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antennas

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accessories

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PRODUCT SELECTION GUIDE

wideband antenna - no tuning required over specified freq. range
narrowband antenna - freq. must be specified or ATU used

PRODUCT TYPE	DESCRIPTION	1MHz	10MHz	100 MHz	1000 MHz
		2 3 4 5 6 7 8 9	2 3 4 5 6 7 8 9	2 3 4 5 6 7 8 9	2 3
	ANTENNAS 2 - 30 MHz				
AD-02/...	tubular sectionalized transceiving HF monopole				
AD-3/10	HF transceiving selfsupporting monopole				
KUA-35/5	tactical wideband HF transceiving wire antenna				
KUA-35/5-S	stationary wideband HF transceiving wire antenna				
KUA-35/6	tactical wideband HF wire dipole antenna				
KUA-35/7-T	tactical adjustable HF wire antenna				
A 6160	tubular sectionalized HF monopole with tiltable base				
AD-4	tubular sectionalized HF mobile monopole with base AP-4				
A-7142	foldable sectionalized HF whip antenna for manpack radios - height 2.4 m				
AD-14-CQ/A	2-element HF CUBICAL QUAD antenna for radioamateurs - 14, 21, 28 MHz				
AD-14-A/WARC	add-on kit for AD-14-CQ/A for WARC bands 18, 25 MHz				
AD-14-CQ/B	2-element HF CUBICAL QUAD antenna for radioamateurs - 21, 28 MHz				
AD-14-CQ/C	4-element HF CUBICAL QUAD antenna for radioamateurs - 14, 21, 28 MHz				
AD-14-C/WARC	add-on kit for AD-14-CQ/C for WARC bands 18, 25 MHz				
AD-14-CQ/D	4-element HF CUBICAL QUAD antenna for radioamateurs - 21, 28 MHz				
AD-14-W/80	five band wire HF antenna (3.5, 7, 14, 21, 28 MHz) for radioamateurs				
AD-14-WA/80	eight band wire HF antenna (3.5, 7, 10, 14, 18, 21, 24, 28 MHz) for radioamateurs				
	ANTENNAS 30 - 108 MHz				
AD-25/C	tape whip VHF antenna for manpack radio				
AD-25/CW	wideband whip VHF antenna for manpack radio (30 - 90 (108) MHz)				
AD-26/C	foldable VHF whip antenna for manpack radios				
AD-26/CW	wideband whip VHF antenna for manpack radio (30 - 90 (108) MHz)				
AD-44/BW	wideband antenna for handheld tactical radio (L = 400 mm; 30 - 90 (108) MHz)				
AD-44/CW	wideband antenna for handheld tactical radio (L = 850 mm; 30 - 90 (108) MHz)				
AD-52	wideband VHF directional wire antenna 30 - 90 MHz				
A 2228	sectionalized whip mobile antenna with base AP-11				
AD-18/D	wideband mobile VHF monopole antenna (30 - 90 MHz)				
AD-18/D-110	wideband mobile VHF monopole antenna (30 - 110 MHz)				
AD-18/D-LP	wideband mobile VHF low-profile monopole antenna (30 - 90 MHz)				
AD-18/D-GP	wideband VHF tactical ground plane antenna (30 - 90 MHz;AD-18/D+"add-on" kit)				
AD-27/V120	wideband mobile VHF monopole antenna (30 - 90 MHz)				
JAS-12/M	wideband VHF monopole antenna for stationary use (30 - 90 MHz)				
JAS-12/M-GP	wideband VHF monopole antenna for stationary use (30 - 90 MHz)				
ADS-21/4-W	wideband mobile antenna 66-88 MHz w. magnet mount				
ADS-21/4-WB	wideband mobile antenna 30-88 MHz w. magnet mount				
AD-17	wideband disc - cone VHF antenna (30 - 90 MHz)				
AD-17/B-110	wideband disc - cone VHF antenna (30 - 110 MHz)				

PRODUCT SELECTION GUIDE

wideband antenna - no tuning required over specified freq. range

narrowband antenna - freq. must be specified or ATU used

PRODUCT TYPE	DESCRIPTION	1MHz	10MHz	100 MHz	1000 MHz
		2 3 4 5 6 7 8 9	2 3 4 5 6 7 8 9	2 3 4 5 6 7 8 9	2 3
AD-33	wideband ground plane VHF antenna (66 - 88 MHz)				
AD-15-GP/fo	family of ground plane antennas				
AD-39/4	folded dipole - 68 - 88 MHz				
AD-38/4	double folded dipole - 68 - 88 MHz				
AD-40/4-2	2-element YAGI antenna 72 - 86 MHz				
AD-40/4-3	3-element YAGI antenna 72 - 86 MHz				
ADS-21/...	mobile antennas (27 - 88 MHz)				
	ANTENNAS 145 - 175 MHz				
AD-11/G	wideband dipole (144 - 176 MHz)				
AD-23/2-2	collinear dipole 144 - 176 MHz; 6 dBi				
AD-39/2	folded dipole 146 - 176 MHz				
AD-38/2	double folded dipole - 146 - 176 MHz				
AD-40/2-2	2-element YAGI antenna - 146 - 176 MHz; 3 dBd				
AD-40/2-3	3-element YAGI antenna - 146 - 176 MHz; 5 dBd				
AD-40/2-6	6-element YAGI antenna - 146 - 176 MHz; 8 dBd				
AD-36/2-10	corner reflector antenna - 145 - 175 MHz; 10 dBd				
AD-23/2-144	collinear dipole 143 - 147 MHz; 6 dBi				
AD-34/2-A	ground plane antenna - 144 - 176 MHz				
AD-34/2-G	5/8 ground plane antenna - 144 - 176 MHz				
AD-32	wideband mobile VHF monopole antenna (144 - 176 MHz)				
AD-70/C	VHF marine antenna 156 - 163 MHz (+console+22 m RG-58+PL 259)				
AD-71/S	VHF marine antenna 156 - 163 MHz (+6 m RG-58+PL 259)				
AD-72/C	VHF marine antenna 156 - 163 MHz, gain 3 dBd (6 m RG-58+PL 259)				
AD-44/BW-D	wideband antenna for handheld radio (L = 382 mm; 138 - 176 MHz)				
ADS-21/...	mobile antennas 144 - 176 MHz				
	ANTENNAS 88 - 3000 MHz				
AD-20/...	antennas for handheld radios				
AD-44/BW-AS-30-512	wideband antenna for handheld or manpack radio (L = 380 mm; 30 - 512 MHz)				
AD-44/CW-AS-30-512	wideband antenna for handheld or manpack radio (L = 825 mm; 30 - 512 MHz)				
AD-44/CW-TA-30-512	wideband antenna for handheld or manpack radio (L = 500 mm; 30 - 512 MHz)				
AD-10/S	wideband VHF - UHF dipole (100 - 400 MHz) for stationary use				
AD-10/A	wideband UHF dipole (225 - 400 MHz) for stationary use				
AD-16	wideband ground plane VHF antenna (108 - 240 MHz)				
AD-22/A	wideband log - periodic VHF - UHF antenna (100 - 470 MHz)				
AD-22/B	wideband log - periodic VHF - UHF antenna (200 - 470 MHz)				
AD-22/C	wideband log - periodic VHF - UHF antenna (80 - 1300 MHz)				
AD-22/D	wideband log - periodic VHF - UHF antenna (1300 - 2700 MHz)				
AD-18/E	wideband mobile UHF antenna (225 - 400 MHz)				

PRODUCT SELECTION GUIDE

wideband antenna - no tuning required over specified freq. range
narrowband antenna - freq. must be specified or ATU used

PRODUCT TYPE	DESCRIPTION	1MHz	10MHz	100 MHz	1000 MHz
		2 3 4 5 6 7 8 9	2 3 4 5 6 7 8 9	2 3 4 5 6 7 8 9	2 3
AD-44/E	wideband antenna for handheld or manpack radio (L = 280 mm; 225 - 400 MHz)				
AD-23/207-A	collinear DUALBAND dipole for 144 (6dB) and 432 (9 dB)				
AD-23/207-B	collinear DUALBAND dipole for 144 (2dB) and 432 (5 dB)				
AD-34/2G4-0	dipole antenna for wireless LAN - 2.4 GHz - 0 dBd gain				
AD-34/2G4-5	collinear omnidirectional antenna for wireless LAN - 2.4 GHz - 5 dBd gain				
AD-34/2G4-7	collinear omnidirectional antenna for wireless LAN - 2.4 GHz - 7 dBd gain				
AD-40/2G4-14	16-element light-duty YAGI antenna for 2.4 GHz wireless LAN				
AD-40/2G4-16	16-element YAGI antenna for 2.4 GHz wireless LAN				
AD-86/2G4-6	indoor panel antenna for 2.4 GHz wireless LAN				
AD-81/2G4-23	parabolic antenna for 2.4 GHz wireless LAN				
AD-79/18D	mobile GPS active receiving antenna				
ADS-21/...	mobile antennas				
	ANTENNAS 400 - 1000 MHz				
AD-12/G	wideband dipole (440 - 475 MHz)				
AD-12/B	heavy duty wideband dipole (390-480 MHz, gain 0 dB)				
AD-29/07-5	collinear heavy-duty omnidirectional antenna 375 - 470 MHz - 5 dBd gain				
AD-23/07-4	collinear dipole 400 - 500 MHz; 8 dBi				
AD-24/A	wideband heavy duty mobile antenna (430 - 470 MHz)				
AD-34/07-A	ground plane antenna - 390 - 475 MHz; 0 dBd				
AD-34/07-G	ground plane collinear antenna - 390 - 475 MHz; 4 dBd				
AD-39/07	folded dipole - 390 - 480 MHz				
AD-38/07	double folded dipole - 390 - 480 MHz				
AD-40/07-3	3-element YAGI antenna - 390 - 475 MHz; 5 dBd				
AD-40/07-7	7-element YAGI antenna - 390 - 475 MHz; 8.5 dBd				
AD-40/07-9	9-element YAGI antenna - 390 - 475 MHz; 10 dBd				
AD-72/F	UHF marine antenna 410-430 MHz (+22 m H-155+TNC)				
AD-34/35-A	ground plane antenna 810 - 910 MHz				
AD-34/35-G	ground plane collinear antenna - 890 - 960 MHz; 4 dBd				
AD-40/722-14	14-element yagi antenna for 698 - 746 MHz; 13 dBd				
AD-40/35-7	7-element yagi antenna for 810 - 910 MHz; 8.5 dBd				
AD-72/E	UHF marine cellular antenna (890-960 MHz, 22 m H-155 + TNC)				
ADS-21/...	mobile antennas (380 - 960 MHz)				
	ANTENNA MASTS				
STV-08/105	telescopic winch driven mast - height 8 m with accessories				
STV-10/105	telescopic winch driven mast - height 10 m with accessories				
STV-12/105	telescopic winch driven mast - height 12 m with accessories				
STV-15/105	telescopic winch driven mast - height 15 m with accessories				
STV-08/128	telescopic winch driven mast - height 8 m with accessories				

PRODUCT SELECTION GUIDE

wideband antenna - no tuning required over specified freq. range
narrowband antenna - freq. must be specified or ATU used

PRODUCT TYPE	D E S C R I P T I O N	1MHz 2 3 4 5 6 7 8 9	10MHz 2 3 4 5 6 7 8 9	100 MHz 2 3 4 5 6 7 8 9	1000 MHz 2 3
STV-10/128	telescopic winch driven mast - height 10 m with accessories				
STV-12/128	telescopic winch driven mast - height 12 m with accessories				
STV-15/128	telescopic winch driven mast - height 15 m with accessories				
STV-18/128	telescopic winch driven mast - height 18 m with accessories				
ST-05	sectionalized tubular mast - height 5 m				
ST-08	sectionalized tubular mast - height 8 m				
ST-10	sectionalized tubular mast - height 10 m				
ST-12	sectionalized tubular mast - height 12 m				
ST-R	sectionalized tubular mast with tripod - height 6 m				
	ACCESSORIES				
BRACKETS...	mounting hardware for base station antennas				
APS-38/...	antenna power dividers				
ASP	coaxiall lightning surge protector (0 - 1.5 GHz)				
ASP-W	coaxial lightning surge protector (0 - 1.5 GHz) - waterproof				
ASP-WH	coaxial lightning surge protector (1.5 - 2.5 GHz) - waterproof				
UI-2	lead-through insulator				
UI-3	lead - through insulator for main marine antenna				

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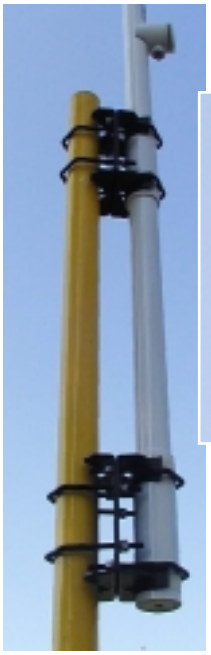
AD-2

Antennas AD-2 represent the family of transceiving self- supporting HF monopoles. The antennas are composed of two- or three sections, connected together by screw-joints, protected against unscrewing with cross screw protecting unit. The first part of the antenna is support, designed in four types with difference in the way of mounting and also connecting of the RF feeding wire. The support type A has the antenna connector below the flange ant it is convenient for mounting directly on deck, where the antenna connector is safe against atmospheric influences. The support type B is similar, only a special insulator is added below the flange allows the antenna to be mounted outside on a proper console. The support type C and D have side mounted antenna connector in a special waterproof housing with a lead-in unit. They differ only in the way of mounting. All the antenna connectors are screw type with M8 nuts. The antenna sections are made of epoxy-glass composite material and the screw joints are made of stainless steel. The antennas are very lightweight but on the other side they are highly resistant against all weather conditions. The flange on the support type A, B and C is made of special polyamide with excellent mechanical characteristics. Antennas AD-2 are intended primarily for use on all kind of ships, oil rigs etc. They could be also used on ground objects for stationary use. In that case a special wire ground-plane must be ordered.

TECHNICAL DATA	
Frequency range	2 - 30 MHz
Polarization	VERT.
Connector	M 8
Maximum power	500 W (5,6,7 m) 1000 W (8,9 m)
Height	5....9 m
No. of Sections	2 (5 and 6 m antenna) 3 (7, 8 and 9 m antenna)
Mass	max. 10 kg
Diameter	38/28/20 mm
Wind velocity	150 km/h
Temperature range	-40...+70°C



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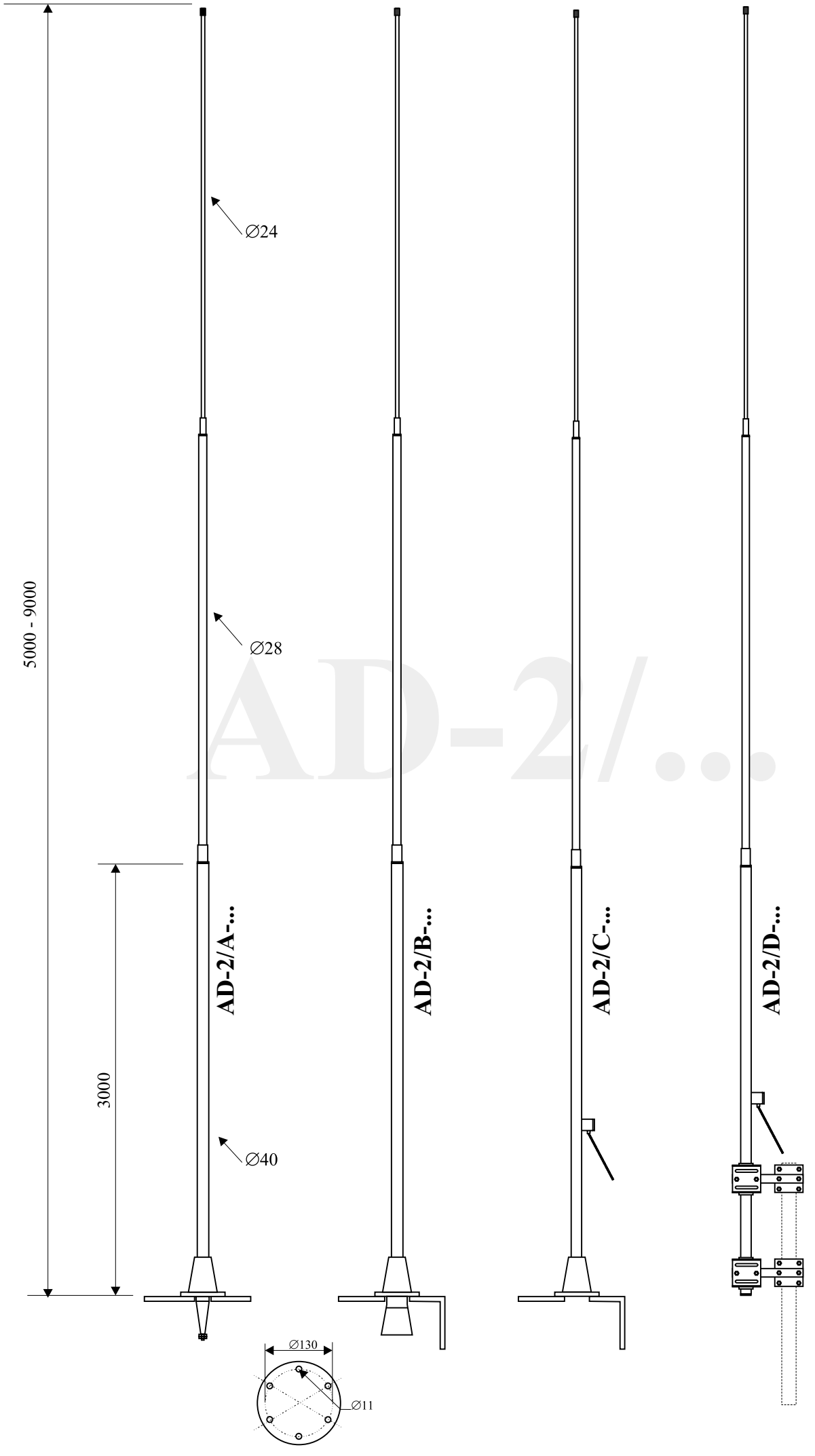
5000 - 9000
3000
Ø24
Ø28
Ø40
AD-2/A-...
AD-2/B-...
AD-2/C-...
AD-2/D-...
Ø130
Ø11

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AD-3/10

The antenna AD-3/10 is a self-supported marine transmitting monopole antenna primarily intended for use on ocean going ships for HF frequency range. It is composed of two sections. On the bottom of the first section is a robust flange for mounting the antenna directly on deck. In the height of 2 m over the flange is a connecting element for the antenna wire. Both sections are made of composite material (epoxy - fiberglass) enabling excellent mechanical and climatic resistance. The flange is made of bronze and galvanically protected. All joints are made of stainless steel.

TECHNICAL DATA	
Frequency range	1,5 - 30 MHz
Impedance	Diag. 1,2
Polarization	VERT.
Maximum power	2 kW
Height	10 m
Dimension of sections	1. 72/27x5000 mm
	2. 26/10x5000 mm
Mass	18 kg
Wind velocity	180 km/h

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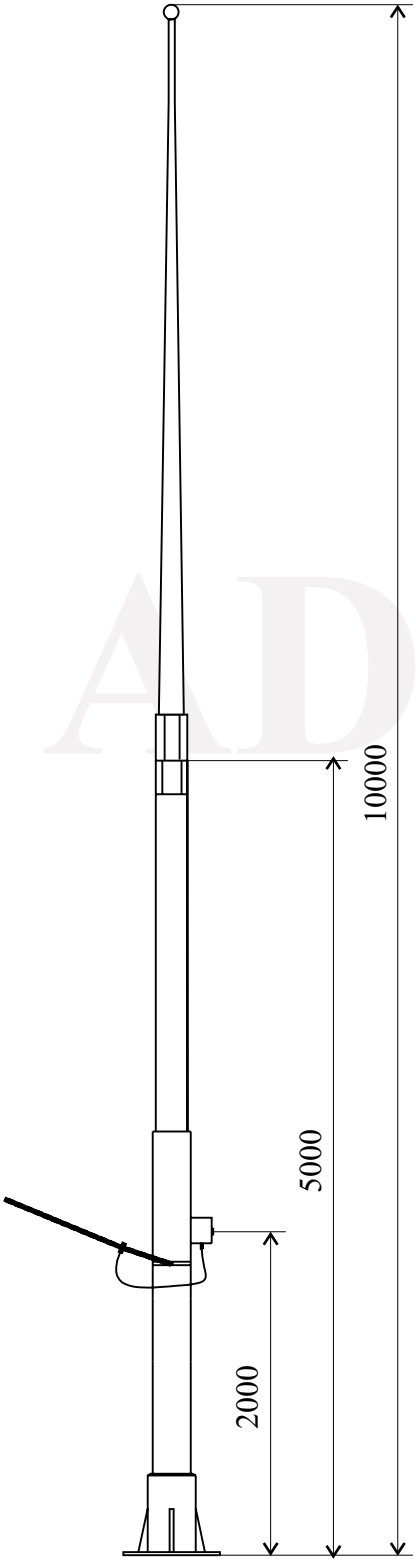
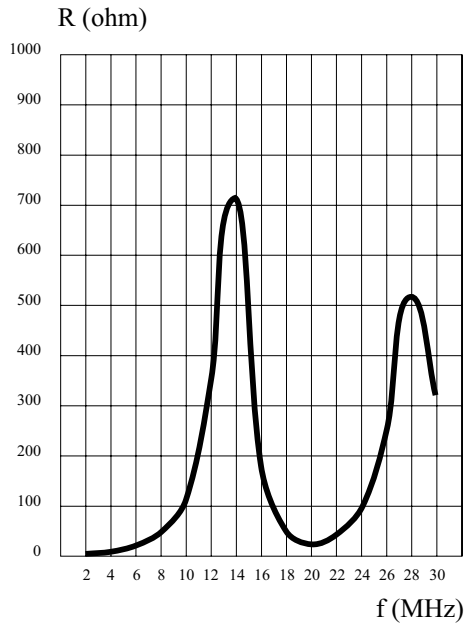
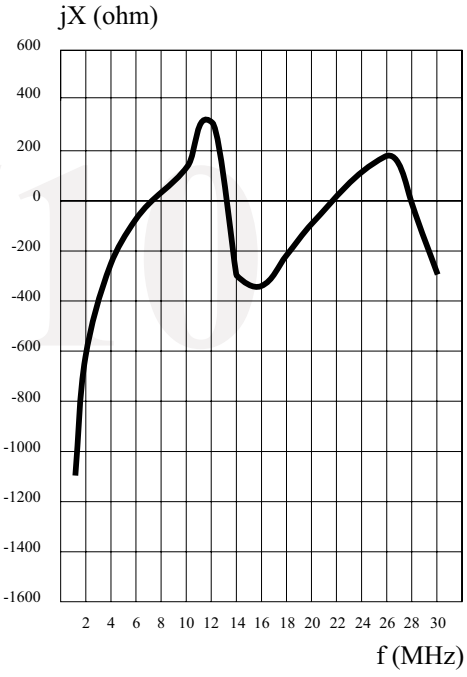
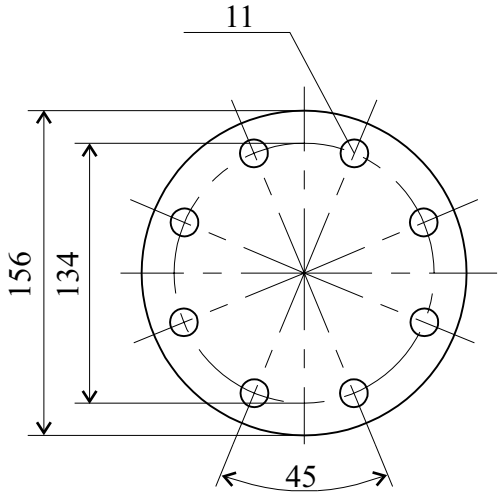

10000
5000
2000


R (ohm)
1000
900
800
700
600
500
400
300
200
100
0
2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
f (MHz)


jX (ohm)
600
400
200
0
-200
-400
-600
-800
-1000
-1200
-1400
-1600
2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
f (MHz)


11
156
134
45

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KUA-35/5

The antenna KUA-35/5 is a wideband shortwave transportable antenna. The mast is composed of seven sections each made of epoxy - glass composite material. On the top of the mast is the impedance transformer which is connected to two 7-wire dipole sections. From the top of the mast 7-wire sections of dipoles go toward the ground, guyed on it with ropes and pegs. Dipoles are connected over the special junction element and coaxial cable with 3-wire dipoles, mounted similar from the top of the mast toward the ground. Such construction of the antenna allows beside wideband characteristics also an approximately circular horizontal radiation pattern and vertical radiation toward the zenith. Therefore the antenna is suitable for communications over short to middle ranges up to 1500 km with sky and ground waves. The antenna is packed in the transportable linen bags.
Stationary type of the antenna is named KUA-35/5-S and is available in three versions:1, 5 and 10 kW.

TECHNICAL DATA	
Frequency range	1,5 - 30 MHz
Impedance	50 ohm
VSWR	< 2,5 (DIAG. 1)
Polarization	HOR.
Maximum power	1 kW CW
Radiation diagram	DIAG. 2, 3
Height	10 m
Lenght of sections	7 X 1,4 m
Mass of antenna	67 kg
Section diameter	60 mm
Mount. time/no. of pers.	30 min./3
Mounting area	25 m
Wind velocity	120 km/h
Temperature range	-40....+70 °C

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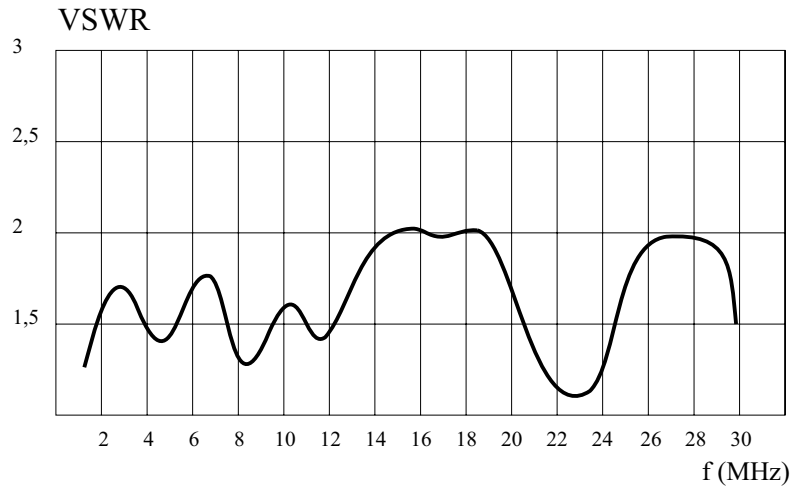
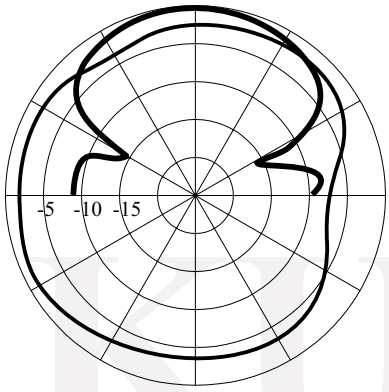
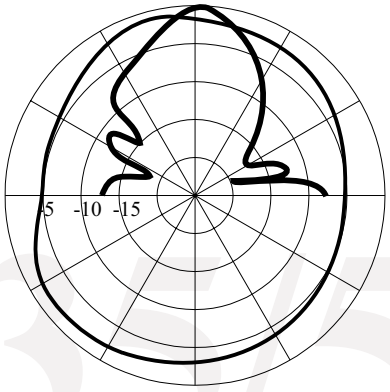


f=2MHz

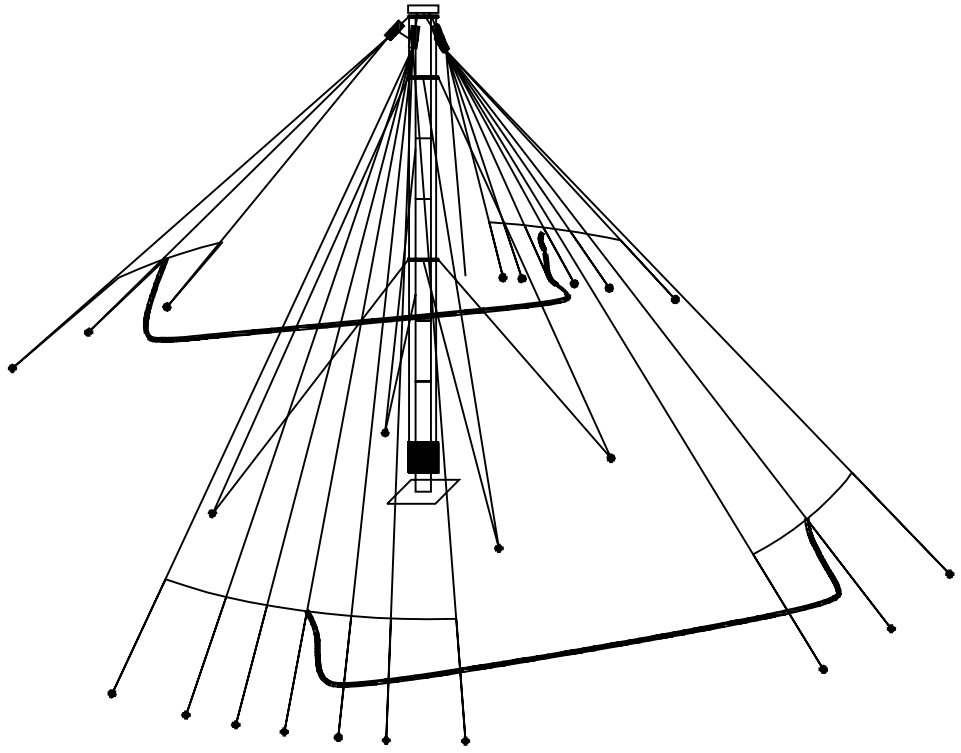


VERT. DIA.
HOR. DIA.

f=10MHz



VERT. DIA.
HOR. DIA.



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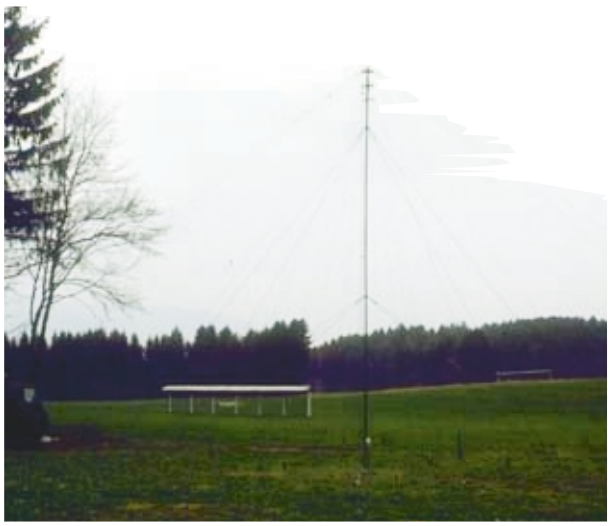
KUA-35/5-S

The antenna KUA-35/5-S is a wideband shortwave stationary antenna. The mast is composed of five sections each made of epoxy - glass composite material. On the bottom is fixed the impedance transformer which is connected to two 7-wire dipole sections through the balancing line. From the top of the mast 7-wire sections of dipoles go toward the ground, guyed on it with ropes and pegs. Dipoles are connected over the special junction element and coaxial cable with 3-wire dipoles, mounted similar from the top of the mast toward the ground. Such construction of the antenna allows beside wideband caracteristcs also an approximately circular horizontal radiation pattern and vertical radiation toward the zenith. Regarding that, the antenna is suitable for communication over short to middle ranges up to 1500 km with sky and ground waves. The antenna is packed in two wooden cases. The antenna is available in three versions:1, 5 and 10 kW.



TECHNICAL DATA	
Frequency range	1,5 - 30 MHz
Impedance	50 ohm
VSWR	< 2,5 (DIAG. 1)
Polarization	HOR.
Maximum power	1, 5 and 10 kW CW
Radiation diagram	DIAG. 2, 3
Height	10 m
Lenght of sections	4 X 2.25 +1 X 0.8 m
Mass of antenna	120 kg (1 kW) 170 kg (5 kW) 200 kg (10 kW)
Section diameter	72 mm
Mount. time/no. of pers.	5h./3
Mounting area	d = 25 m
Wind velocity	150 km/h
Temperature range	-40....+70 °C

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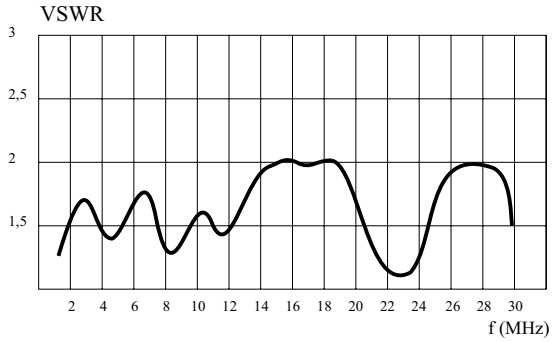
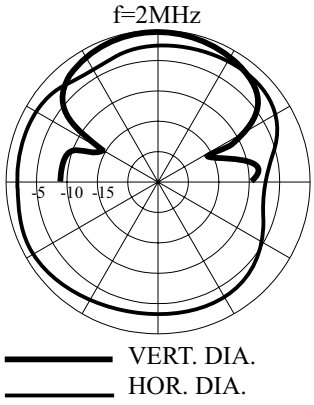
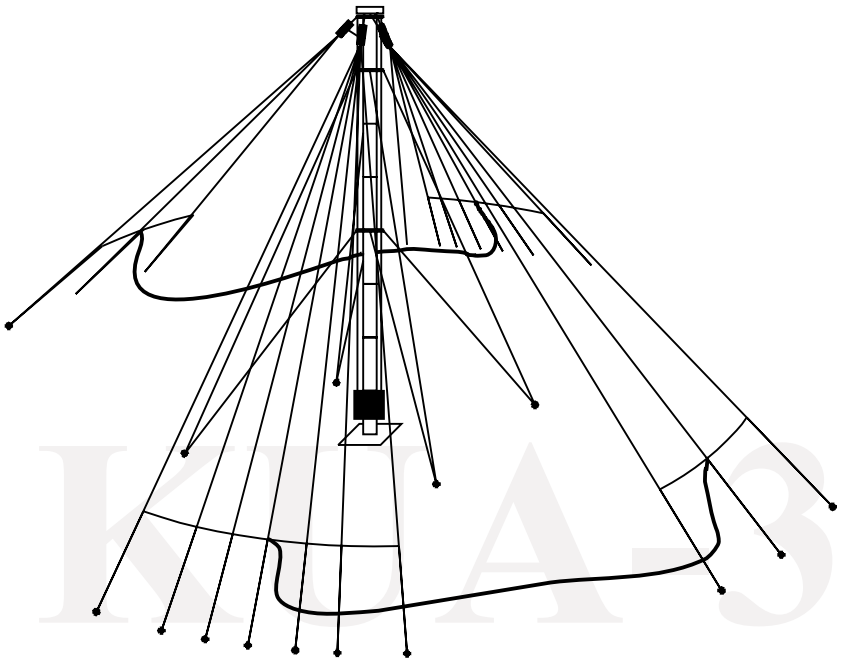
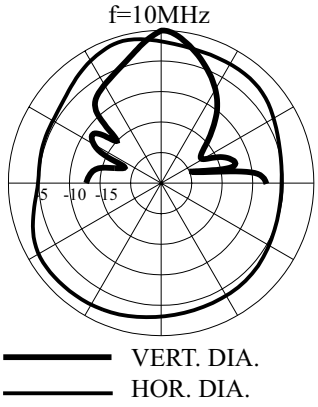
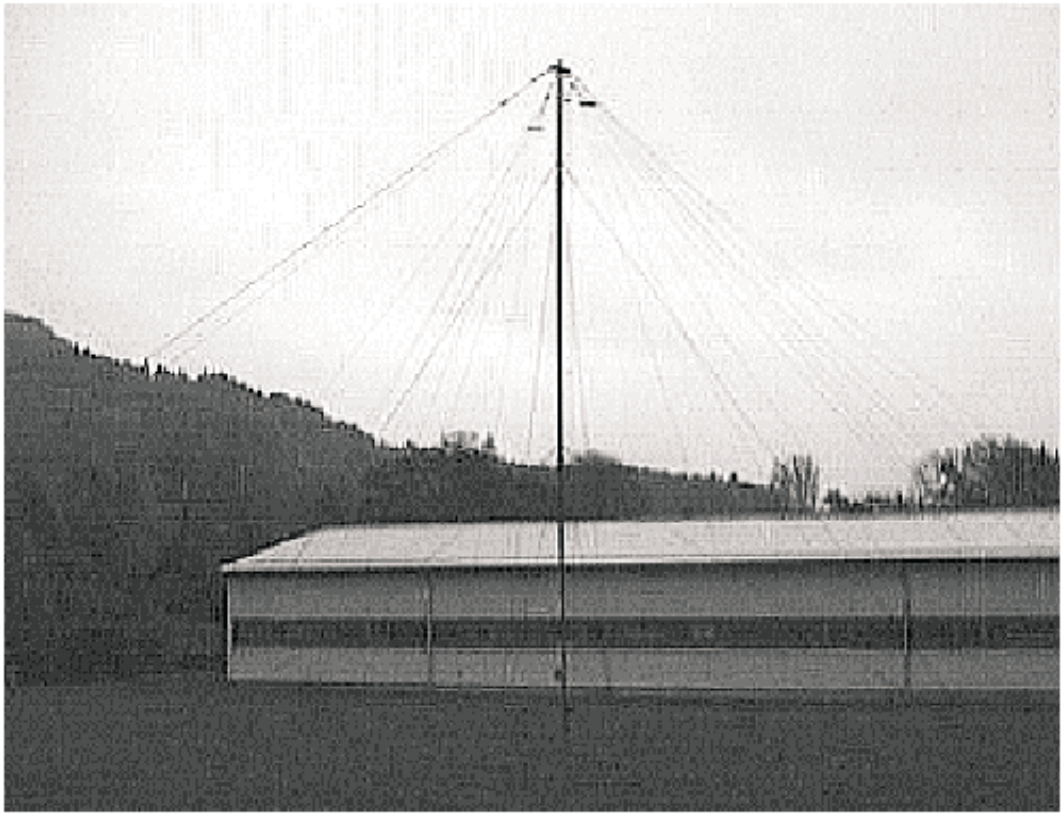

VSWR
3
2,5
2
1,5
2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
f (MHz)


f=2MHz
-5 -10 -15
VERT. DIA.
HOR. DIA.




f=10MHz
-5 -10 -15
VERT. DIA.
HOR. DIA.



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KUA-35/6

Antennas KUA-35/6 represent the family of wideband HF wire dipole antennas. Its universal construction allows using almost everywhere and in all circumstances. It is primarily intended for use as a tactical field antenna together with a single support mast at the center as inverted “V” or “delta dipole” antenna. Each end is attached to the sliding insulator with nylon rope allows us to attach the antenna ends on ground or some other appropriate objects. The antenna could be also mounted stationary on the already prepared mounting mast. Stationary version has two special mounting consoles for fixing the terminating load and the antenna transformer.
The antenna is electrically designed as a closed dipole with balun transformer and end terminating load. The overall length of the antenna wire is 2 x 40 m. The antenna has vertical radiation toward the zenith for short to medium skywave communications.
The antenna is very simple and robust construction. All metal parts are galvanically protected or made of corrosion resistant materials enables long life and high reliability. For tactical use we recommend using some of our sectionalized tubular masts series ST or telescopic masts series STV.

TECHNICAL DATA	
Frequency range	2 - 30 MHz
Impedance	50 ohm
VSWR	< 3
Efficiency	15 - 55 %
Radiation pattern	DIAG. 1, 2
Maximum power	30, 100, 400 W, 1 kW
Min. mounting height	10 m
Length of dipole	2 x 20 m wire length 40 m
Weight	app. 6 kg
Input connector	N female

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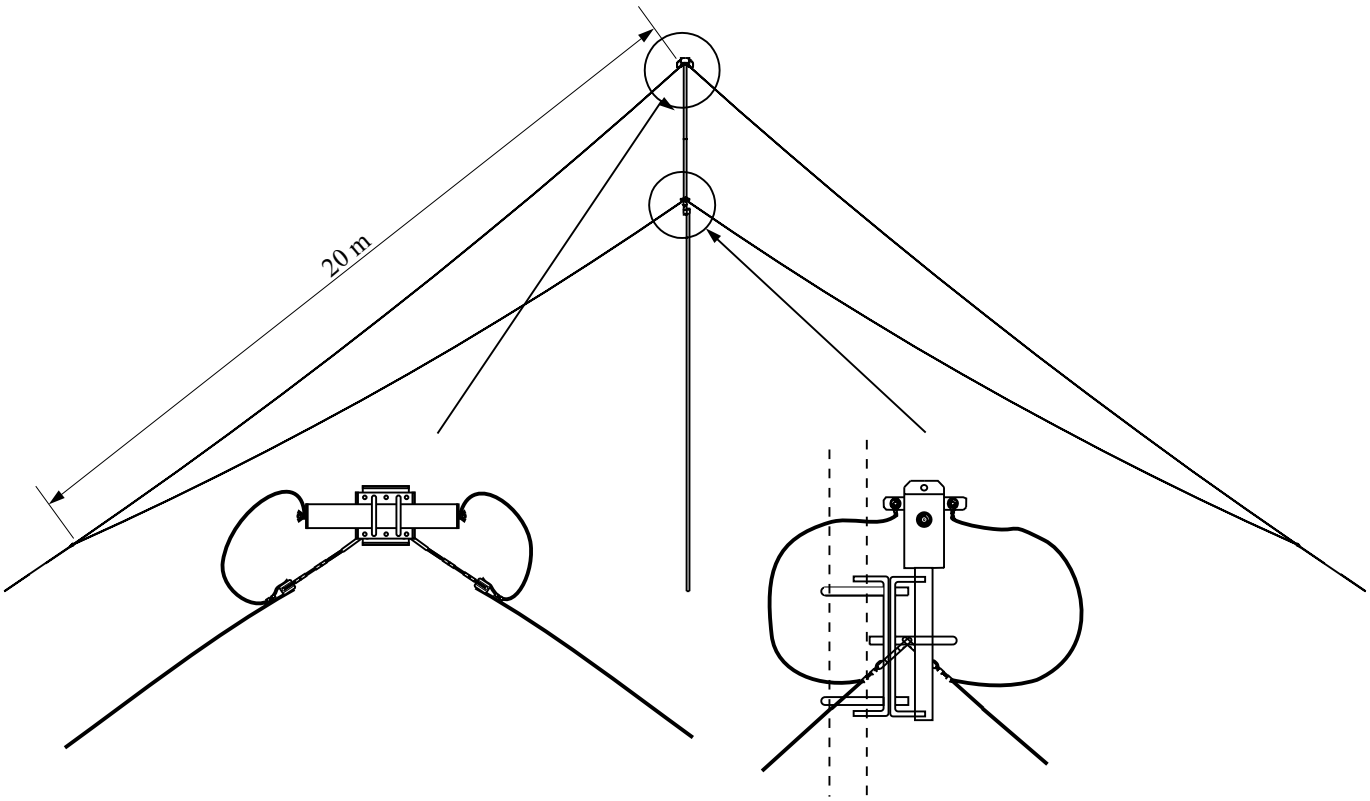
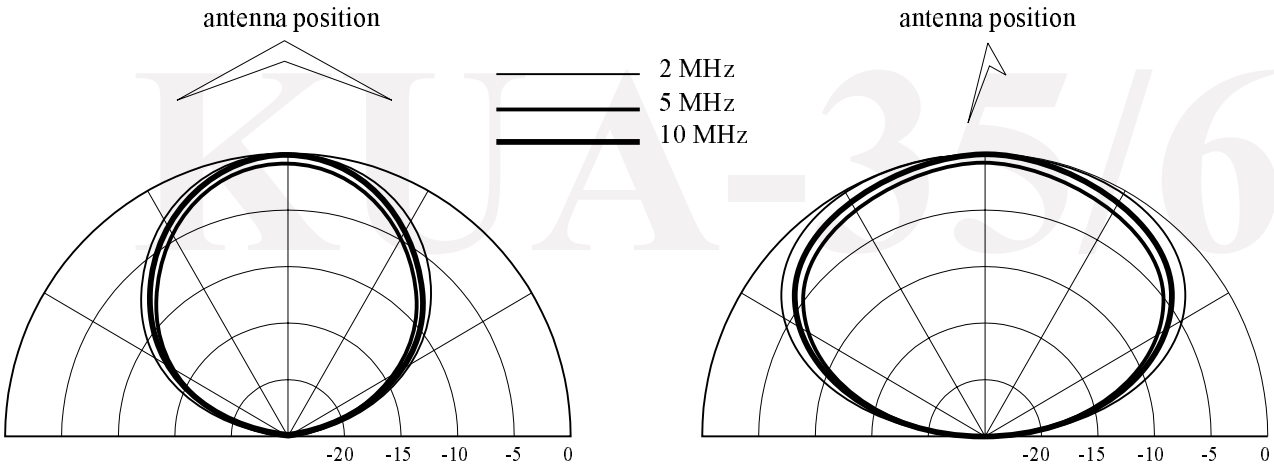
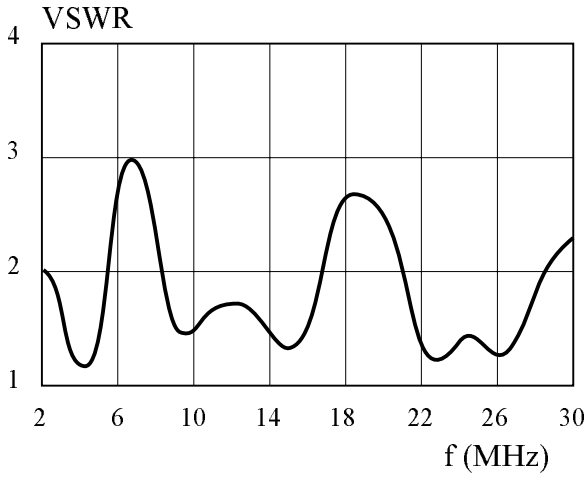




RADIATION PATTERN



KUA-35/7-T

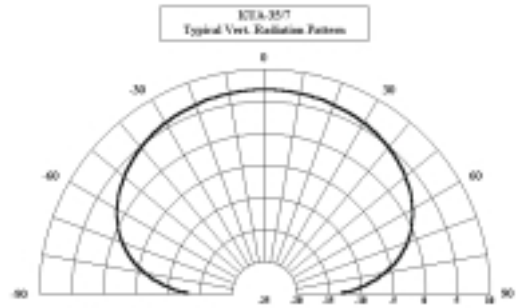
The antenna KUA-35/7-T is tactical HF adjustable wire dipole antenna for the frequency range from 2 to 30 MHz. It is intended for use with portable and manpack HF radio stations. The antenna is primarily designed to be erected as "inverted V" or in specific cases as "long wire" antenna. The antenna could be supported by trees or similar objects or could be used with some appropriate tactical portable mast such as ST series of fiberglass masts.

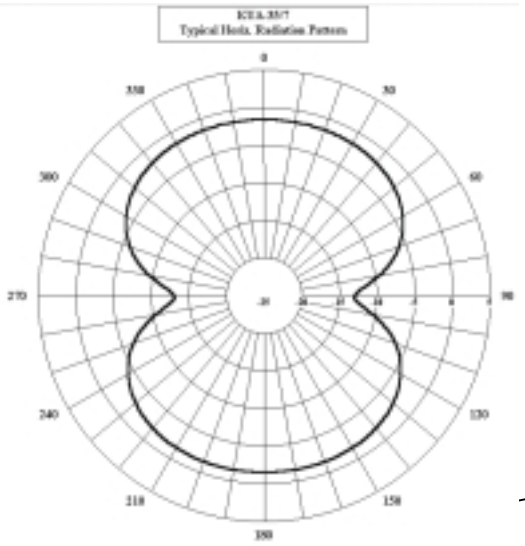
The antenna is composed of center dipole junction box and two dipole wire elements calibrated with marker sleeves indicating the length necessary for particular frequency. The dipole wire elements are wounded on the polypropylene reels which are used also as insulators. Each dipole element has 15 m of nylon rope for fixing it on ground through the anchors. The antenna comprises also 24 m raising rope with throwing weight for erecting and two coaxial cables for connection the antenna to radio station.

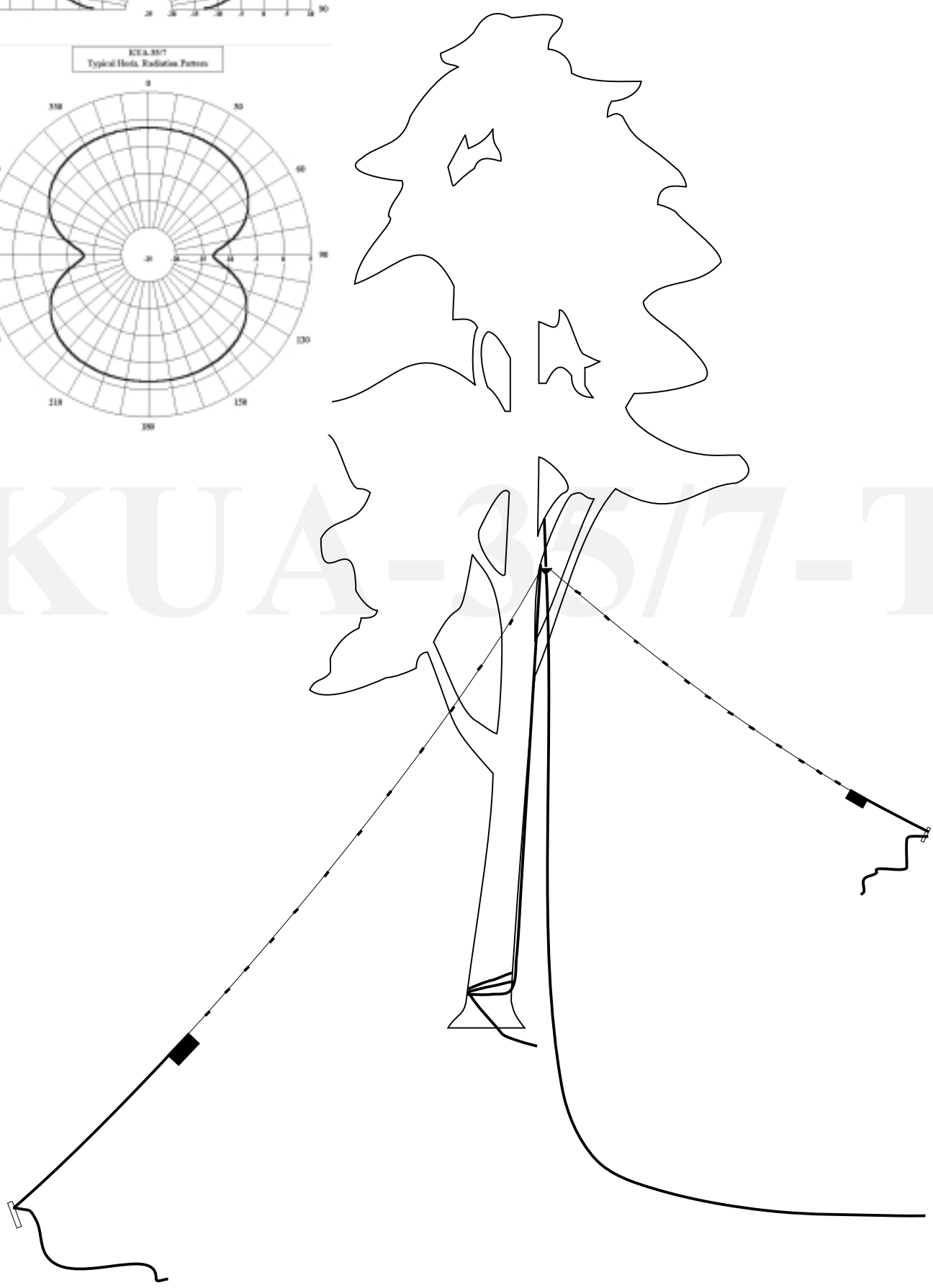
In special cases the antenna could be erected as long wire antenna using only one dipole element. One end of the element is connected on the radio set and the other end is spreaded toward the direction of communication. For that specific case of antenna some special elements are included such as grounding anchor and BNC - two pole adapter connector.

All parts of the antenna are made of materials tested on MIL-810-C standards. A special kevlar reinforced wire is used for dipole wire elements. All metal parts are made of stainless steel or they are galvanicaly protected. All elements are packed in a linen bag suitable for transport.

TECHNICAL DATA	
Frequency range	2-30
Impedance	50 ohm
VSWR	< 1,5
Maximum power	100 W CW
Min. mounting height	8 m
Length of dipole	2 x 34 m
Mass	3 kg
Input connector	BNC


KUA-35/7
Typical Vert. Radiation Pattern
0
30
60
90
-30
-60
-90


KUA-35/7
Typical Horiz. Radiation Pattern
0
30
60
90
120
150
180
210
240
270
300
330



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A 6160

The antenna A 6160 is a shortwave self-supporting monopole, composed of six tubular sections, each made of epoxi - glass composite material. Connecting of sections is enabled by special screw - conical joints, which enable perfect electrical contact. The antenna base could be mounted on an appropriate console by the flange. Under the flange is a screw connector with an insulator and spark gap and over the flange is a special tilting device for safe and quick erecting and lowering of the antenna. The antenna is primarily intended for use with HF mobile radio sets for work in stay, but we could also use it as stationary antenna. All metalic parts are galvanically protected. The antenna is packed in a handy transportable linen bag with a linen protective cover for the antenna base.

TECHNICAL DATA	
Frequency range	1,5 - 30 MHz
Impedance	DIAG. 1,2
Maximum power	1 kW CW
Polarization	VER.
Connector	M 8
Height	10 m (6 X 1,7 m)
Mass of antenna	16 kg
Wind velocity	120 km/h
Temperature range	- 40....+70 °C

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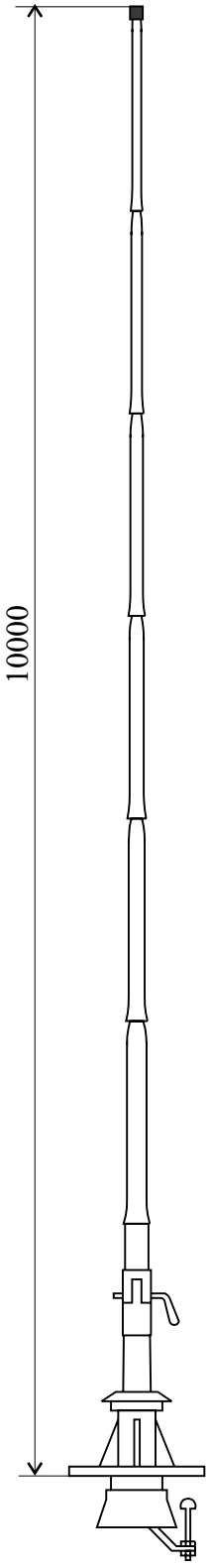
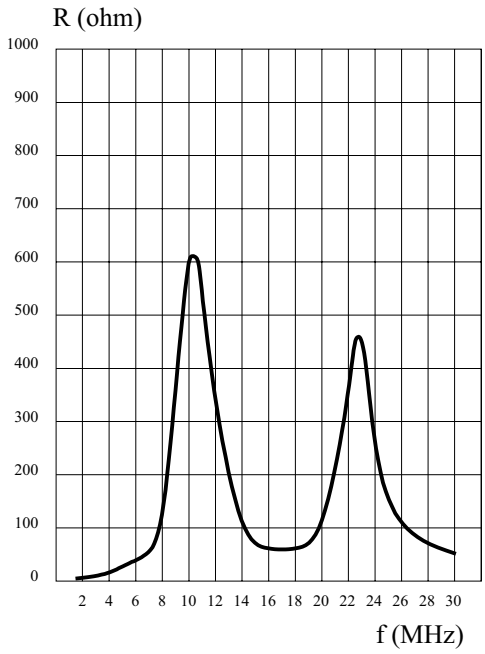
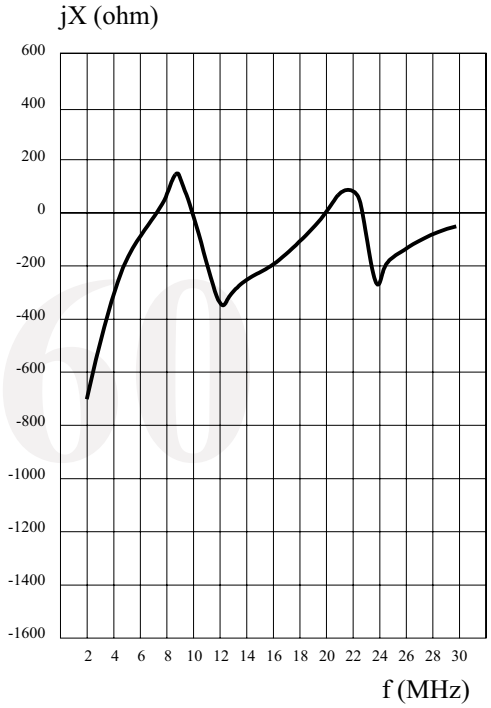
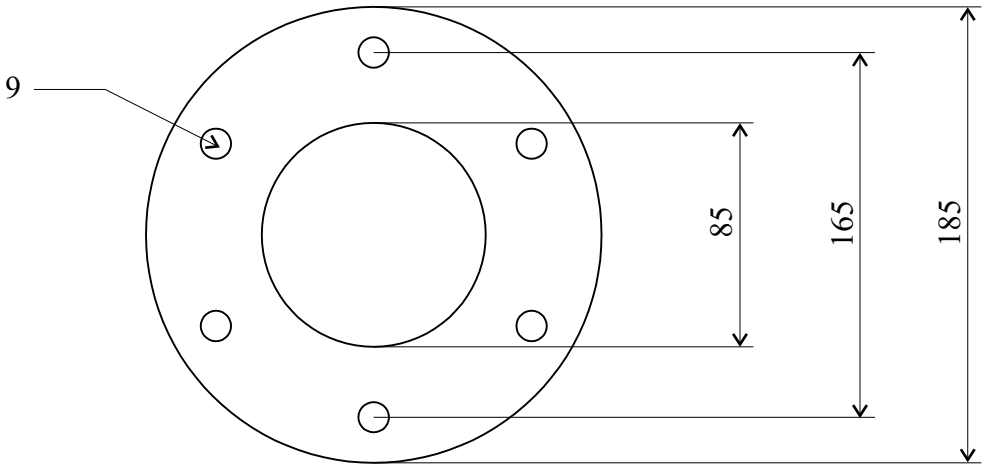

10000


R (ohm)
1000
900
800
700
600
500
400
300
200
100
0
2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
f (MHz)


jX (ohm)
600
400
200
0
-200
-400
-600
-800
-1000
-1200
-1400
-1600
2 4 6 8 10 12 14 16 18 20 22 24 26 28 30
f (MHz)


9
85
165
185

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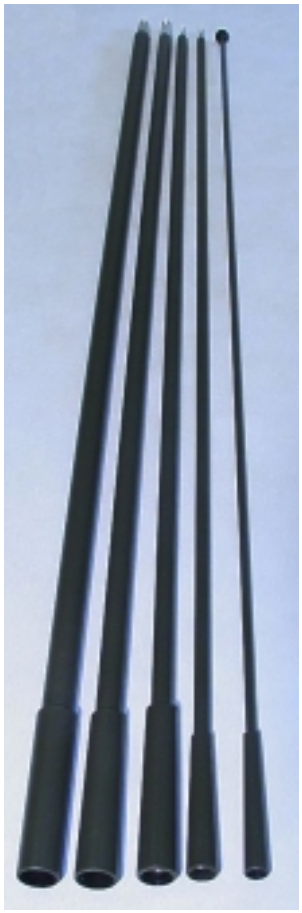
AD-4

The family of the HF mobile antennas AD-4 are composed of the antenna sections and the antenna bases suitable for various configurations and antenna heights. The antennas are intended for mobile work with the HF radios. The antenna sections are all 120 (4') cm long and are made of strong pultruded composite tube (fiberglass) with male and female joints at both ends. Antenna sections are mounted on the antenna base type AP-4/M (up to 4 sections) or on the base type AD-4/MHD (up to 7 sections), made of composite materials and with biconical SS spring enabling bending the antenna with the rope horizontally for NVIS applications. The antenna sections are packed in canvas bag for transportation and storage.
The antenna AD-4 could be used also stationary with the antenna base type AP-4/S.


AP-4/M


AP-4/S


AD-4/4.8m w. canvas bag



TECHNICAL DATA	
Frequency range	1,5 - 30 MHz
Impedance	see diagram
Maximum power	400 W (AP-4/M) - 1 kW CW
Polarization	VER.
Connector	M 6 screw type
Height	3.6 - 6 m with AP-4/M 3.6 - 8.4 m with AP-4/MHD or AP-4/S
Section weight	
- AD-4/1	0.17 kg
- AD-4/2	0.34 kg
- AD-4/3	0.49 kg
- AD-4/4	0.68 kg
- AD-4/5	0.83 kg
Support weight	
- AP-4/M	2.5 kg
- AP-4/S	2.2 kg
- AP-4/MHD	4.8 kg
Wind velocity	120 km/h
Temperature range	- 40....+70 °C

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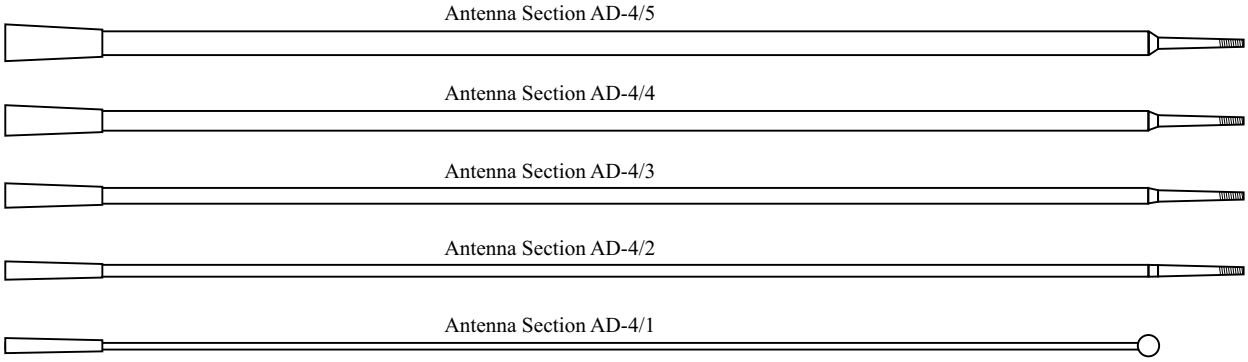
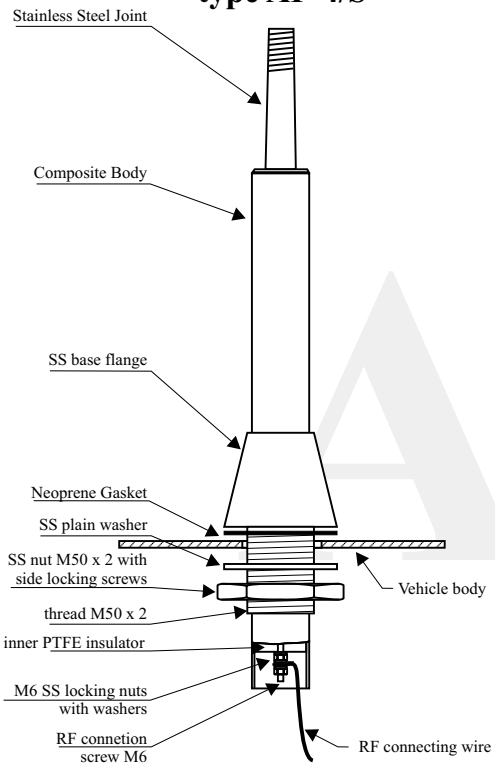
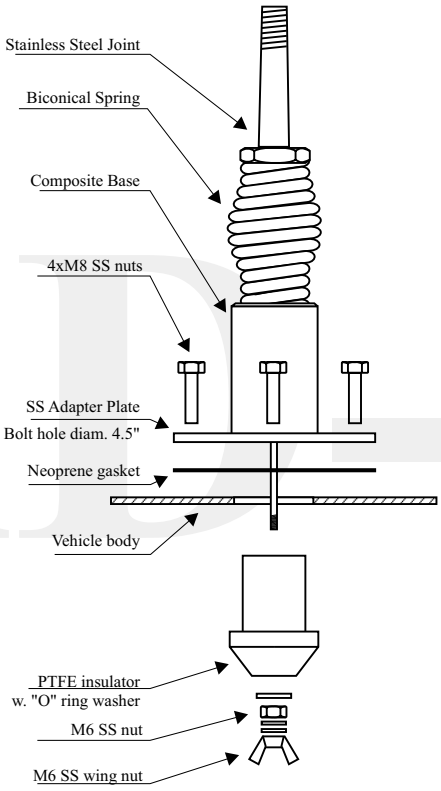
Antenna Sections



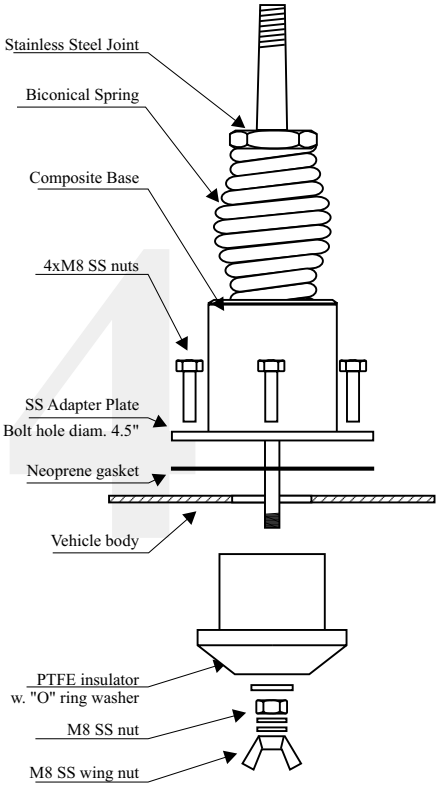
Antenna Support type AP-4/S



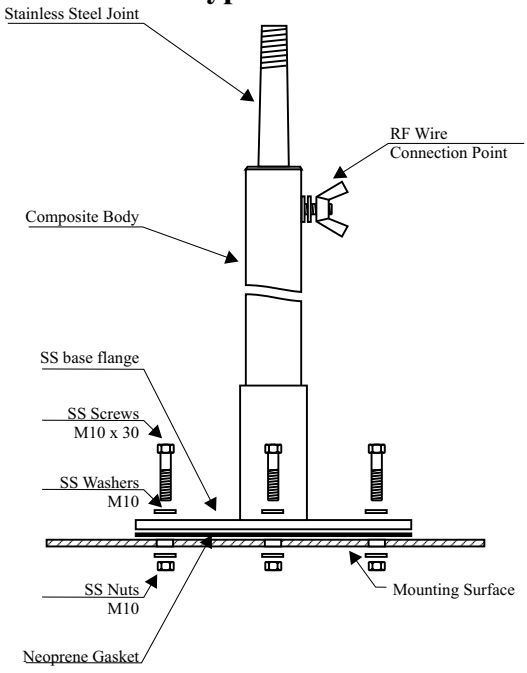
Antenna Support type AP-4/M

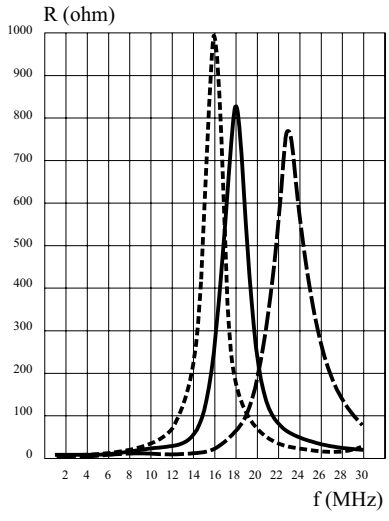


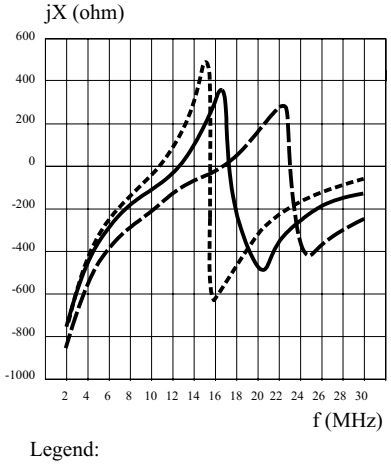
Antenna Support type AP-4/MHD



Antenna Support type AP-4/SF







Legend:

6 m antenna (5 sections): ----------
4.8 m antenna (4 sections): ————
3.6 m antenna (3 sections): — — — —

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A-7142

Family of antennas A-7142 is intended for use with portable and manpack radios within HF frequency band. The antenna is composed of several thin wall stainless steel sections connected with elastic rope. Elastic rope tension enables good electrical contact between sections and quick deployment of the antenna within seconds. The antenna consists also a special grip tape for packing when not in use.
Version A-7142/GN contains also a special “goose-neck”enables vertical position of the antenna irrespective of position of radio set. The antenna is available in different heights (max. 3220 mm) and with different types of thread connectors (5/8-18UNF as standard or by request).

TECHNICAL DATA	A-7142	A-7142/GN
Frequency range	2 - 30 MHz	2 - 30 MHz
Maximum power	50 W	50 W
Polarization	VER.	VER.
Connector	thread 5/8”-18UNF (or by request)	thread 5/8”-18UNF (or by request)
Height	max. 3035 mm	max. 3220 mm
Weight	max. 0,350 kg	max. 0,5 kg
Temperature range	- 40....+70 °C	- 40....+70 °C

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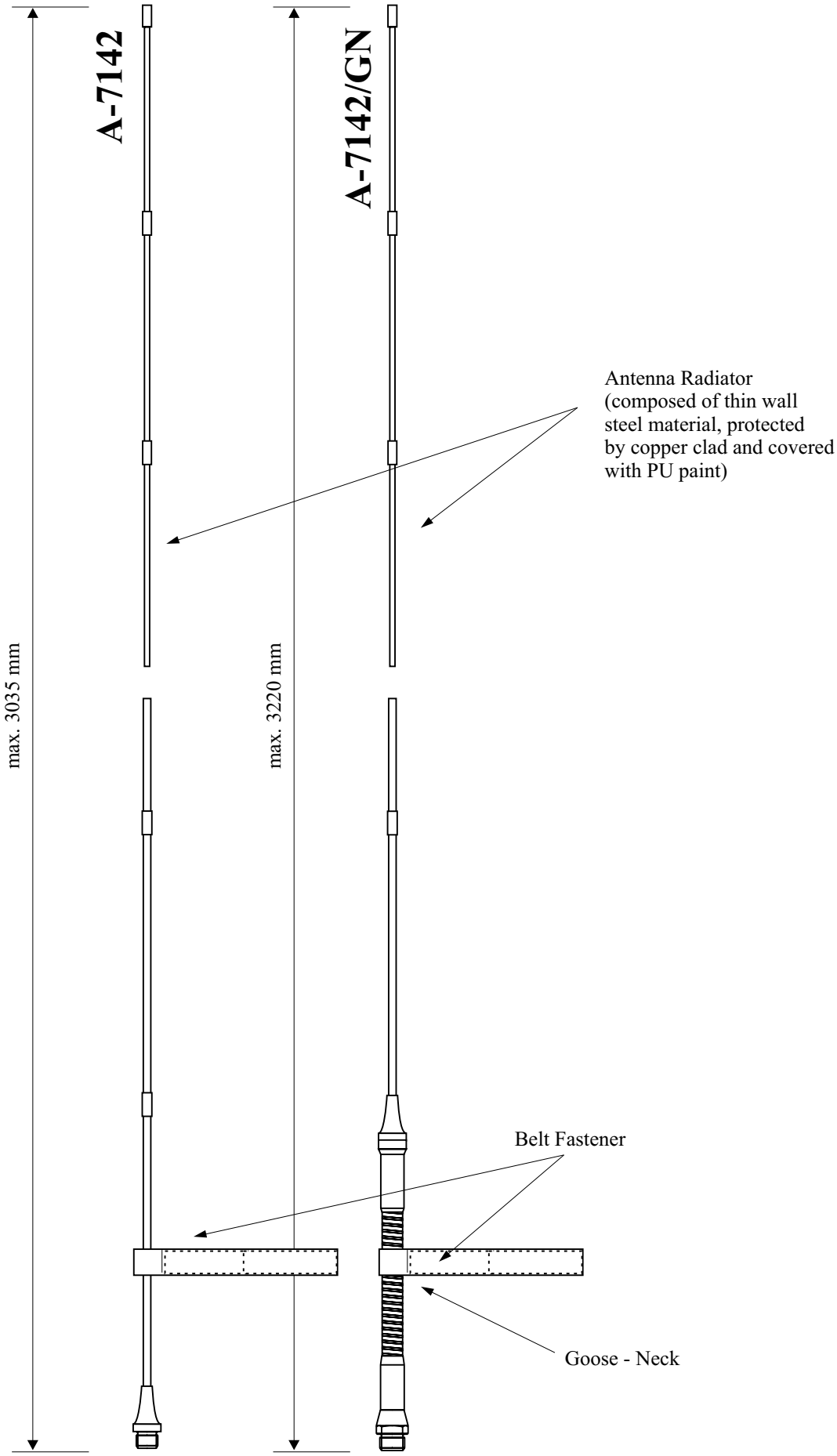
A-7142
A-7142/GN
max. 3035 mm
max. 3220 mm
Antenna Radiator
(composed of thin wall
steel material, protected
by copper clad and covered
with PU paint)
Belt Fastener
Goose - Neck

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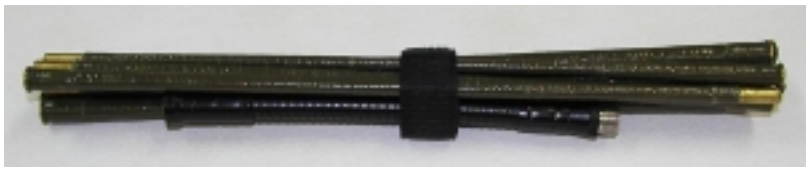
A-7142F

Family of antennas A-7142F is intended for use with portable and manpack radios within HF frequency band. The antenna is composed of several fiberglass tube sections connected with elastic rope. Elastic rope tension enables good electrical contact between sections and quick deployment of the antenna within seconds. The antenna consists also a special grip tape for packing when not in use.
Version A-7142F/GN contains also a special “goose-neck”enables vertical position of the antenna irrespective of position of radio set. The antenna is available in different heights (max. 2835 mm) and with different types of thread connectors (5/8-18UNF as standard or by request).



TECHNICAL DATA	A-7142F	A-7142F/GN
Frequency range	2 - 30 MHz	2 - 30 MHz
Maximum power	50 W	50 W
Polarization	VER.	VER.
Connector	thread 5/8”-18UNF (or by request)	thread 5/8”-18UNF (or by request)
Height	max. 2650 mm	max. 2835 mm
Weight	max. 0,270 kg	max. 0,42 kg
Temperature range	- 40....+70 °C	- 40....+70 °C

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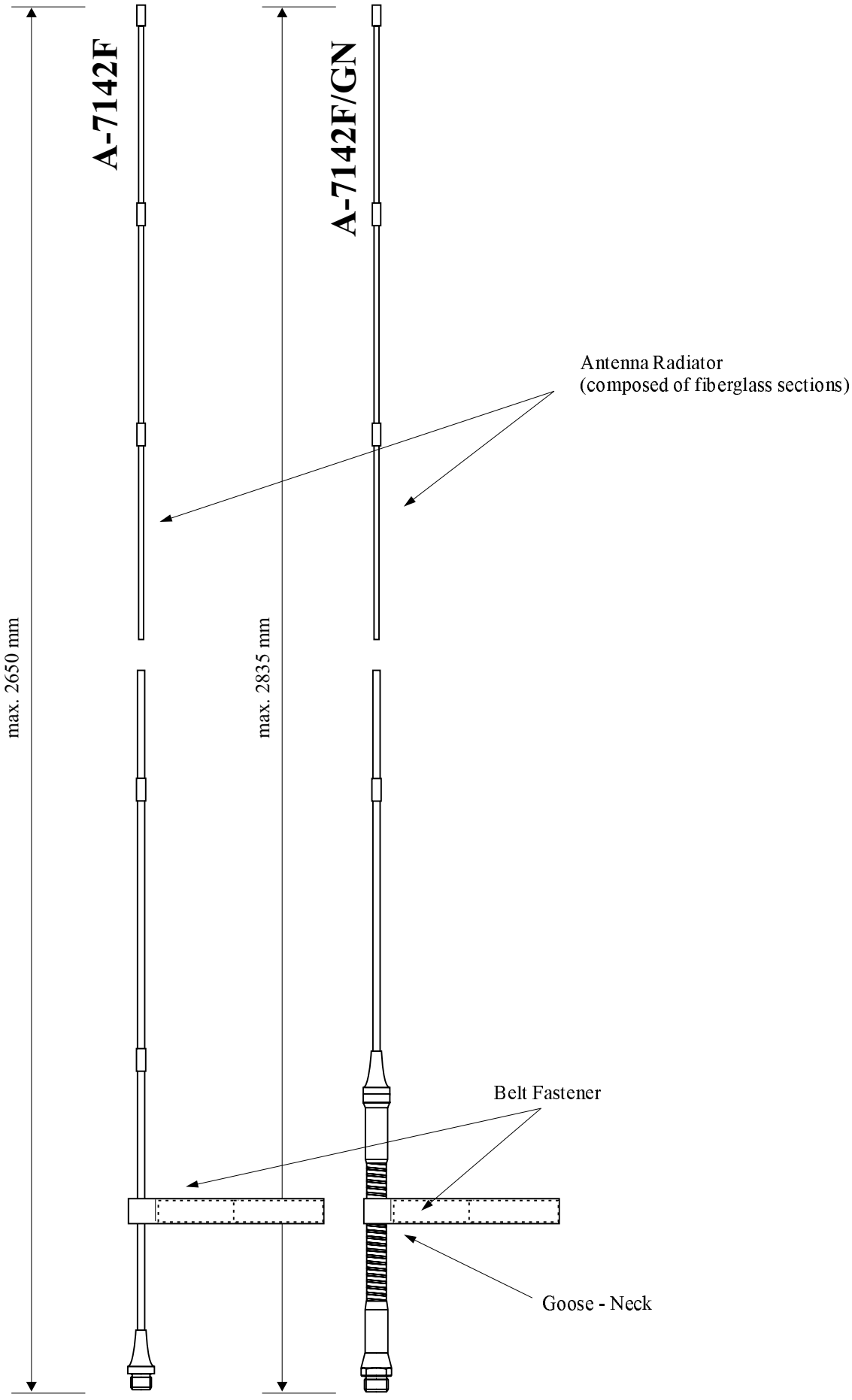
A-7142F
A-7142F/GN
Antenna Radiator
(composed of fiberglass sections)
max. 2650 mm
max. 2835 mm
Belt Fastener
Goose - Neck

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AD-14-CQ-A

The antenna AD-14-CQ-A is a “cubical quad” type of antenna intended for use of radio amateurs in the HF range. Supporting elements are made of epoxy - glass composite material ensuring good mechanical and climatic properties and on the other hand good isolation properties do not spoil electrical characteristics of the antenna as for instance at metal versions. The optimal electrical characteristics are also enabled with right selection of angles and distances between the radiating elements and reflectors. The antenna is designed in so called “diamond shape”, and this means besides better electrical also better mechanical properties, because we could mount coaxial cable on the lower supporting element.

The new version of this antenna has all wire elements cut and prepared for immediate installation without any additional tuning. For coax. cable connection there are a special junction box, so called “dipole junction” with UHF female connector. Therefore the antenna and the cables are well protected against all weather conditions.

An “add-on” wire kit for WARC bands is available on request.

TECHNICAL DATA	
Frequency range	14, 21, 28 MHz
Impedance	50 ohm
VSWR	< 2 (DIAG. 1)
Gain	5-6 dBd
Front-to-back ratio	10-20 dB
Polarization	HOR.
Maximum power	1 kW CW, 2 kW PEP
Mass of antenna	15 kg
Supporting elem. lenght	4,1 m
Diameter of rotation	8 m
Wind velocity	120 km/h

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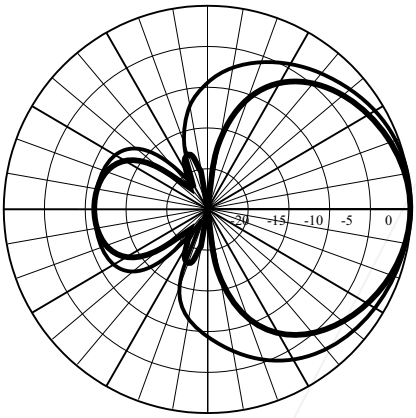
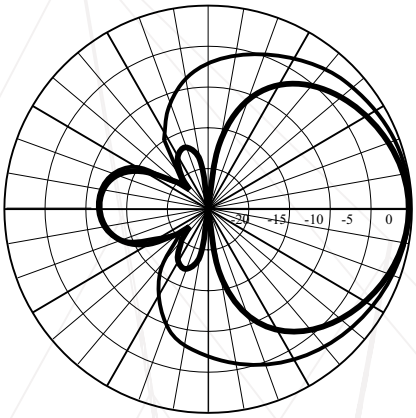
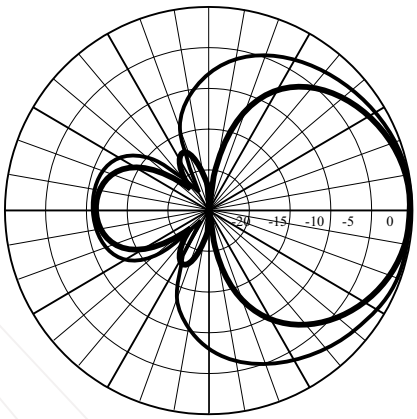
E plane
H plane



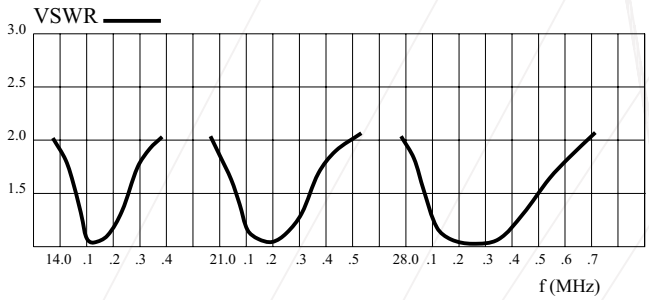
14 MHz

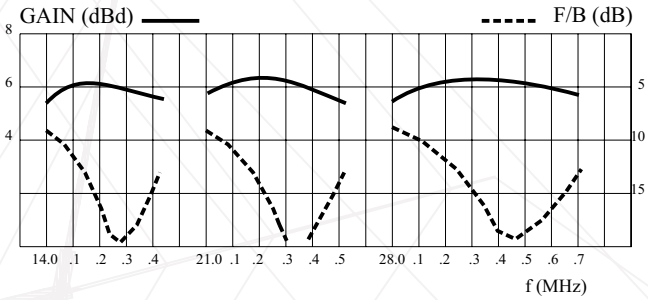


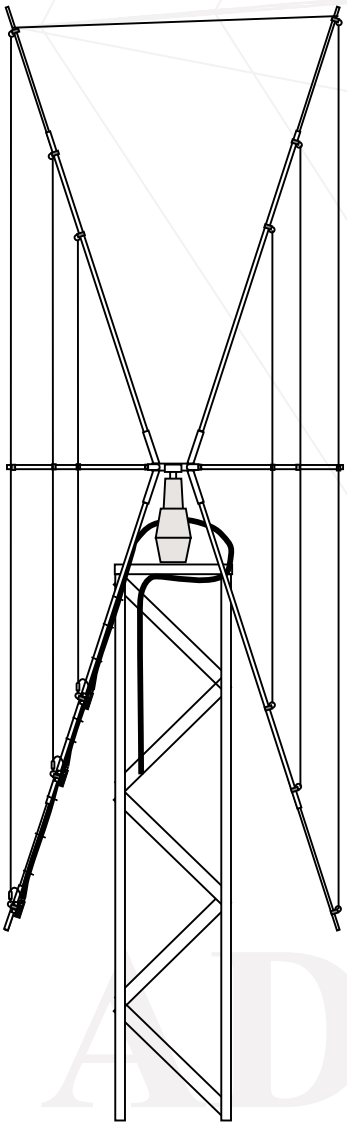
21 MHz

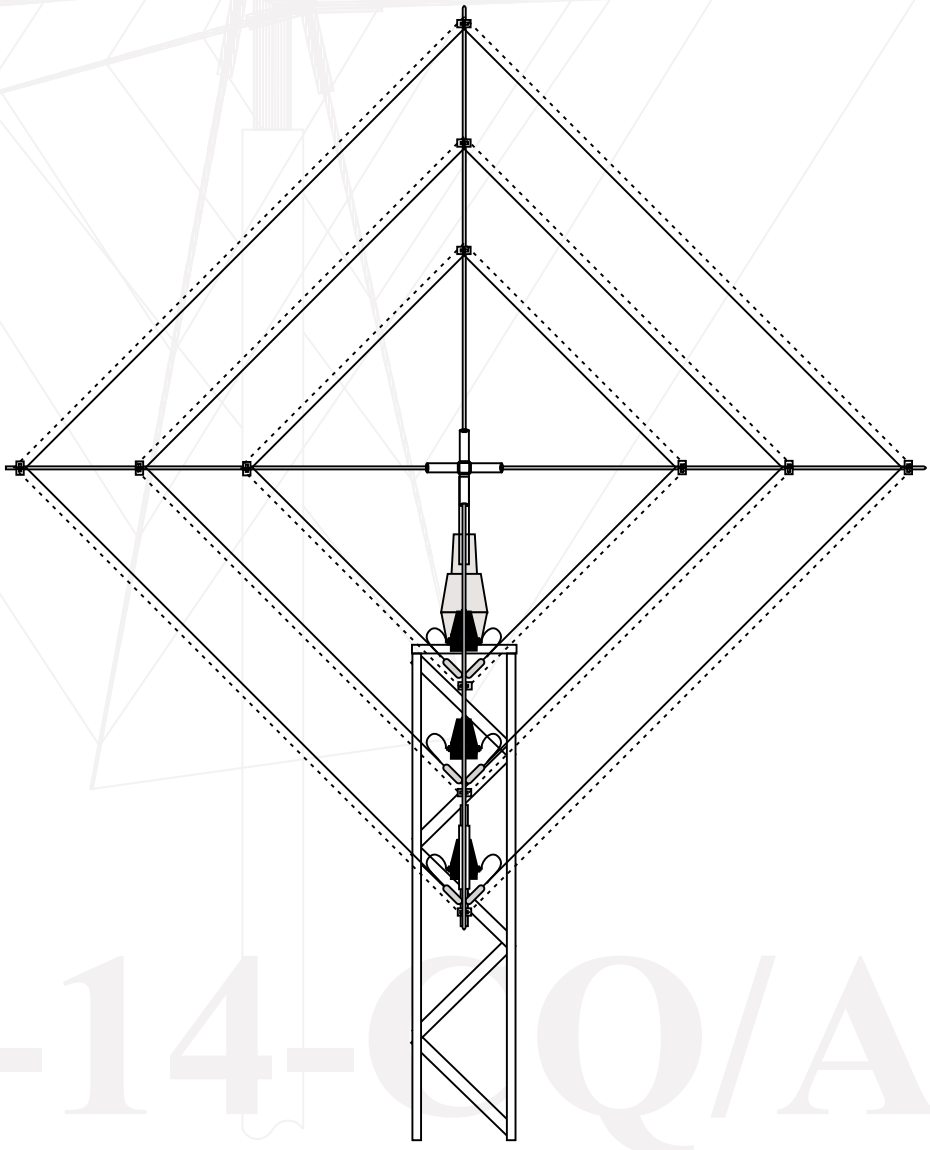


28 MHz









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AD-14-CQ-B

The antenna AD-14-CQ-B is a “cubical quad” type of antenna intended for use of radio amateurs in the HF range. Supporting elements are made of epoxy - glass composite material ensuring good mechanical and climatic properties and on the other hand good isolation properties do not spoil electrical characteristics of the antenna as for instance at metal versions. The optimal electrical characteristics are also enabled with right selection of angles and distances between the radiating elements and reflectors. The antenna is designed in so called “diamond shape”, and this means besides better electrical also better mechanical properties, because we could mount coaxial cable on the lower supporting element.

The antenna has all wire elements cut and prepared for immediate installation without any additional tuning. For coax. cable connection there are a special junction box, so called “dipole junction” with UHF female connector. Therefore the antenna and the cables are well protected against all weather conditions.

TECHNICAL DATA	
Frequency range	21, 28 MHz
Impedance	50 ohm
VSWR	< 2 (DIAG. 1)
Gain	5-6 dBd
Front-to-back ratio	10 - 20 dB
Polarization	HOR.
Maximum power	1 kW CW, 2 kW PEP
Mass of antenna	12 kg
Supporting elem. lenght	2.8 m
Diameter of rotation	5.7 m
Wind velocity	120 km/h

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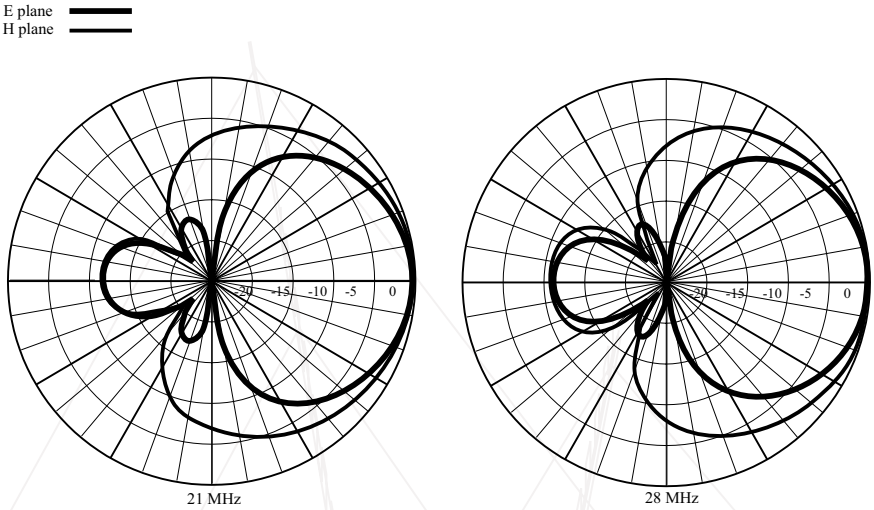
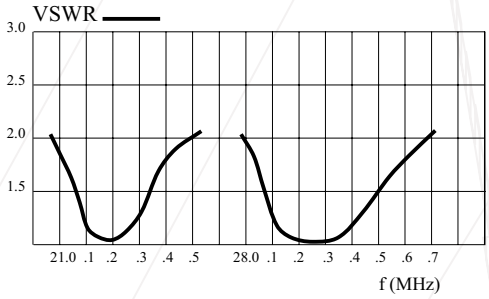
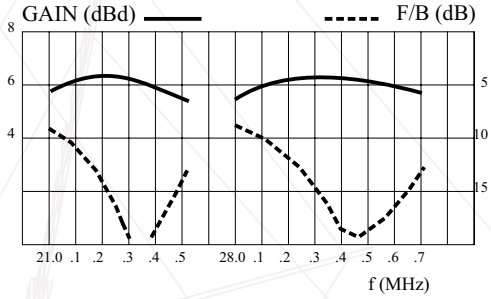
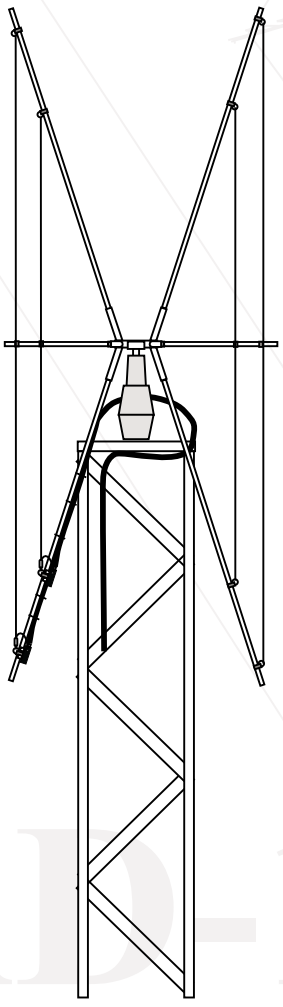
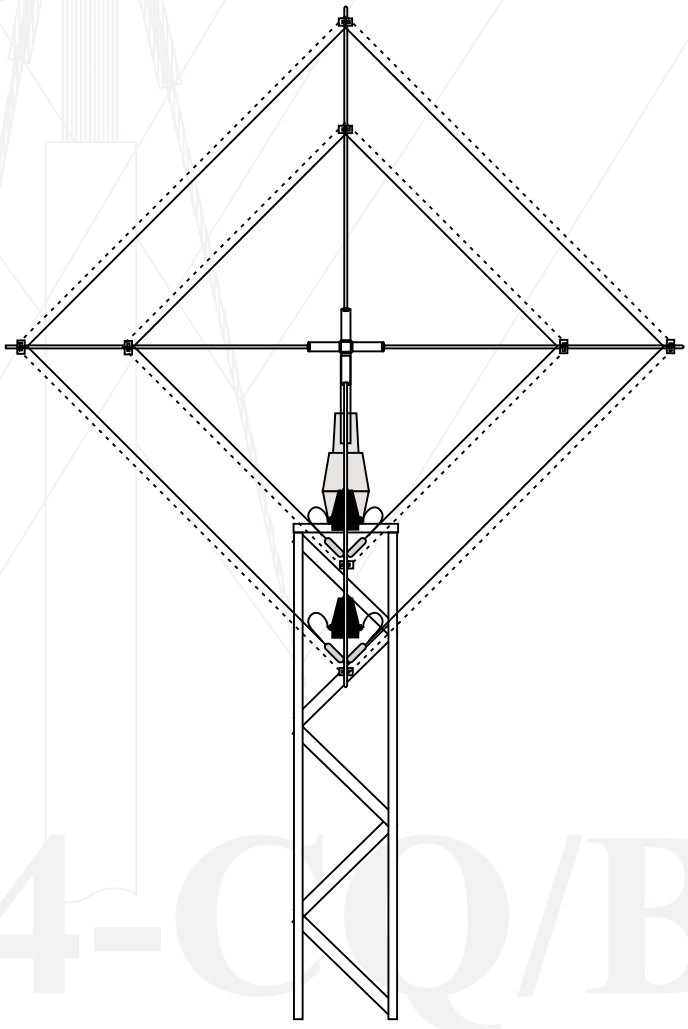

E plane
H plane
-20 -15 -10 -5 0
21 MHz
-20 -15 -10 -5 0
28 MHz


VSWR
3.0
2.5
2.0
1.5
21.0 .1 .2 .3 .4 .5
28.0 .1 .2 .3 .4 .5 .6 .7
f (MHz)


GAIN (dBd)
F/B (dB)
8
6
4
5
10
15
21.0 .1 .2 .3 .4 .5
28.0 .1 .2 .3 .4 .5 .6 .7
f (MHz)





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AD-14-CQ/C

The antenna AD-14-CQ/C is a 4-elements “cubical quad” antenna intended for use by radioamateurs on the 14, 21 and 28 MHz frequency range. The antenna is designed as “spider quad” or “diamond shaped” with inclined supporting elements thus enable optimum positions between reflector, radiator and directors. Supporting elements are made of fiberglass tubes ensuring good mechanical and climatic properties and on the other hand good isolation properties do not spoil electrical characteristics of the antenna.

The antenna has all wire elements prepared for immediate installation without any additional tuning. For coax. cable connection there are a special junction box, so called “dipole junction” with UHF female connector. Therefore the antenna and the cables are well protected against all weather conditions. The supporting boom is divided in two parts connected together with aluminum tube with mounting consoles enable to mount the antenna on the antenna rotator. Such construction enables easier antenna mounting or even use as “square shaped” antenna with 45^{o} linear polarization saving us some space under the antenna.

An “add-on” wire kit for WARC bands is available on request.

TECHNICAL DATA	
Frequency range	14, 21, 28 MHz
Impedance	50 ohm
VSWR	< 2 (DIAG. 1)
Gain	8.5 dBd (14 MHz) 10 dBd (21, 28 MHz)
Front-to-back ratio	15-25 dB
Front-to-side ratio	> 45 dB
Polarization	HOR/45^{o}/VERT
Maximum power	1 kW CW, 2 kW PEP
Mass of antenna	30 kg
Supporting elem. lenght	4.0 m
Boom length	2 x 2.1 m
Diameter of rotation	10 m
Wind area (CxA)	0.45 m^2
Wind velocity	150 km/h

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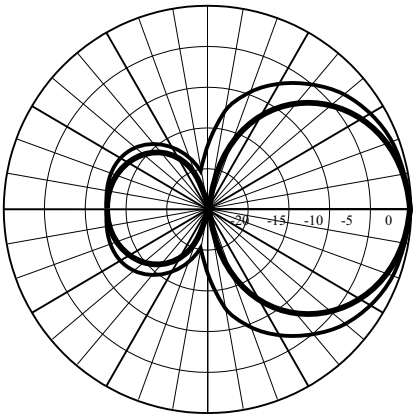
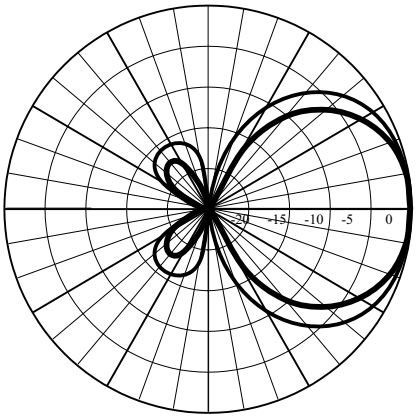
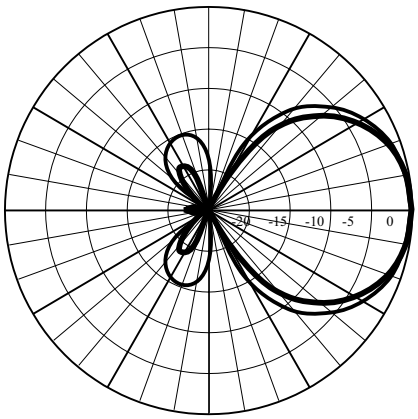
E plane
H plane



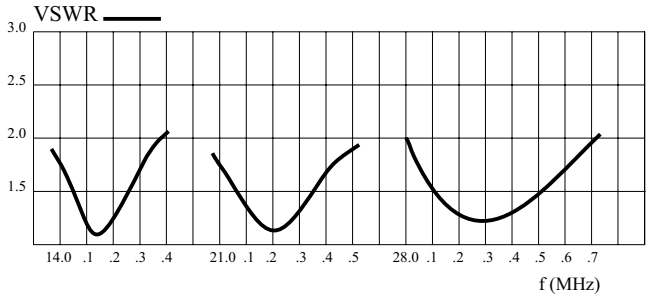
14 MHz

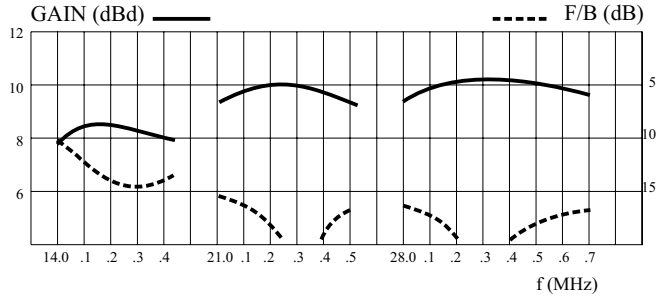


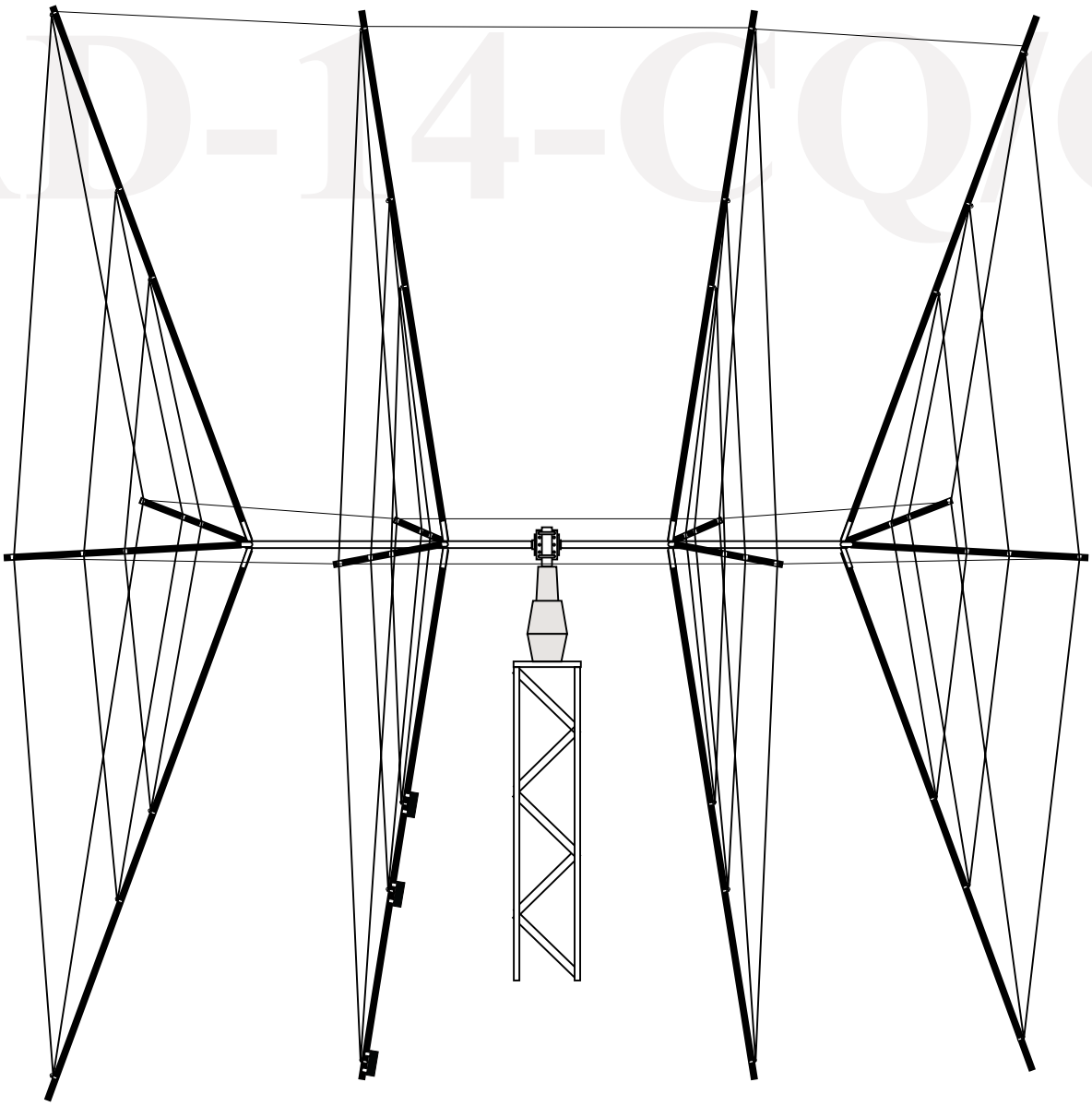
21 MHz



28 MHz







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AD-14-CQ/D

The antenna AD-14-CQ/D is a 4-elements “cubical quad” antenna intended for use by radioamateurs on the 21 and 28 MHz frequency range. The antenna is designed as “spider quad” or “diamond shaped” with inclined supporting elements thus enable optimum positions between reflector, radiator and directors. Supporting elements are made of fiberglass tubes ensuring good mechanical and climatic properties and on the other hand good isolation properties do not spoil electrical characteristics of the antenna.

The antenna has all wire elements prepared for immediate installation without any additional tuning. For coax. cable connection there are a special junction box, so called “dipole junction” with UHF female connector. Therefore the antenna and the cables are well protected against all weather conditions. The supporting boom is divided in two parts connected together with aluminum tube with mounting consoles enable to mount the antenna on the antenna rotator. Such construction enables easier antenna mounting or even use as “square shaped” antenna with 45° linear polarization saving us some space under the antenna.

TECHNICAL DATA	
Frequency range	21, 28 MHz
Impedance	50 ohm
VSWR	< 2 (DIAG. 1)
Gain	10 dBd
Front-to-back ratio	15-25 dB
Front-to-side ratio	> 45 dB
Polarization	HOR/45°/VERT
Maximum power	1 kW CW, 2 kW PEP
Mass of antenna	25kg
Supporting elem. lenght	2.8 m
Boom length	2 x 2.1 m
Diameter of rotation	10 m
Wind area (CxA)	0.45 m^2
Wind velocity	150 km/h

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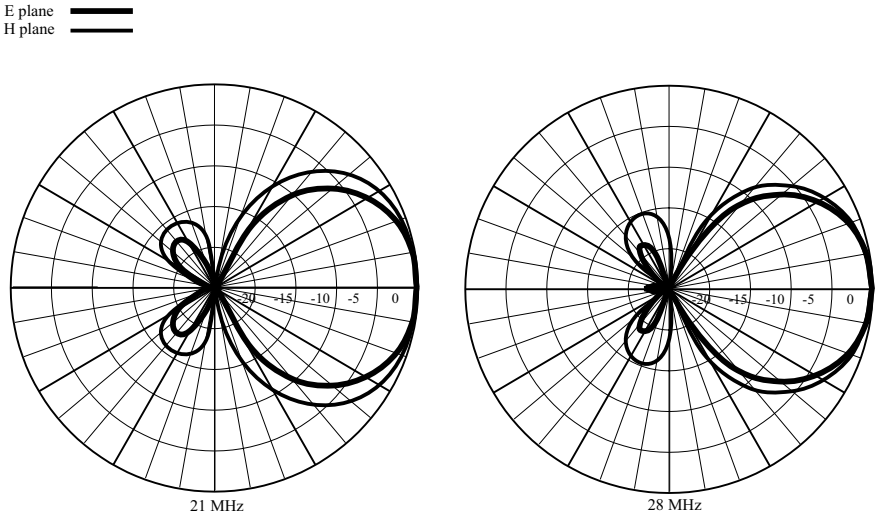
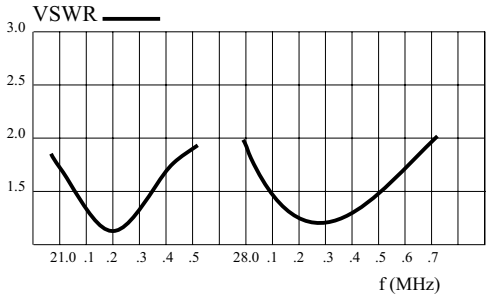
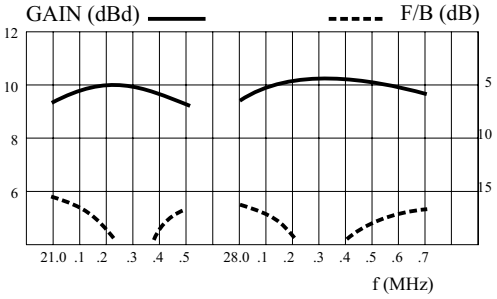
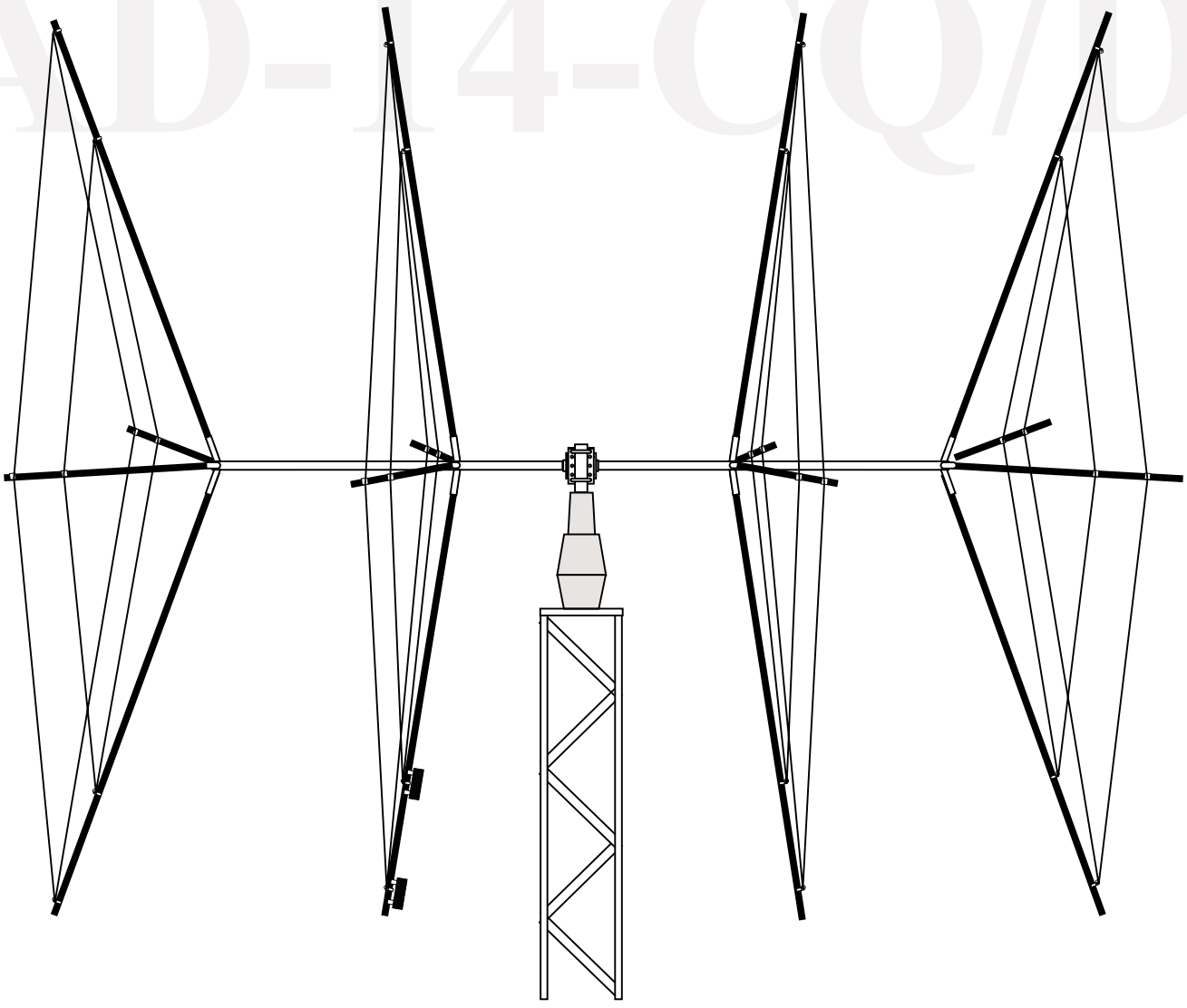

E plane
H plane
-30 -15 -10 -5 0
21 MHz
-30 -15 -10 -5 0
28 MHz


VSWR
3.0
2.5
2.0
1.5
21.0 .1 .2 .3 .4 .5
28.0 .1 .2 .3 .4 .5 .6 .7
f (MHz)


GAIN (dBd)
F/B (dB)
12
10
8
6
5
10
15
21.0 .1 .2 .3 .4 .5
28.0 .1 .2 .3 .4 .5 .6 .7
f (MHz)



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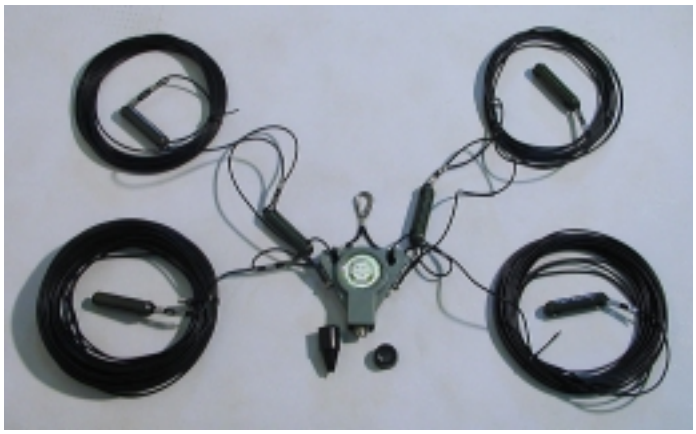
AD-14-W/80

The antenna AD-14-W/80 is wire multiband antenna intended for radioamateur use on 80, 40, 20, 17, 12 and 10 meter bands. 15 meter band is usable only with antenna tuner unit. The antenna is composed of two wire segments made of special insulated copper wire rope length of approx. 40 meters, of two end insulators and of balun transformer. The balun is placed on 1/3 or 2/3 of the antenna wire enables good VSWR on all mentioned frequency bands. The antenna is suitable for mounting as dipole, mounted between two appropriate supports or mounted on some appropriate mast as "inverted V".



A special version of this antenna (AD-14-WA/80) is available for work also on WARC and 15 m bands.

TECHNICAL DATA	AD-14-W/80	AD-14-WA/80
Frequency range	3.5 - 4.0 MHz 7.0 - 7.3 MHz 14.0 - 14.35 MHz 18.068 - 18.168 MHz 24.89 - 24.99 MHz 28.0 - 29.7 MHz	3.5 - 4.0 MHz 7.0 - 7.3 MHz 10.10 - 10.15 14.0 - 14.35 MHz 18.068 - 18.168 MHz 21.0 - 21.45 MHz 24.89 - 24.99 MHz 28.0 - 29.7 MHz
Impedance	50 ohm	50 ohm
VSWR	< 2.5	< 2.5
Polarization	HOR.	HOR.
Maximum power	300 W CW, 1000 PEP	300 W CW, 1000 PEP
Mass of antenna	1.4 kg	1.6 kg
Wire length	42.2 m	42.2 m

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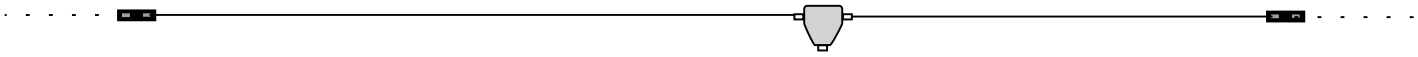
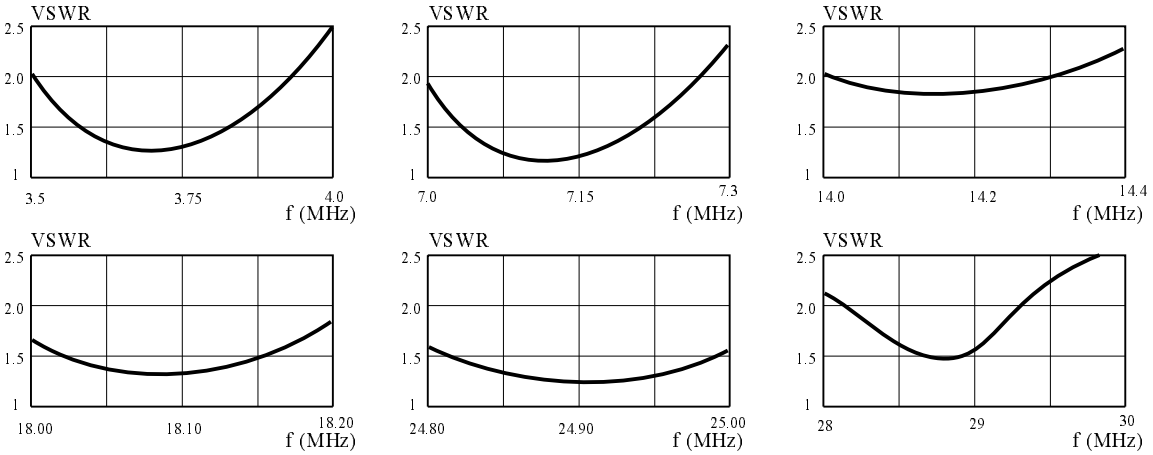
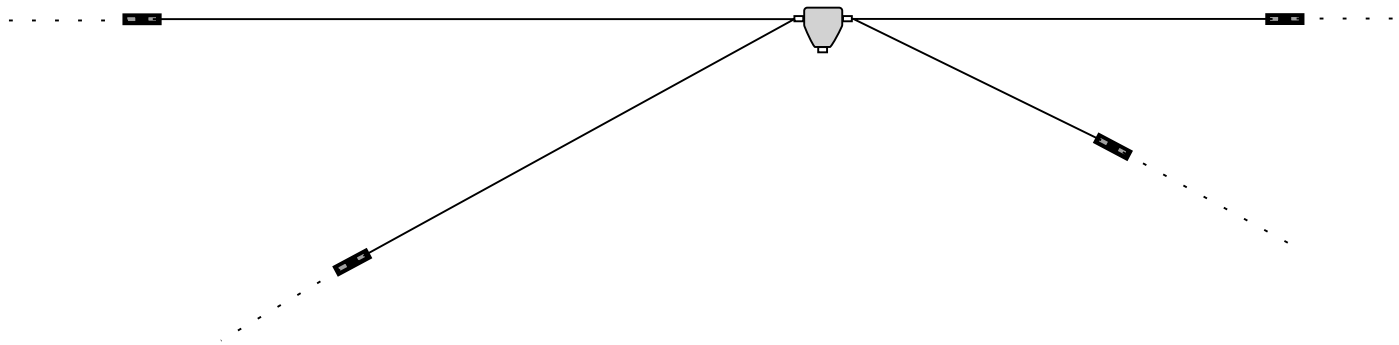
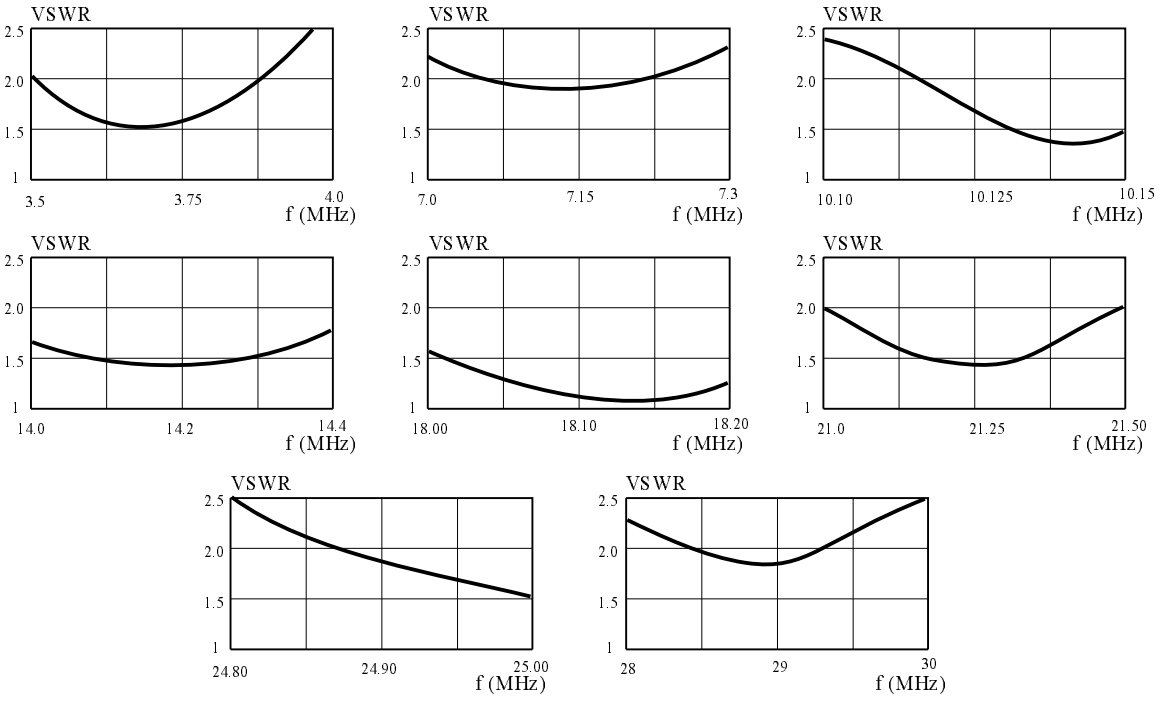
AD-14-W/80





AD-14-WA/80





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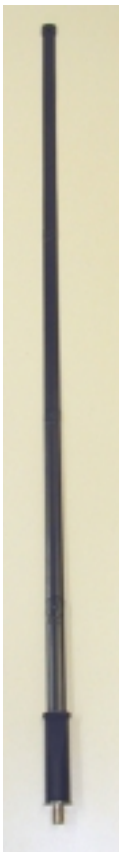
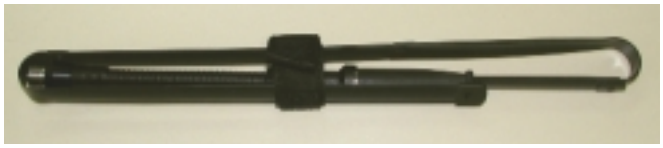
AD-25/C

Family of antennas AD-25/C is intended for use with portable and manpack radios within VHF frequency band. The antenna radiator is composed of several multilayered tapes connected together to ensure good conductivity, flexibility and robust construction. The antenna consists also a special grip tape for packing when not in use.
Version of AD-25/C-GN contains also a special “goose-neck”enables vertical position of the antenna irrespective of position of radio set. Antenna is available in different heights (max. 1080 mm) and with different types of thread connectors (5/16”- 24UNF as standard or by request).





TECHNICAL DATA	AD-25/C-760	AD-25/C-915	AD-25/C-GN-925	AD-25/C-GN-1080
Frequency range	30 - 90 (108) MHz	30 - 90 (108) MHz	30 - 90 (108) MHz	30 - 90 (108) MHz
Maximum power	25 W	25 W	25 W	25 W
Polarization	VER.	VER.	VER.	VER.
Connector	thread 5/16-24UNF (or by request)	thread 5/16-24UNF (or by request)	thread 5/16-24UNF (or by request)	thread 5/16-24UNF (or by request)
Height	760 mm	915 mm	925 mm	1080 mm
Weight	0,10 kg	0,11 kg	0,17 kg	0,18 kg
Temperature range	- 40....+70 °C	- 40....+70 °C	- 40....+70 °C	- 40....+70 °C

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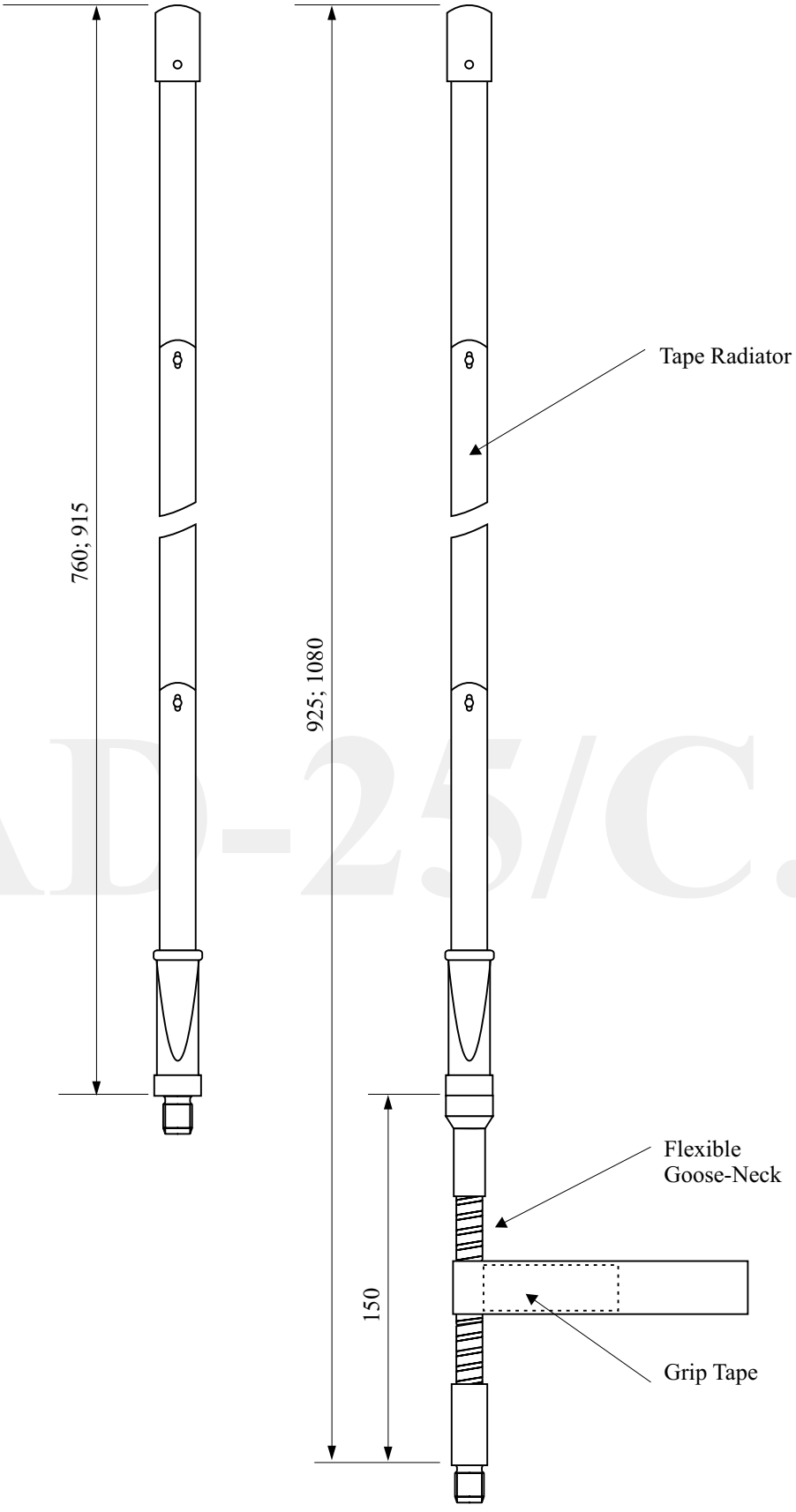
760; 915
925; 1080
Tape Radiator
Flexible
Goose-Neck
150
Grip Tape

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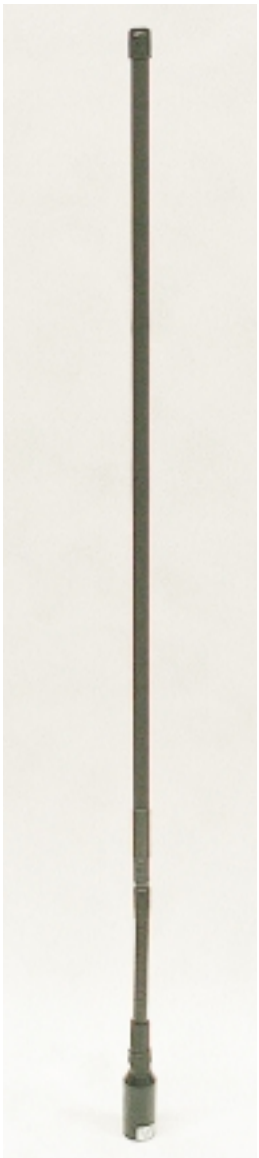
AD-25/CW

The family of wideband antennas AD-25/CW is composed of wideband VHF whips intended for use on manpack radios in the frequency range from 30 to 88 (108) MHz. Electrically the antenna is optimised for all exploitation conditions (radio on back, at the breast, on the ground, etc.) so it is not necessary for additional tuning. The antenna is composed of radiating part made of special steel multilayer tape material ensuring high flexibility and roughness. The antenna has built-in a special passive transformer tuning network enclosed in fibreglass housing above the input coaxial connector. Above the transformer unit is so called “goose neck” enables that the antenna is always in vertical position regardless of the position of the radio unit. Different models regarding the frequency range, max. RF power, input connector, etc., are available on request.



TECHNICAL DATA	AD-25/CW
Frequency range	30 - 90 (108) MHz
Impedance	50 ohm
VSWR	< 3 (DIAG. 1)
Gain	DIAG. 2
Polarization	VER.
Maximum power	10 W CW
Connector	modif. BNC/TNC
Height	0.9 - 1,2 m
Mass of antenna	0,35 kg
Environmental specs.	MIL-STD-810

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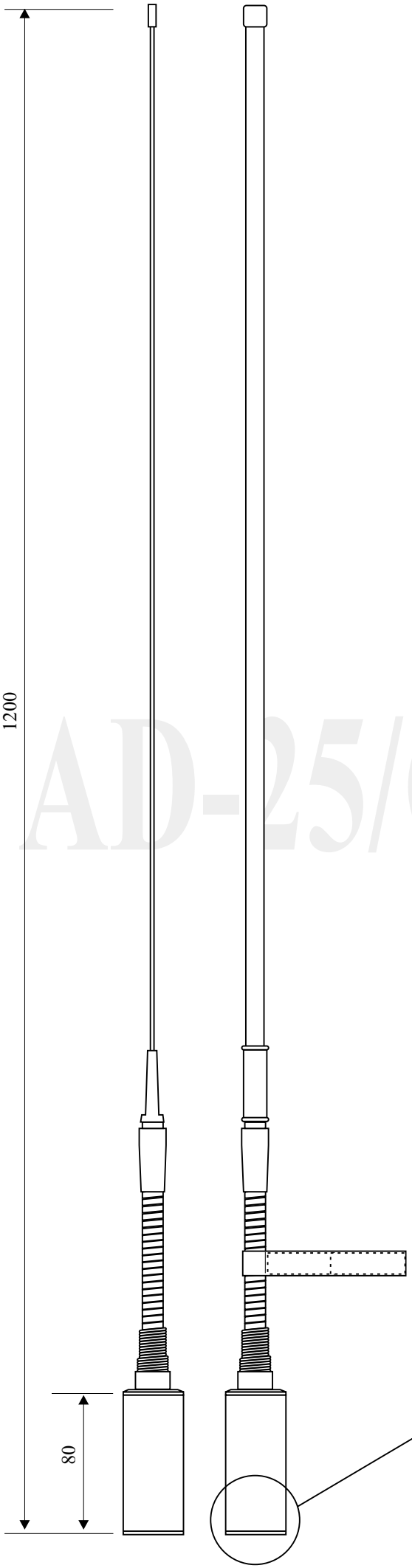

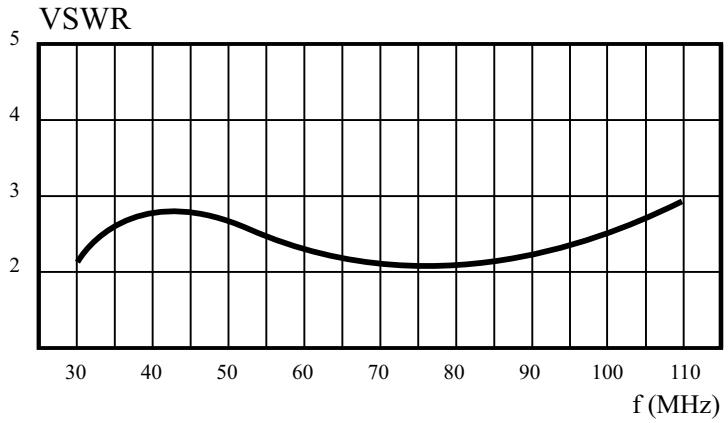

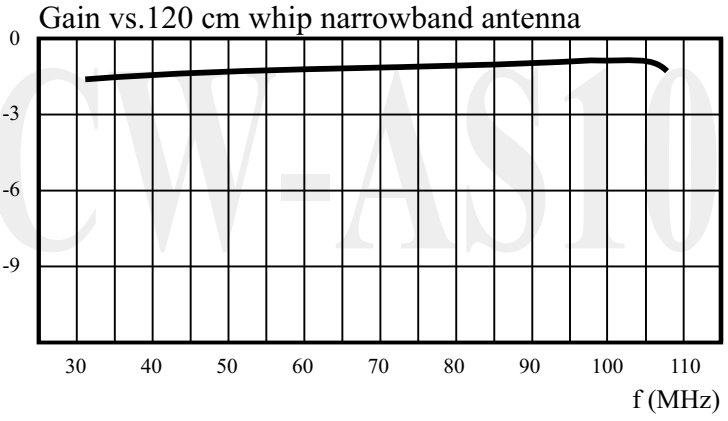

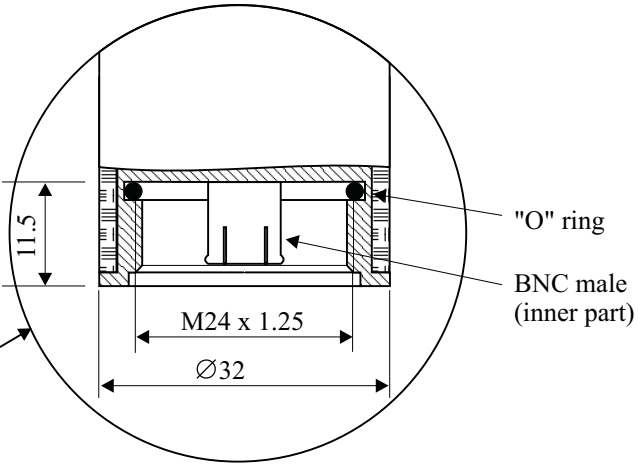

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AD-26/C

Family of antennas AD-26/C is intended for use with portable and manpack radios within VHF frequency band. The antenna is composed of several thin wall stainless steel sections connected with elastic rope. Elastic rope tension enables good electrical contact between sections and quick deployment of the antenna within seconds. The antenna consists also a special grip tape for packing when not in use. Version of AD-26/C-GN contains also a special “goose-neck”enables vertical position of the antenna irrespective of position of radio set. Antenna is available in different heights (max. 3220 mm) and with different types of thread connectors (5/8”-18UNF as standard or by request).

TECHNICAL DATA	AD-26/C	AD-26/C-GN
Frequency range	30 - 90 MHz	30 - 90 MHz
Maximum power	50 W	50 W
Polarization	VER.	VER.
Connector	thread 5/8”-18UNF (or by request)	thread 5/8”-18UNF (or by request)
Height	max. 3035 mm	max. 3220 mm
Weight	max. 0,350 kg	max. 0,5 kg
Temperature range	- 40....+70 °C	- 40....+70 °C

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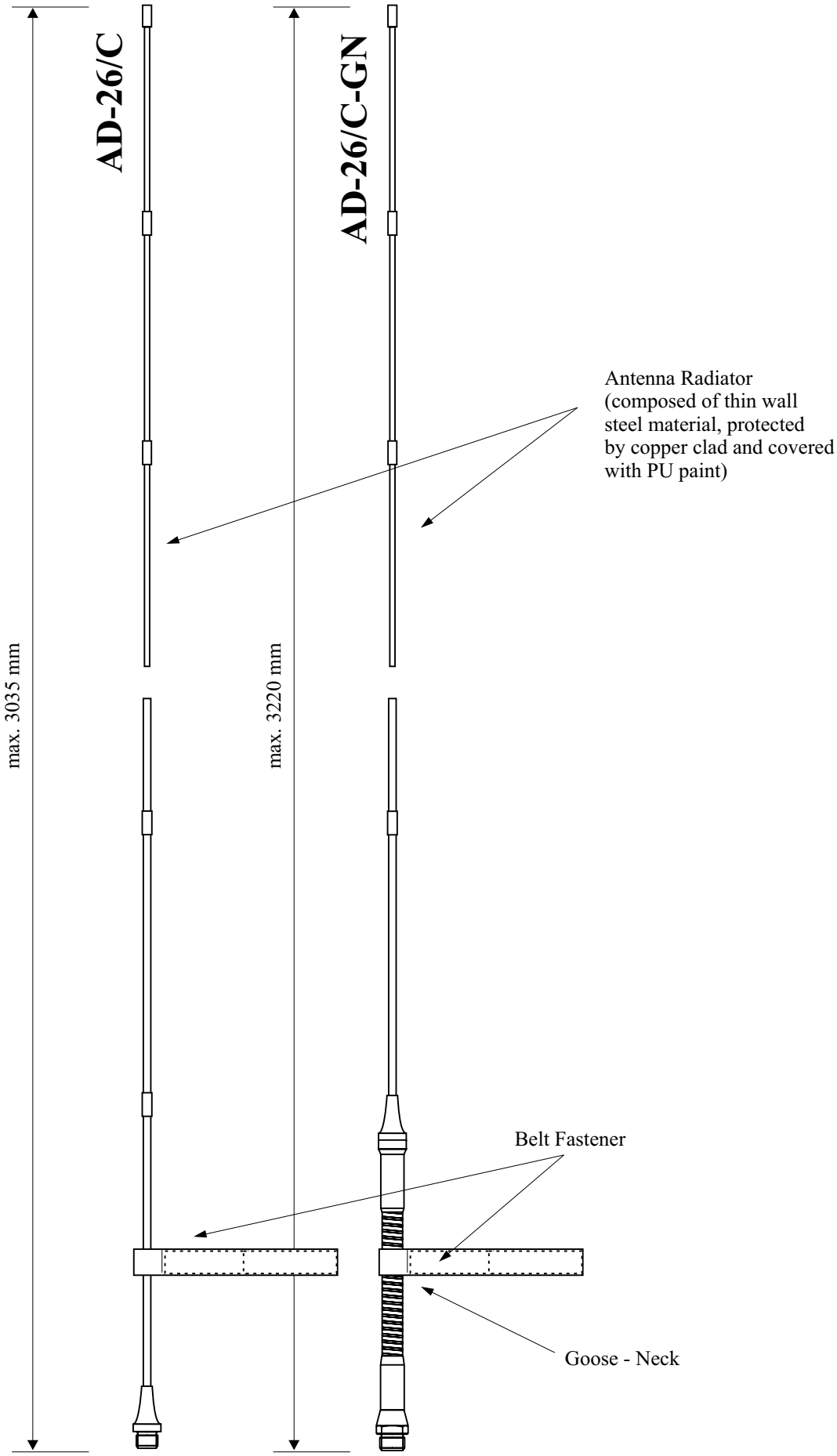
AD-26/C
AD-26/C-GN
max. 3035 mm
max. 3220 mm
Antenna Radiator
(composed of thin wall
steel material, protected
by copper clad and covered
with PU paint)
Belt Fastener
Goose - Neck

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AD-26/CW

The antenna AD-26/CW is a wideband VHF monopole intended for use primarily on manpack radio stations. It is composed of six rod sections, made of polyester - glass composite material, connected together with screw - conical joints and with safety ropes between them. The antenna has built-in a special passive transformer tuning network enclosed in fibreglass housing above the input coaxial connector. Above the transformer unit is so called “goose neck” enables that the antenna is always in vertical position. The antenna is wideband and therefore suitable for use with standard VHF radios as well with “frequency hopping” systems for work in stay with radio on the ground or on the back, concerning the antenna length. All metal parts of the antenna are galvanically protected.
Different models regarding the frequency range, max. RF power, input connector, etc., are available on request.

TECHNICAL DATA	
Frequency range	30 - 90 (108) MHz
Impedance	50 ohm
VSWR	< 3 (DIAG. 1)
Gain	DIAG. 2
Polarization	VER.
Maximum power	5 W CW
Connector	modif. BNC/TNC
Height	2,6 m
Mass of antenna	0,6 kg
Lenght of sections	380 mm
Environmental specs.	MIL-STD-810

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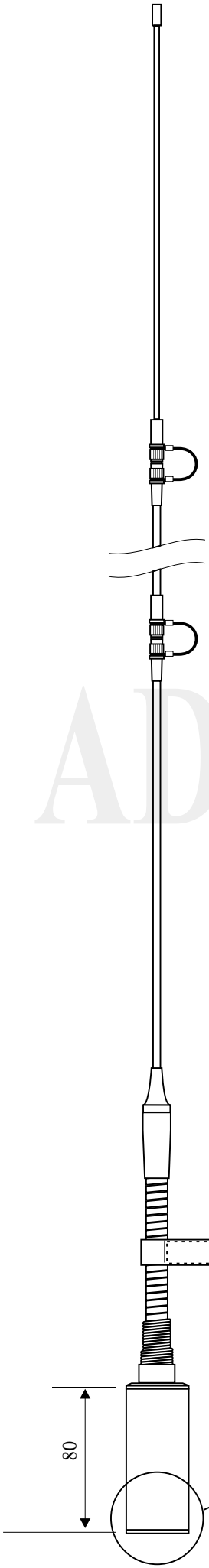
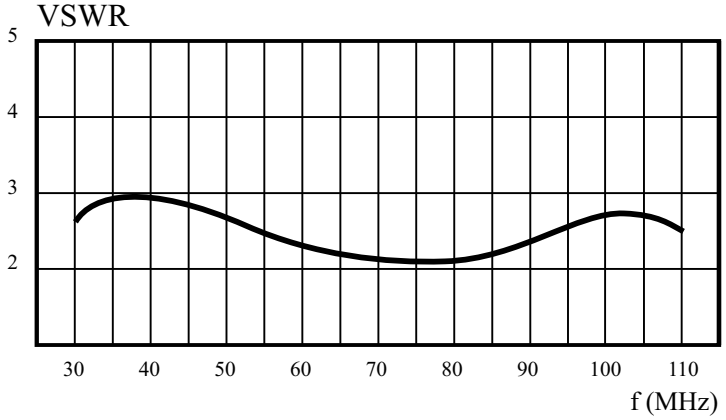
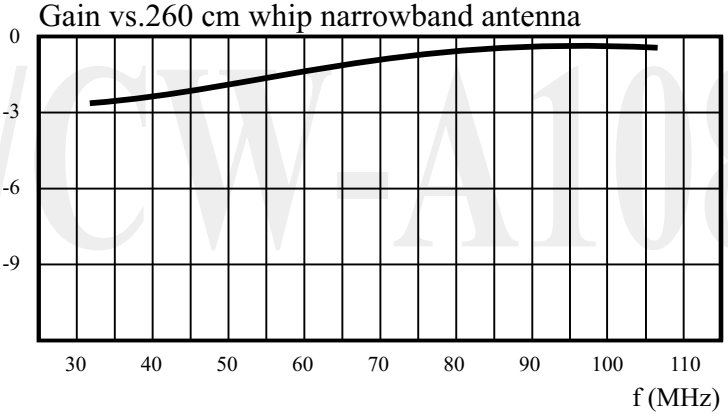
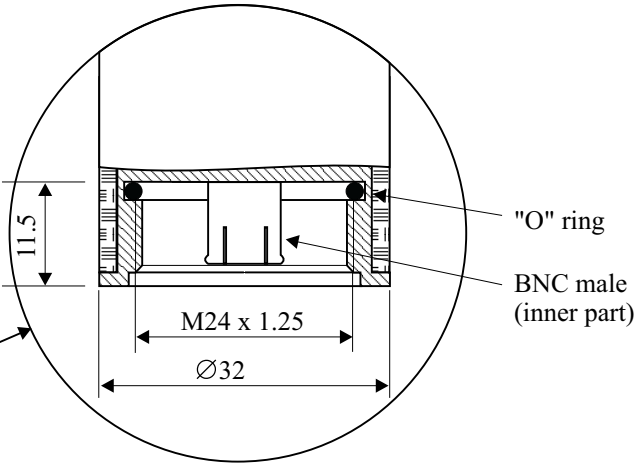


VSWR



Gain vs.260 cm whip narrowband antenna





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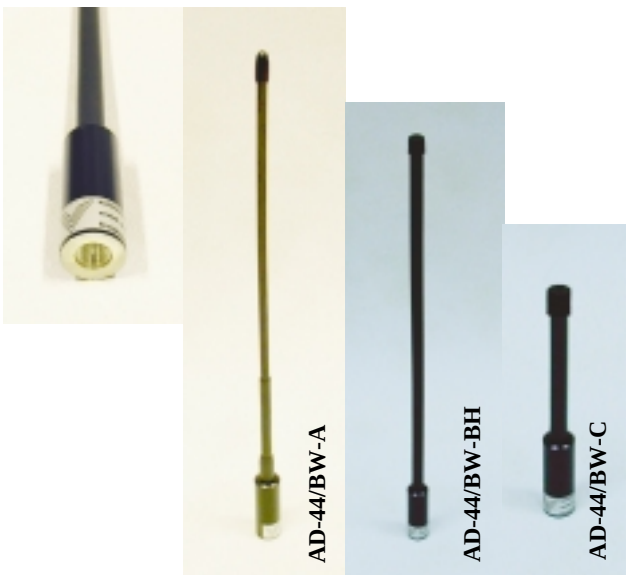
AD-44/BW...

The antennas AD-44/BW represent a family of wideband monopole whips, primarily intended for use with portable and handheld radios in VHF frequency range from 30 to 90 (108) MHz. Electrically the antenna is optimised for all exploitation conditions (radio in hand, at the side, etc.) so it is not necessary for additional tuning. The antenna is composed of radiating part made of special wounded wire or helix and covered with a heatshrinkable tube with silicone undercover ensuring high flexibility and roughness. The antenna has built-in a special passive transformer tuning network enclosed in fiberglass housing above the input coaxial connector. Input connector is TNC male. Other types (N or BNC male) are available on special request.

TECHNICAL DATA	/BW-C	/BW-A	/BW-AH	/BW-B	/BW-BH	/BW-ESW	/BW-ESS
Frequency (MHz)	30-108	30-88	30-108	30-88	30-108	30-88	30-88
Impedance	50	50	50	50	50	50	50
VSWR	< 3	<3	<3	<3	<3	<3	<3
Max. power (W)	5	5	5	5	5	5	5
Connector type	TNCm	TNCm	TNCm	TNCm	TNCm	TNCm mod.	TNCm mod.
Radiator type	helix	whip	whip	helix	helix	whip	helix
Radiator diam. (mm)	10.8	5.5	5.5	10.8	10.8	5.5	10.8
Height (mm)	150	400	330	400	330	400	400
Weight (gr.)	75	120	105	120	105	120	120



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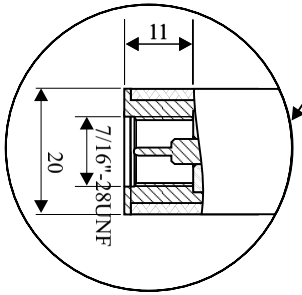
AD-44/BW-C

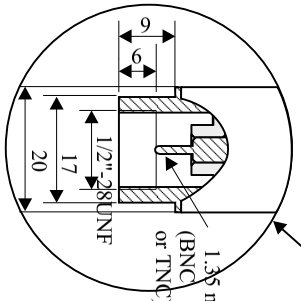
AD-44/BW-A



AD-44/BW-AH

AD-44/BW-B

AD-44/BW-BH



AD-44/BW-ESW

AD-44/BW-ESS

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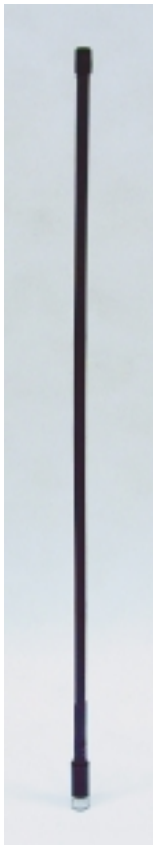
AD-44/CW...

The antennas AD-44/CW represent a family of wideband monopole whips, primarily intended for use with portable and handheld radios in VHF frequency range from 30 to 90 (108) MHz. Electrically the antenna is optimised for all exploitation conditions (radio in hand, at the side, at the breast etc.) so it is not necessary for additional tuning. The antenna is composed of radiating part made of special steel multilayer tape material ensuring high flexibility and roughness. The antenna has built-in a special passive transformer tuning network enclosed in fibreglass housing above the input coaxial connector. Above the transformer unit could be added so called “goose neck” enables that the antenna is always in vertical position regardless of the position of the radio station. Input connector is TNC male (or modified TNC male), Other types (N or BNC male) are available on special request.



TECHNICAL DATA	/CW-A	/CW-AH	/CW-E	/CW-EG	/CW-A120	/CW-AG120	/CW-A136
Frequency (MHz)	30-88	30-108	30-88	30-88	30-88	30-88	30-88
Impedance	50	50	50	50	50	50	50
VSWR	< 3	<3	<3	<3	<3	<3	<3
Max. power (W)	5	5	5	5	5	5	5
Connector type	TNCm	TNCm	TNCm mod.	TNCm mod.	TNCm	TNCm	TNCm
Radiator type	tape	tape	tape	tape	tape	tape	tape
Goose-neck (mm)	-	150	-	150	-	150	-
Height (mm)	820	975	825	980	1200	1200	1360
Weight (gr.)	135	200	135	200	160	240	250

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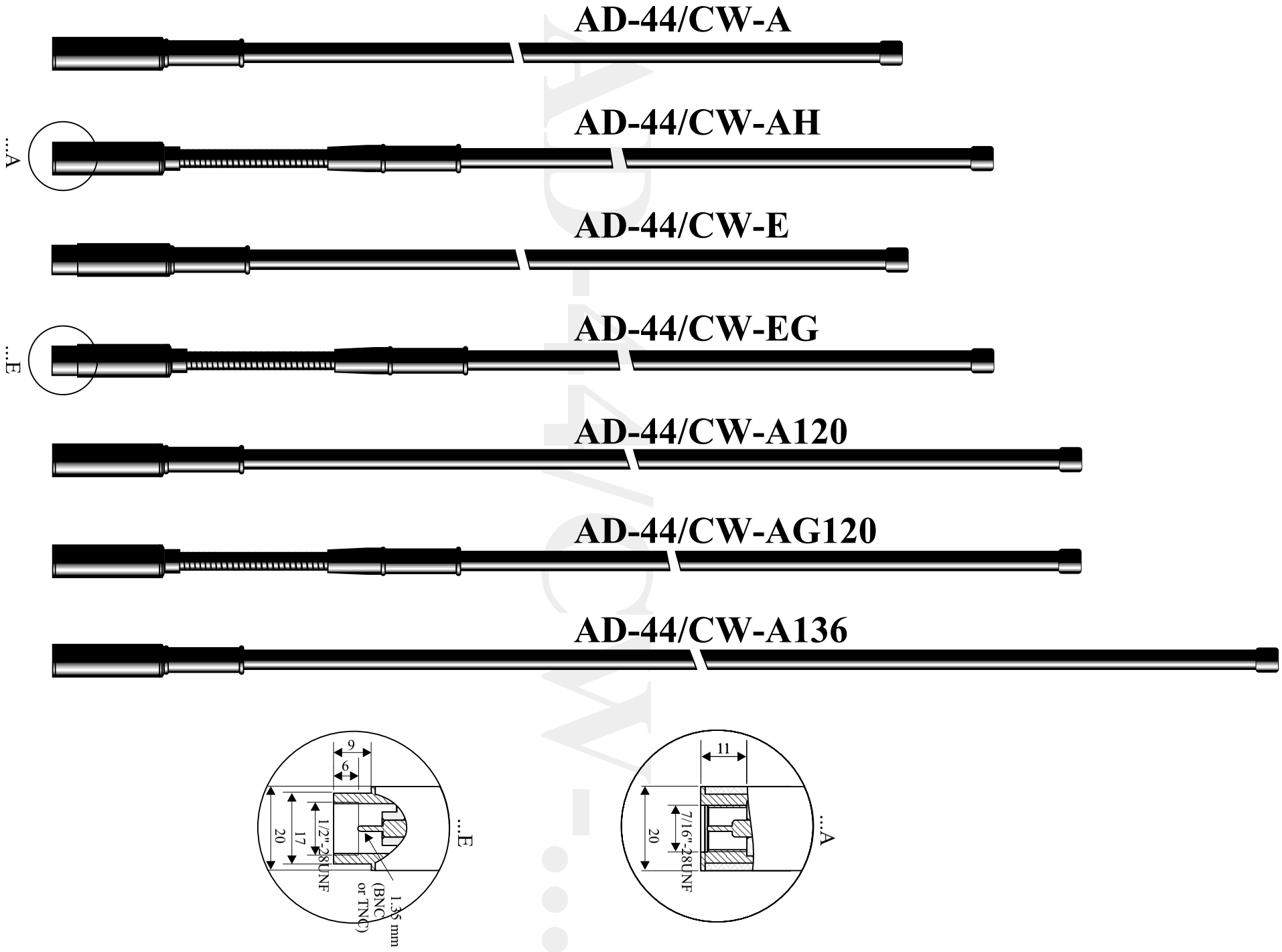
AD-44/CW-A
AD-44/CW-AH
...A
AD-44/CW-E
AD-44/CW-EG
...E
AD-44/CW-A120
AD-44/CW-AG120
AD-44/CW-A136
9
6
20
17
1/2"-28UNF
1.35 mm
(BNC
or TNC)
...E
11
20
7/16"-28UNF
...A

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AD-52

The antenna AD-52 is a wideband wire directional antenna intended for use with handheld or manpack radio units in VHF frequency range from 30 to 88 MHz. The radiating element is made of wire with special capacitive loadings along it, enable together with antenna matching transformer very low VSWR and on the other hand directional radiation pattern and therefore relatively high gain. The antenna is mainly intended for use in stay because of its simple construction and easy erecting . Except of the wire radiating element the antenna is composed of matching transformer unit, watertight enclosed in a fiberglass housing with all necessary connectors, the 15 m long coaxial feeder made of RG-58/U with coaxial connectors, lifting rope 25 m with weight, anchor and hammer. All together is packed in a handy linen bag, suitable for transport.

TECHNICAL DATA	
Frequency range	30 - 90 MHz
Impedance	50 ohm
VSWR	< 1.8
Gain (vs. 1/4 λ)	8 - 11.5 dB
3 dB beamwidth azim.	90 - 30 °
3 dB beamwidth elev.	35 - 10 °
Front to back ratio	> 13 dB
Polarization	VER.
Maximum power	50 W CW
Connector type	FME +N, TNC, BNC,
Mass of antenna	4.1 kg
Antenna length	17.1 m
Mounting height	8 - 10 m
Temperature range	-40....+70 °C

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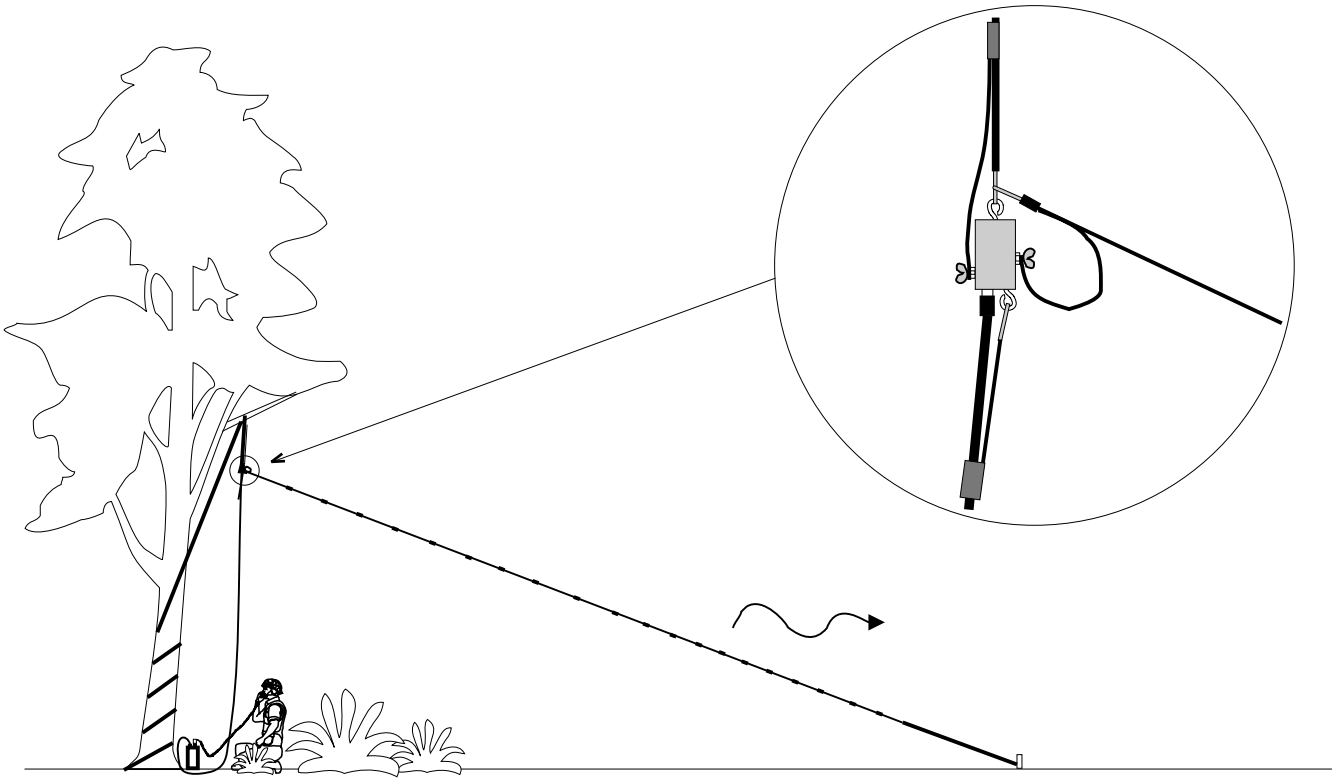
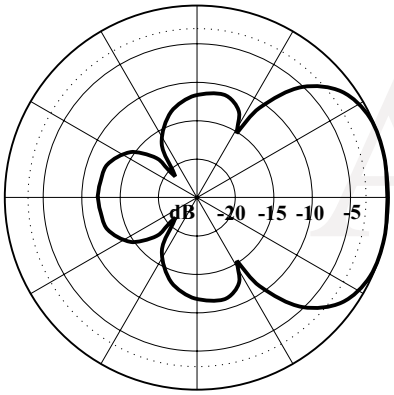
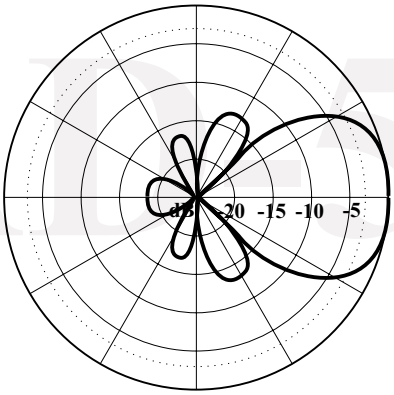


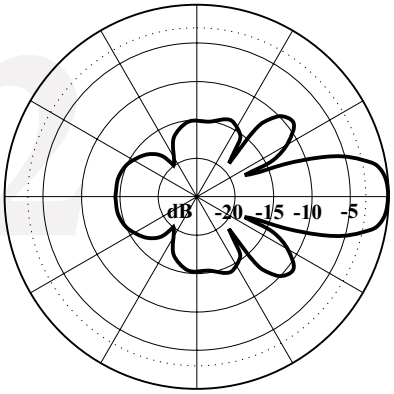
azimuth radiation pattern



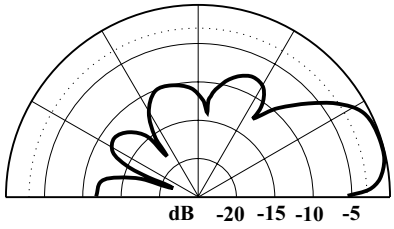
30 MHz

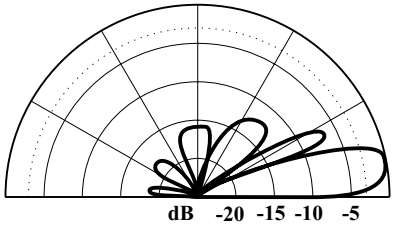


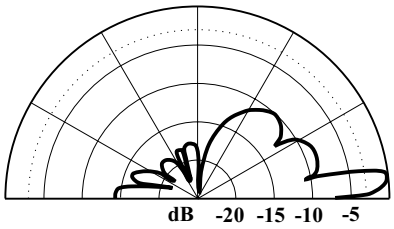
60 MHz



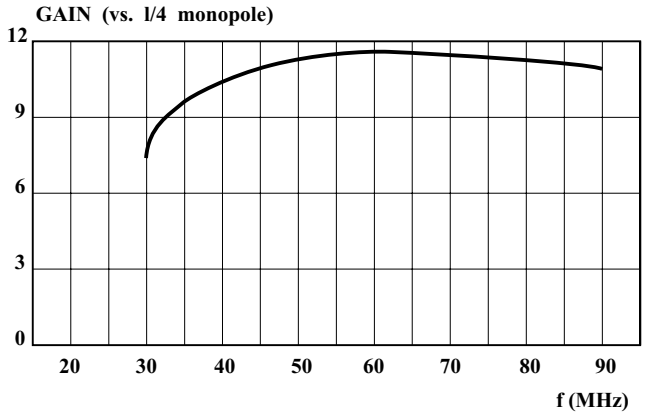
90 MHz

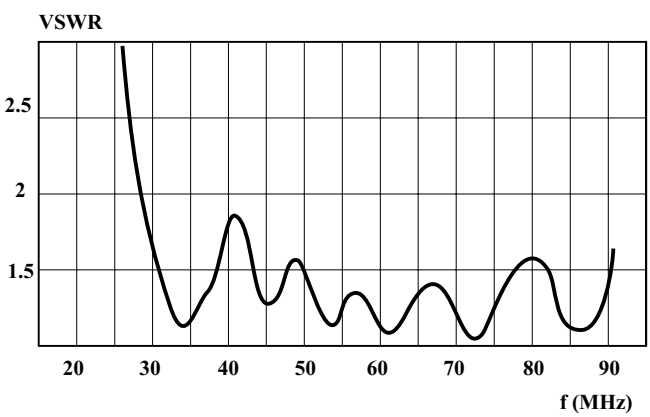






elevation radiation pattern





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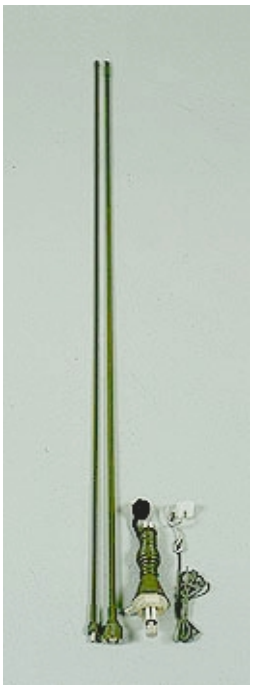
A 2228

The antenna A 2228 is a mobile vertical whip monopole, composed of two rod sections, made of polyester - glass composite material ensuring its excellent mechanical resistance and insensitivity to atmospheric influences. The antenna is intended for use with mobile VHF radio stations and could be mounted on the AP-11 antenna support. A biconical spring of the antenna support allows the antenna to be bent into the horizontal position using the supplied tightening set. All metal parts are galvanically protected.



TECHNICAL DATA	
Frequency range	20 - 90 MHz
Impedance	DIAG. 1, 2
Maximum power	50 W CW
Polarization	VER.
Support	AP-11
Height	2,36 m (2 X 1,18 m)
Mass of antenna	0,2 kg
Wind velocity	150 km/h
Temperature range	- 40....+70 °C

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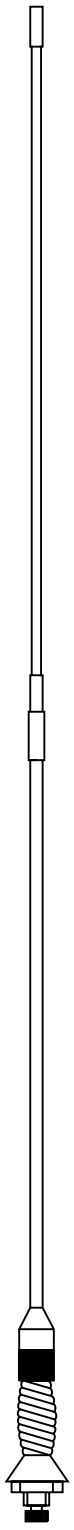
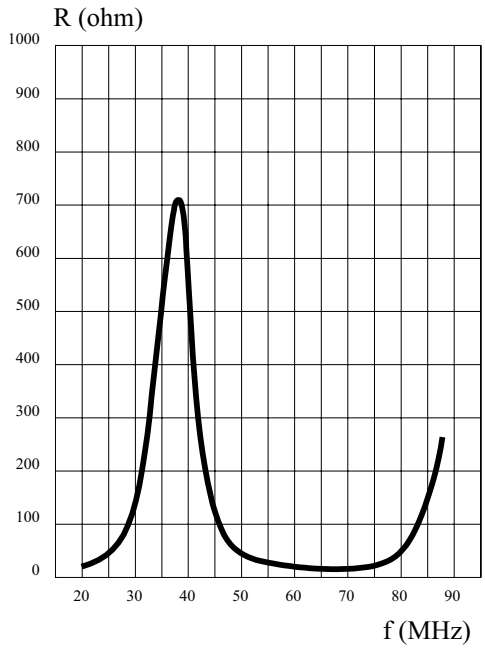
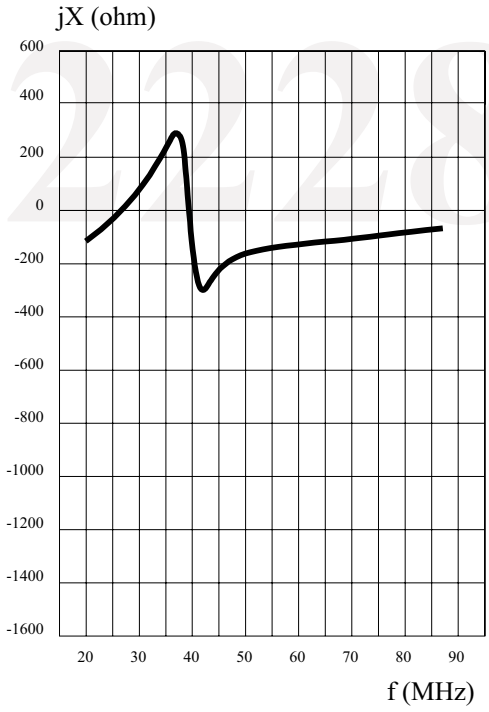
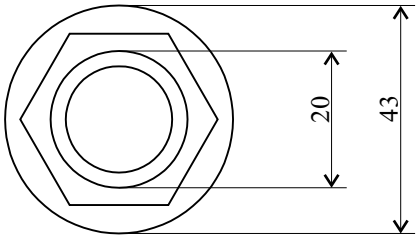



R (ohm)
1000
900
800
700
600
500
400
300
200
100
0
20
30
40
50
60
70
80
90
f (MHz)


jX (ohm)
600
400
200
0
-200
-400
-600
-800
-1000
-1200
-1400
-1600
20
30
40
50
60
70
80
90
f (MHz)


20
43

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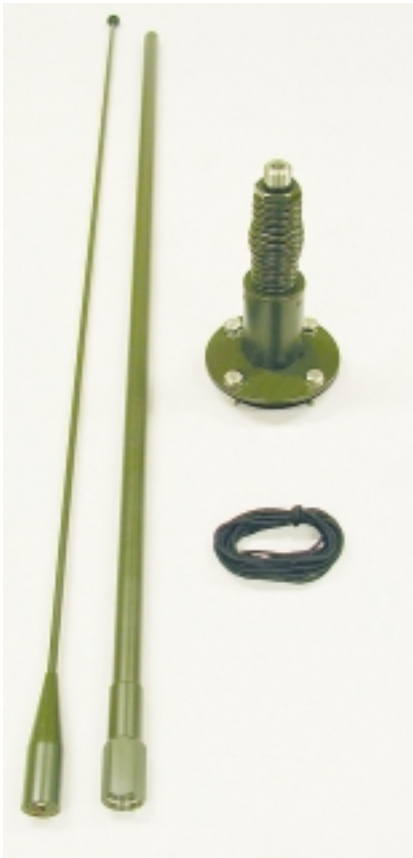
AD-18/D



The antenna AD-18/D is wideband monopole mobile VHF antenna for frequency range from 30 to 90 MHz. The antenna is result of using new technologies and materials enabling together with new electrical design much better electrical and mechanical properties compared with old models.

The antenna is composed of three main parts: antenna base, lower and upper radiating element. The antenna base is made of stainless steel and of composite materials. Inside the base is matching transformer unit. Powerful biconical spring protects the antenna against impacts and enables bending the antenna during operation with added tightening ropes. Both radiating elements are made of composite materials enable outstanding strength and flexibility even in hardest conditions of use.

The antenna base has four mounting holes equally spaced on a 4.5" (114.3 mm) circle which complies with US army standard (AS-1729). Different base plate dimensions are available on request.

The antenna is completely painted with military green (RAL-6014) two-component UV resistant paint.

TECHNICAL DATA	
Frequency range	30 - 90 (110) MHz
Impedance	50 ohms
VSWR	< 3 (DIAGR. 1)
Gain	(DIAGR. 2)
Polarization	vert.
Maximum power	70 W CW
Connector	N, (BNC)
Height	2,85 m
Mass	3.90 kg
Max. high voltage rating	20 kV
Temperature range - in use	-25 ... +55 ^{o}C

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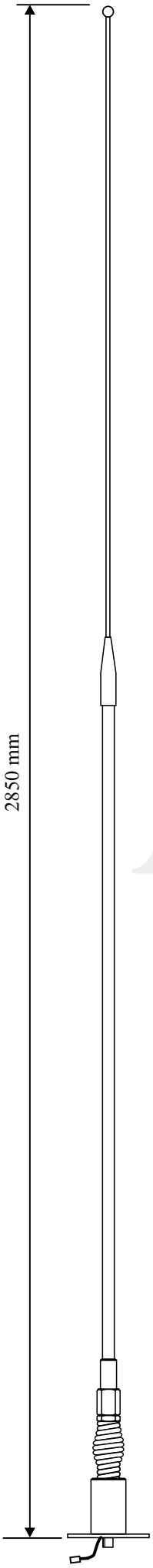
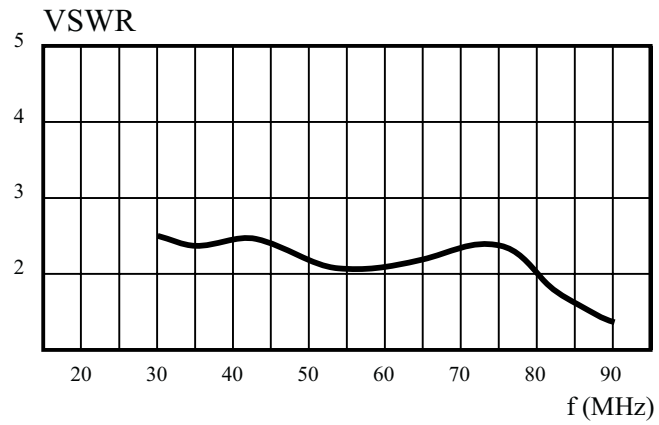
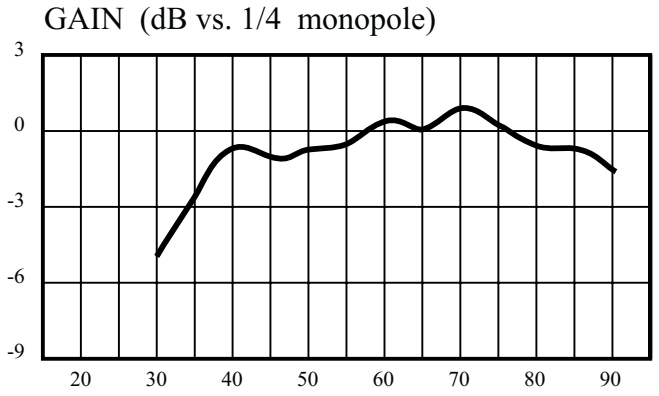
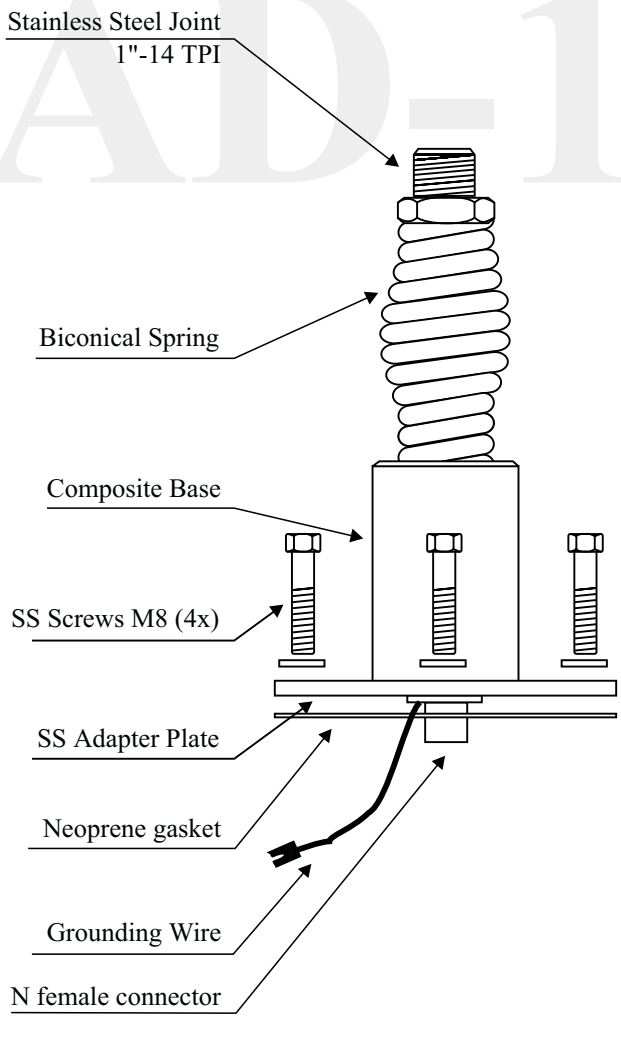
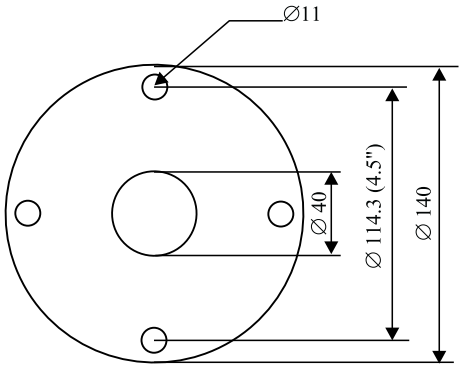

2850 mm


VSWR
5
4
3
2
20
30
40
50
60
70
80
90
f (MHz)


GAIN (dB vs. 1/4 monopole)
3
0
-3
-6
-9
20
30
40
50
60
70
80
90


Stainless Steel Joint
1"-14 TPI
Biconical Spring
Composite Base
SS Screws M8 (4x)
SS Adapter Plate
Neoprene gasket
Grounding Wire
N female connector


∅11
Ø 40
Ø 114.3 (4.5")
Ø 140

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AD-18/D-110

The antenna AD-18/D is wideband monopole mobile VHF antenna for frequency range from 30 to 110 MHz. The antenna is result of using new technologies and materials enabling together with new electrical design much better electrical and mechanical properties compared with old models.
The antenna is composed of three main parts: antenna base, lower and upper radiating element. The antenna base is made of stainless steel and of composite materials. Inside the base is matching transformer unit. Powerful biconical spring protects the antenna against impacts and enables bending the antenna during operation with added tightening ropes. Both radiating elements are made of composite materials enable outstanding strength and flexibility even in hardest conditions of use.
The antenna base has four mounting holes equally spaced on a 4.5" (114.3 mm) circle which complies with US army standard (AS-1729). Different base plate dimensions are available on request.
The antenna is completely painted with military green (RAL-6014) two-component UV resistant paint.

TECHNICAL DATA	
Frequency range	30 - 110 MHz
Impedance	50 ohms
VSWR	< 3.5 (DIAGR. 1)
Gain	(DIAGR. 2)
Polarization	vert.
Maximum power	70 W CW
Connector	N, (BNC)
Height	2,85 m
Mass	3.90 kg
Max. high voltage rating	20 kV
Temperature range - in use	-25 ... +55 oC

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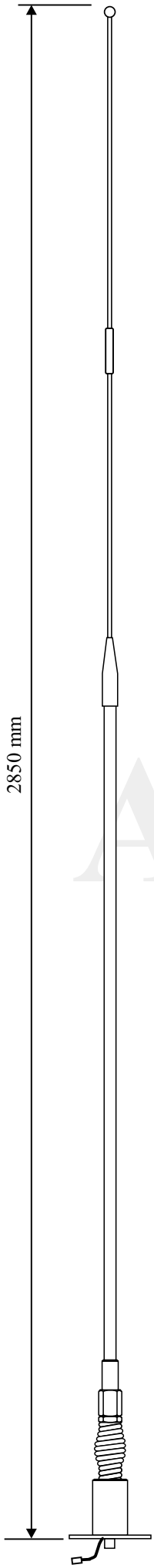
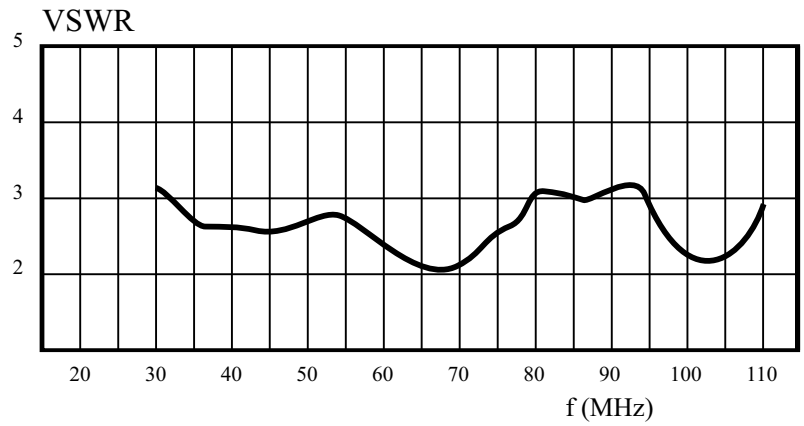
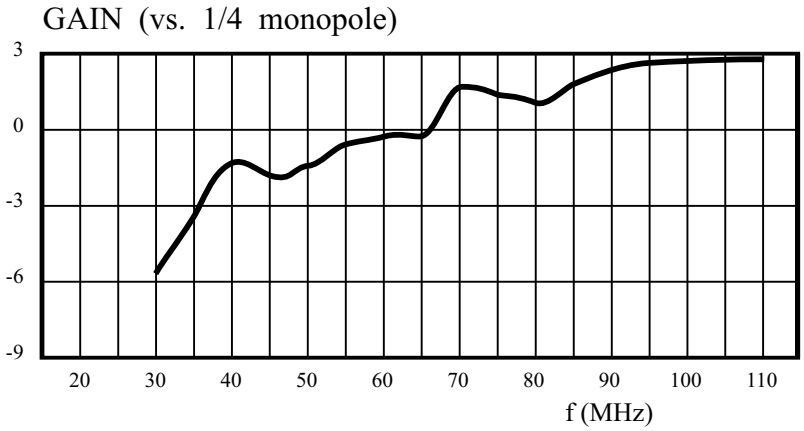
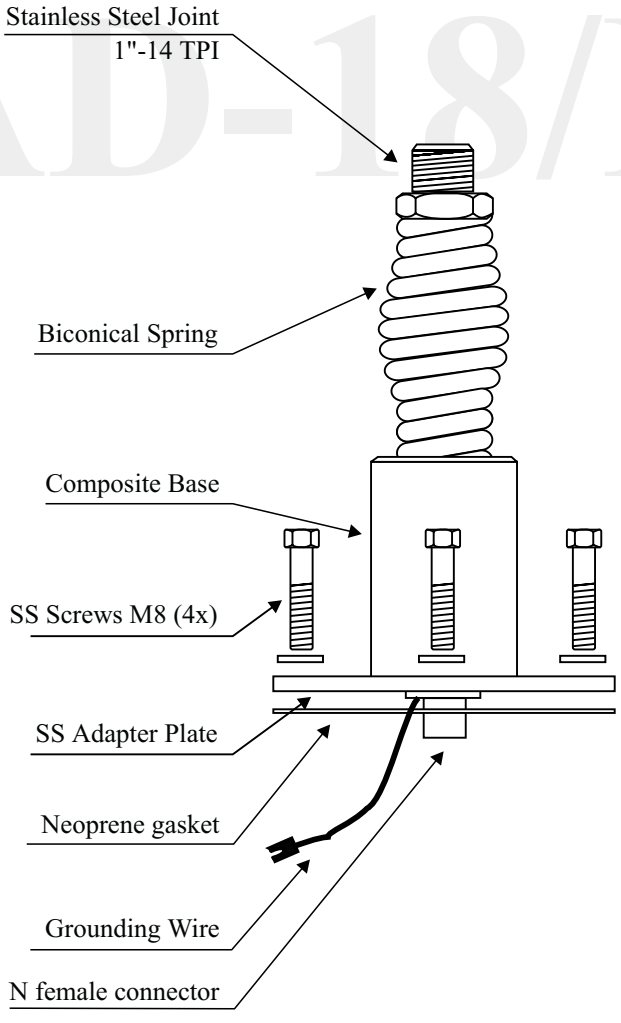
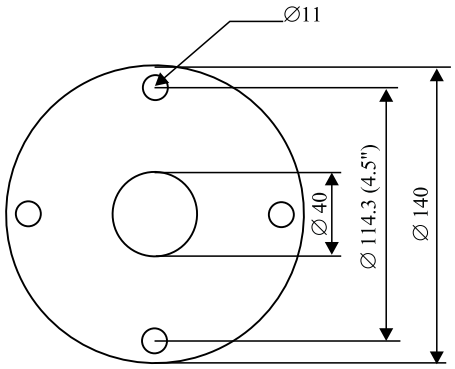

2850 mm


VSWR
5
4
3
2
20
30
40
50
60
70
80
90
100
110
f (MHz)


GAIN (vs. 1/4 monopole)
3
0
-3
-6
-9
20
30
40
50
60
70
80
90
100
110
f (MHz)


Stainless Steel Joint
1"-14 TPI
Biconical Spring
Composite Base
SS Screws M8 (4x)
SS Adapter Plate
Neoprene gasket
Grounding Wire
N female connector


∅11
Ø 40
Ø 114.3 (4.5")
Ø 140

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AD-18/D-LP

The antenna AD-18/D-LP is wideband monopole mobile VHF antenna for frequency range from 30 to 90 MHz. The antenna has very low profile radiating elements which makes it appropriate for use with lighter vehicles.
The antenna is composed of three main parts: antenna base, lower and upper radiating element. The antenna base is made of stainless steel and of composite materials. Inside the base is matching transformer unit. Powerful biconical spring protects the antenna against impacts and enables bending the antenna during operation with added tightening ropes. Both radiating elements are made of composite materials enable outstanding strength and flexibility even in hardest conditions of use.
The antenna base has four mounting holes equally spaced on a 4.5" (114.3 mm) circle which complies with US army standard (AS-1729). Different base plate dimensions are available on request.
The antenna is completely painted with military green (RAL-6014) two-component UV resistant paint.

TECHNICAL DATA	
Frequency range	30 - 90 MHz
Impedance	50 ohms
VSWR	< 3,5
Gain	see diagram
Polarization	vert.
Maximum power	70 W CW
Connector	N, (BNC)
Height	2,77 m
Mass	1.95 kg
Max. high voltage rating	20 kV
Temperature range - in use	-25 ... +55 °C

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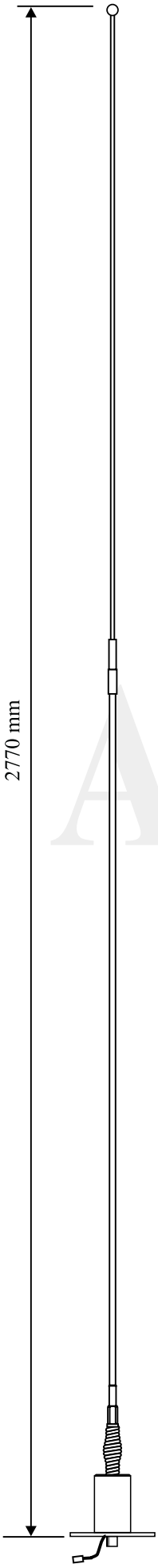
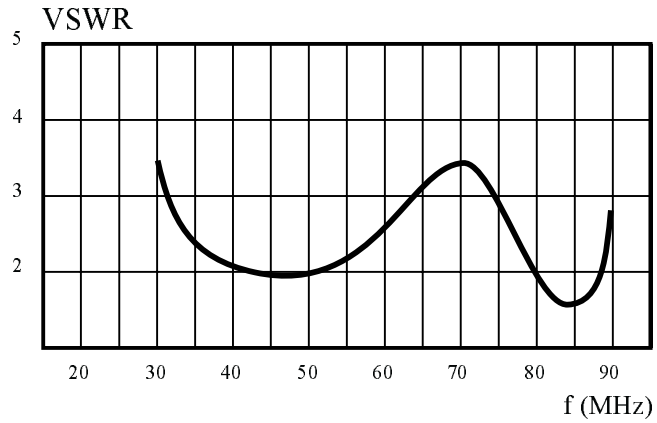
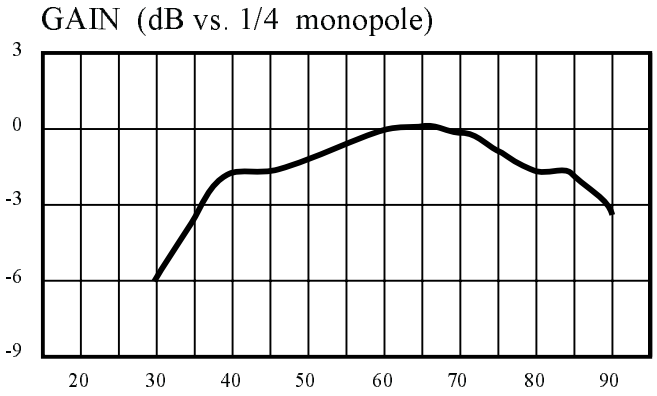
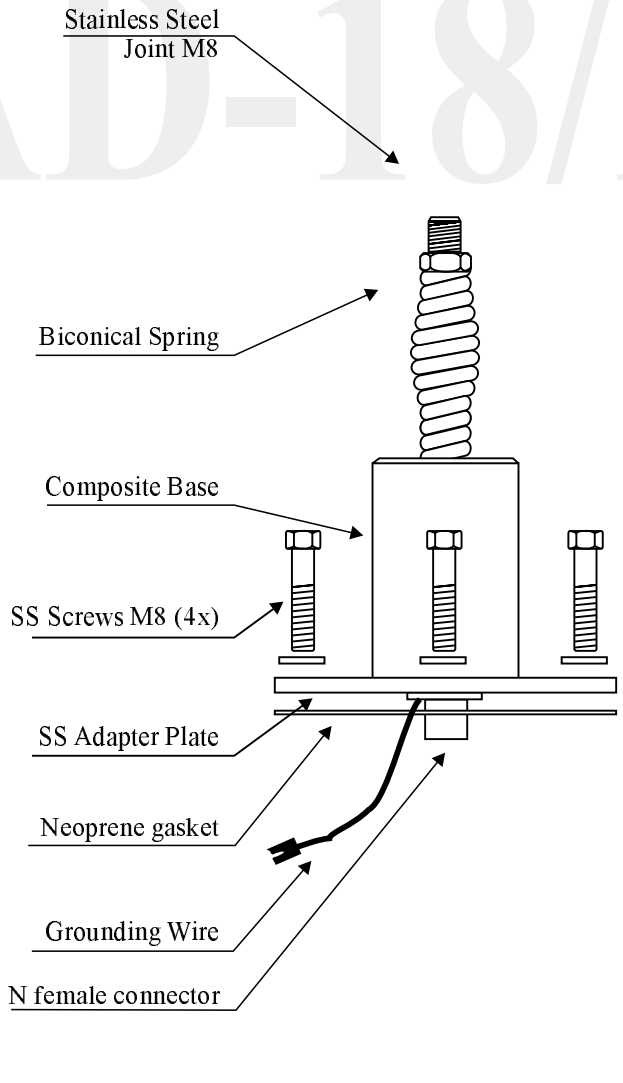
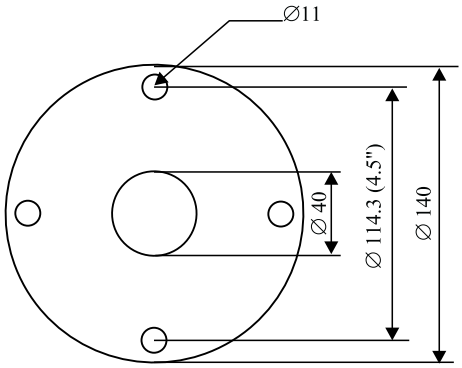

2770 mm


VSWR
5
4
3
2
20
30
40
50
60
70
80
90
f (MHz)


GAIN (dB vs. 1/4 monopole)
3
0
-3
-6
-9
20
30
40
50
60
70
80
90


Stainless Steel
Joint M8
Biconical Spring
Composite Base
SS Screws M8 (4x)
SS Adapter Plate
Neoprene gasket
Grounding Wire
N female connector


∅11
Ø 40
Ø 114.3 (4.5")
Ø 140

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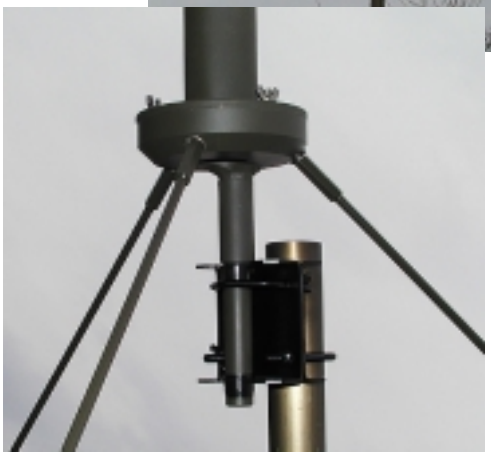
AD-18/D-GP

The antenna AD-18/D-GP is composed of standard mobile wideband VHF antenna AD-18/D and of special GP ("ground plane") kit. Therefore the AD-18/D-GP could be used as mobile antenna mounted on mobile or tactical masts for work in stay.
Besides all antenna parts contained in the AD-18/D the antenna has also GP kit composed of three radials (2.8 meter long each), made of fiberglass and mounting GP head with standard NATO spigot Ř23.5 mm x 120 mm.
The antenna AD-18/D-GP is mainly intended for tactical work in stay together with appropriate antenna mast with NATO socket attachment. Additional mounting consoles are available for different antena masts.
All metal parts of the GP kit are made of aluminium or Stainless Steel (mounting head, joints on the radials) enable excellent reliability and long life even in hardest environmental conditions. All parts are painted with two component polyurethane UV resistant paint.

TECHNICAL DATA	
Frequency range	30 - 90 MHz
Impedance	50 ohms
VSWR	< 3
Gain	see diagram
Polarization	vertical
Maximum power	70 W CW
Connector	N, (BNC)
Height	5.4 m
Mass	6.5 kg
Max. high voltage rating	20 kV
Temperature range - in use	-40° ... +55 °C



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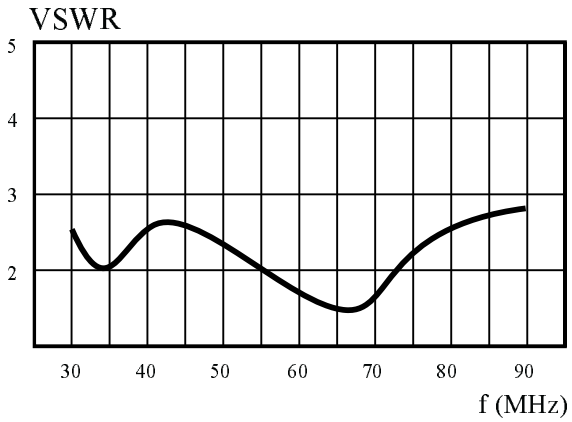
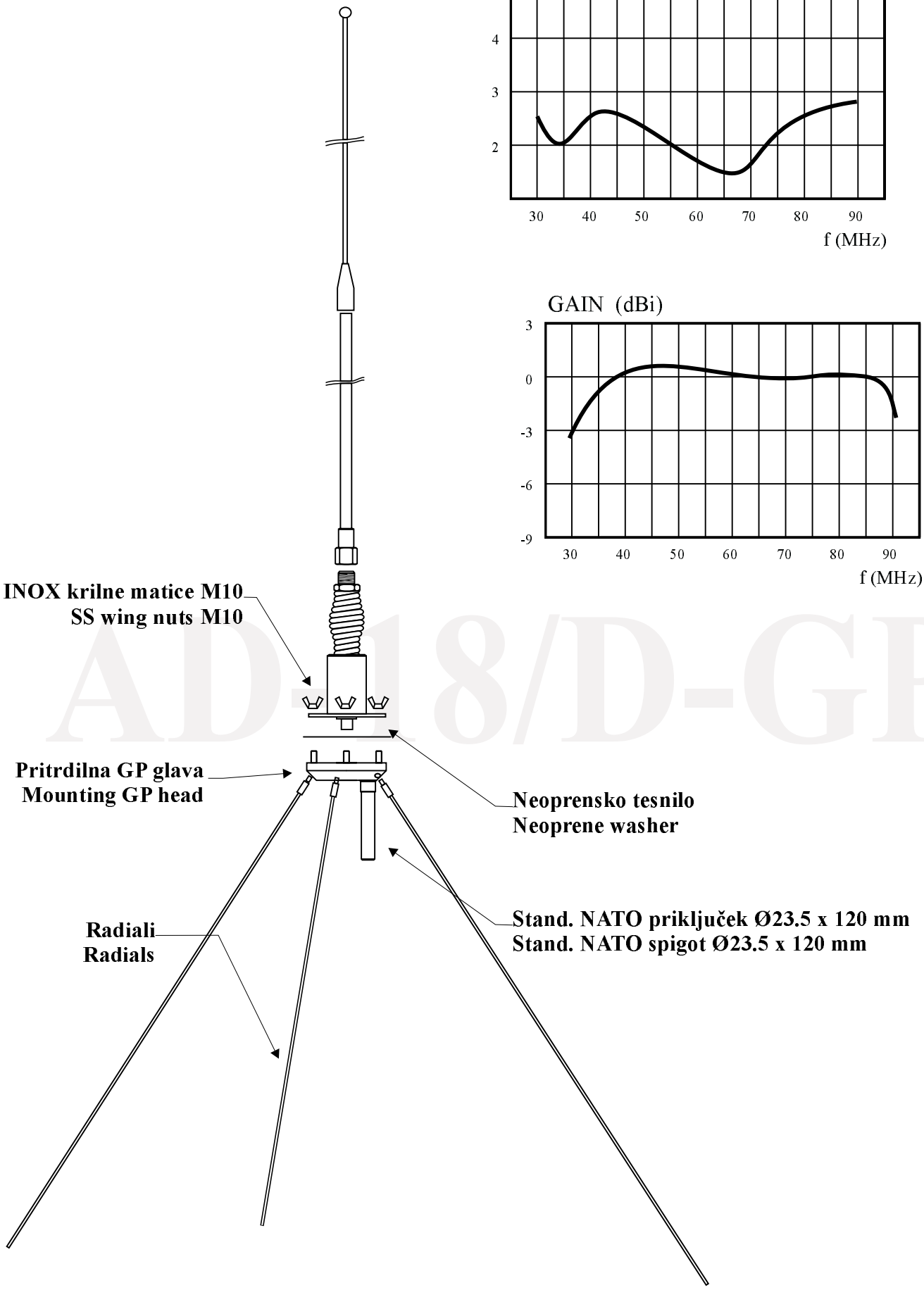

VSWR
5
4
3
2
30
40
50
60
70
80
90
f (MHz)

GAIN (dBi)
3
0
-3
-6
-9
30
40
50
60
70
80
90
f (MHz)


INOX krilne matice M10
SS wing nuts M10
Pritrdilna GP glava
Mounting GP head
Neoprensko tesnilo
Neoprene washer
Radiali
Radials
Stand. NATO priključek Ø23.5 x 120 mm
Stand. NATO spigot Ø23.5 x 120 mm

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AD-27/V120

The antenna AD-27/V120 is wideband monopole mobile VHF antenna intended for frequency range from 30 to 90 MHz. The antenna is designed for maximum possible gain and acceptable low VSWR with extreme short radiating element. The antenna is therefore intended for use on smaller vehicles, motorcycles, etc.

The antenna is composed of two parts: the antenna base and the radiating element. The antenna base is made of stainless steel and of composite materials. Inside the base is matching transformer unit. Powerful biconical spring protects the antenna against impacts. The radiating element is made of composite materials enable outstanding strength even in hardest conditions of use.

The antenna base has four mounting holes equally spaced on a 4.5" (114.3 mm) circle which complies with US army standard (AS-1729). Different base plate dimensions are also available on request.

The antenna is completely painted with military green (RAL-6014) two-component UV resistant paint.

TECHNICAL DATA	
Frequency range	30 - 90 MHz
Impedance	50 ohms
VSWR	< 3 (DIAGR. 1)
Gain	(DIAGR. 2)
Polarization	vert.
Maximum power	70 W CW
Connector	N (BNC)
Height	1.2 m
Mass of antenna	2.2 kg
Temperature range	-25 ... +55 °C

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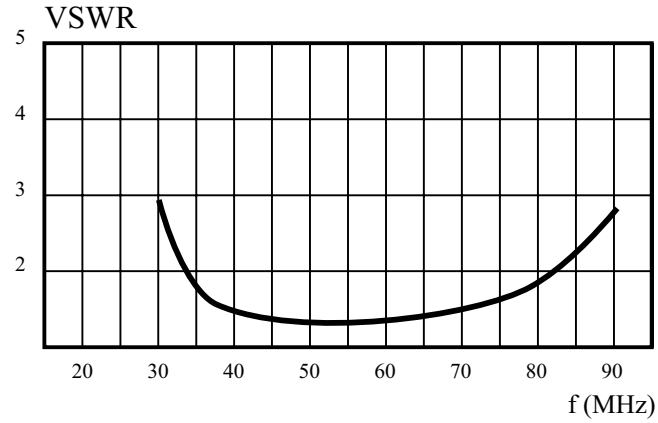
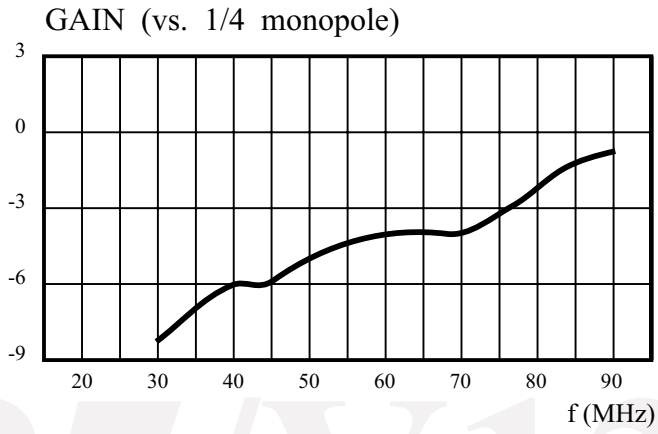
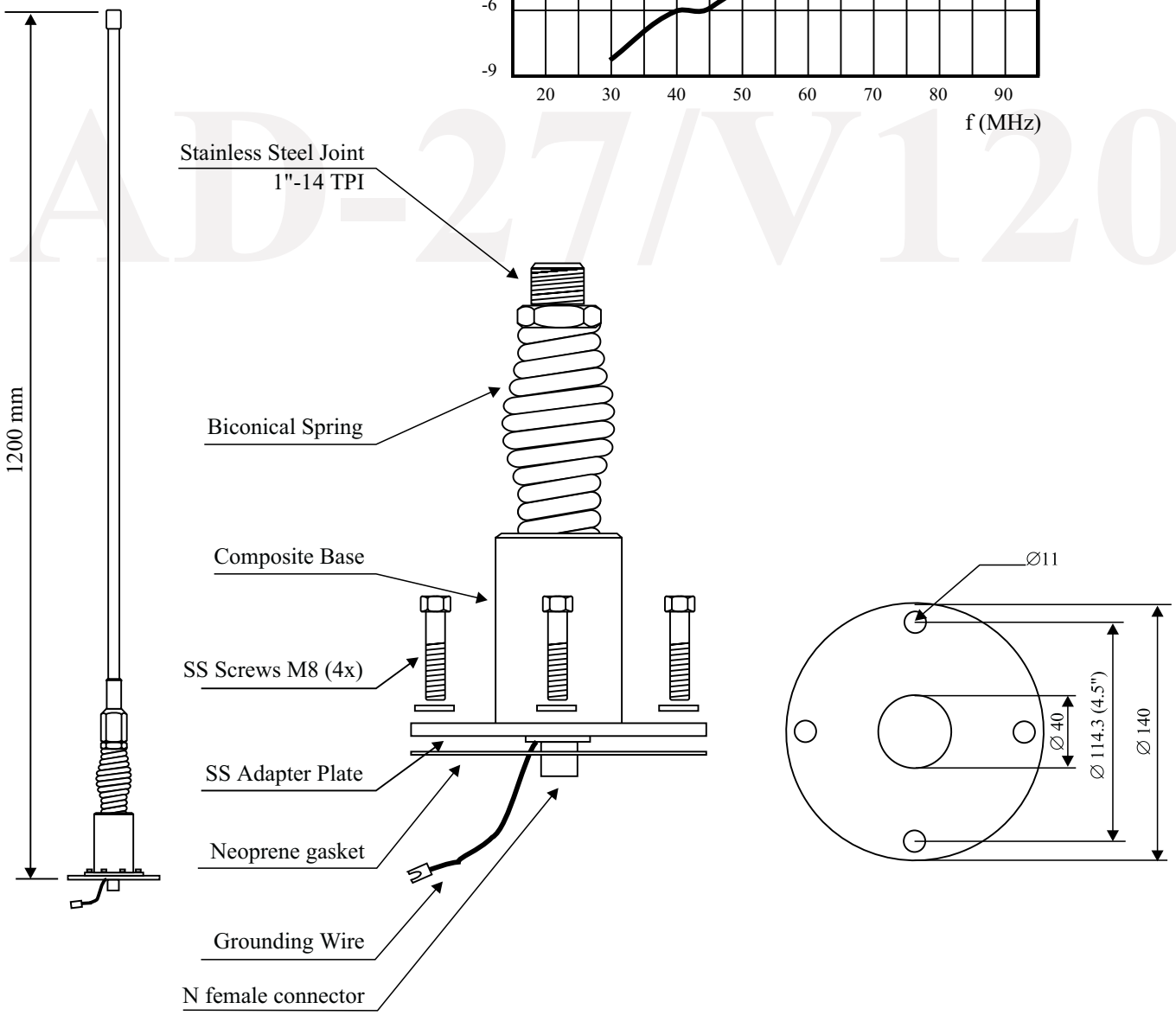

VSWR
5
4
3
2
20
30
40
50
60
70
80
90
f (MHz)


GAIN (vs. 1/4 monopole)
3
0
-3
-6
-9
20
30
40
50
60
70
80
90
f (MHz)


1200 mm
Stainless Steel Joint
1"-14 TPI
Biconical Spring
Composite Base
SS Screws M8 (4x)
SS Adapter Plate
Neoprene gasket
Grounding Wire
N female connector
∅11
∅ 40
∅ 114.3 (4.5")
∅ 140

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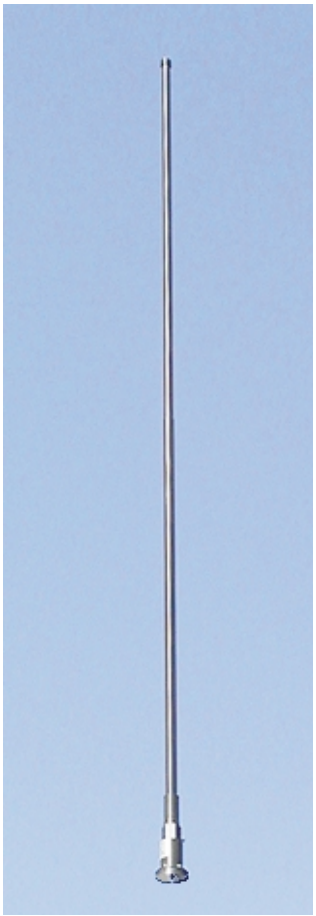
JAS-12/M

The antenna JAS-12/M is a wideband monopole, intended for use in VHF frequency range from 30 to 90 MHz. The antenna has the same electrical construction as mobile antenna AD-18/D but mechanically all radiating elements are enclosed in one conical tube made of epoxy fiberglass composite material. Therefore the antenna is mainly intended for stationary mounting and use on vessels.

The antenna is composed of two parts: the antenna base and the radiating element. The antenna base is made of stainless steel and of composite materials. Inside the base is matching transformer unit.

The antenna base has four mounting holes equally spaced on a 4.5" (114.3 mm) circle which complies with US army standard (AS-1729). Different base plates could be also available on request.

The antenna is completely painted with military green (RAL-6014) two-component UV resistant paint.



TECHNICAL DATA	
Frequency range	30 - 90 MHz
Impedance	50 ohm
VSWR	< 3 (DIAG. 1)
Gain	DIAG. 2
Polarization	VER.
Maximum power	70 W CW
Connector	N
Height	3 m
Mass of antenna	6 kg
Wind velocity	150 km/h
Temperature range	-40....+70 °C

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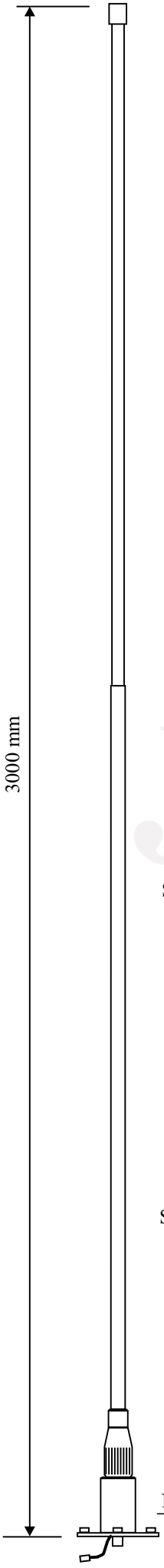
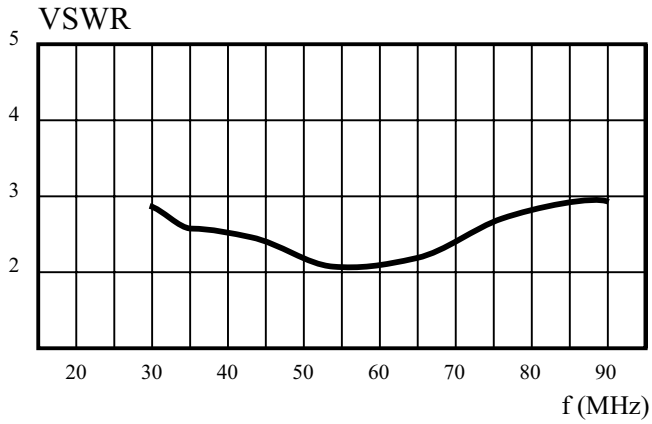
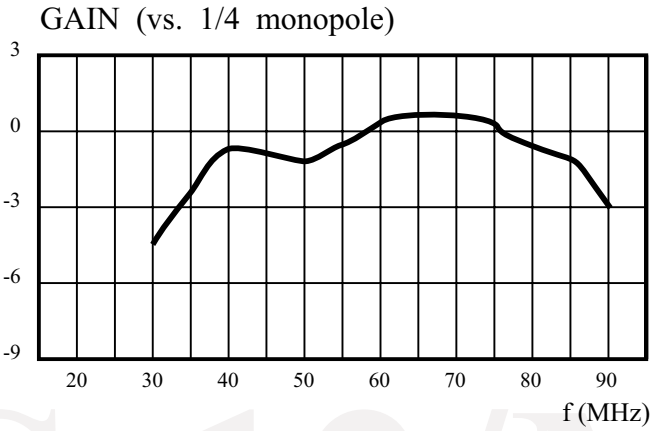
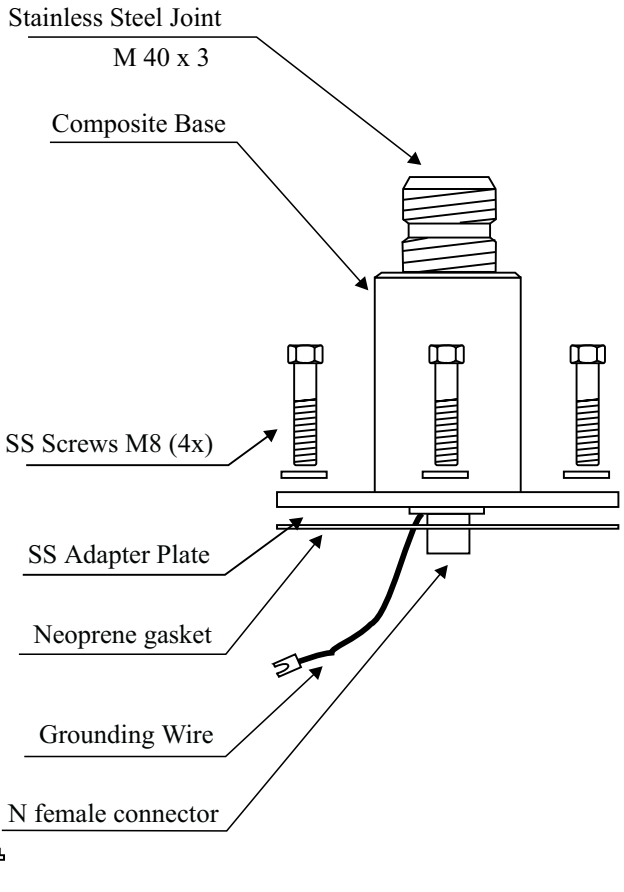
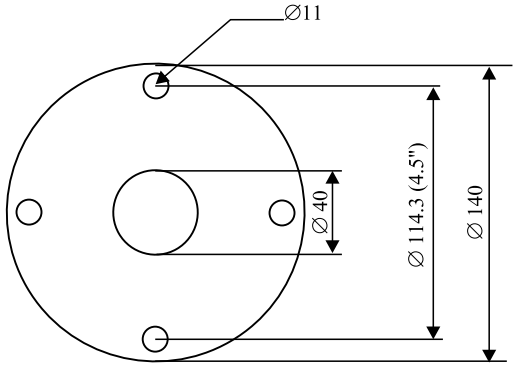

3000 mm


VSWR
5
4
3
2
20
30
40
50
60
70
80
90
f (MHz)


GAIN (vs. 1/4 monopole)
3
0
-3
-6
-9
20
30
40
50
60
70
80
90
f (MHz)


Stainless Steel Joint
M 40 x 3
Composite Base
SS Screws M8 (4x)
SS Adapter Plate
Neoprene gasket
Grounding Wire
N female connector


∅11
∅ 40
∅ 114.3 (4.5")
∅ 140

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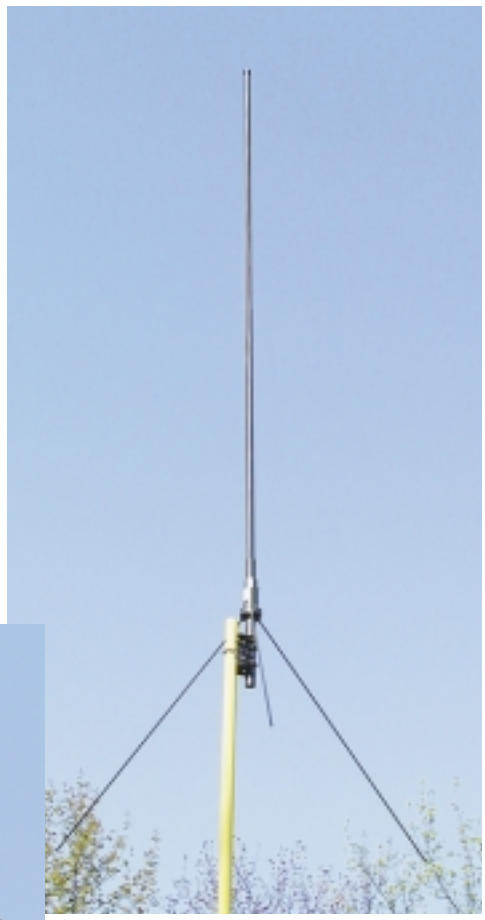
JAS-12/M-GP

The antenna JAS-12/M-GP is composed of standard mobile wideband VHF antenna JAS-12/M and of special GP ("ground plane") kit. Therefore the JAS-12/M-GP could be used as stationary antenna mounted on appropriate antenna mast.
Besides all antenna parts contained in the JAS-12/M the antenna has also GP kit composed of three radials (1.2 meter long each), made of Stainless Steel rods, mounting GP head and universal console enables mounting the antenna on the masts with outer diameter from 20 to 60 mm.
The antenna JAS-12/M-GP is mainly intended for stationary use. All metal parts of the GP kit are made of aluminium or Stainless Steel (mounting head, universal console, joints on the radials) enable excellent reliability and long life even in hardest environmental conditions. All parts are painted with two component polyurethane UV resistant paint.

TECHNICAL DATA	
Frequency range	30 - 90 MHz
Impedance	50 ohm
VSWR	< 3 (DIAG. 1)
Gain	see diagram
Polarization	vertical
Maximum power	70 W CW
Connector	N
Height	4 m
Mass of antenna	8 kg
Wind velocity	150 km/h
Temperature range	-40....+70 °C



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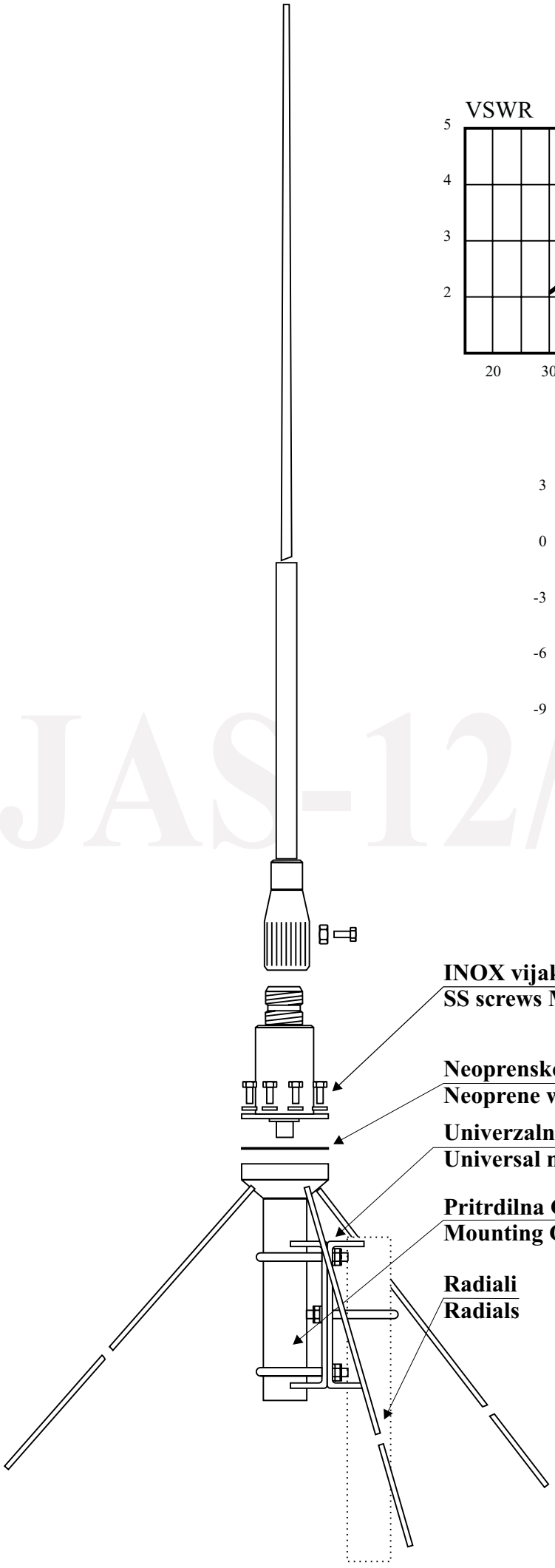
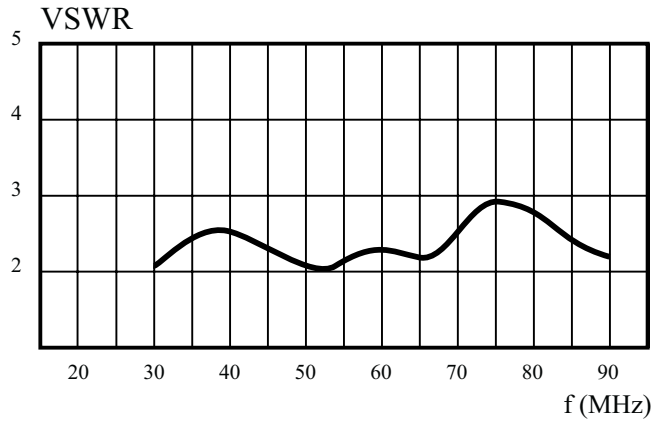
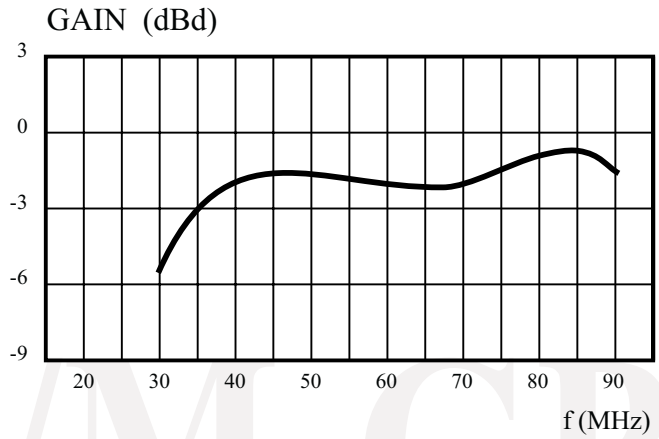

INOX vijaki M6 X 20
SS screws M6 x 20
Neoprensko tesnilo
Neoprene washer
Univerzalna pritrdilna konzola
Universal mounting console
Pritrdilna GP glava
Mounting GP head
Radiali
Radials


VSWR
5
4
3
2
20
30
40
50
60
70
80
90
f (MHz)


GAIN (dBd)
3
0
-3
-6
-9
20
30
40
50
60
70
80
90
f (MHz)

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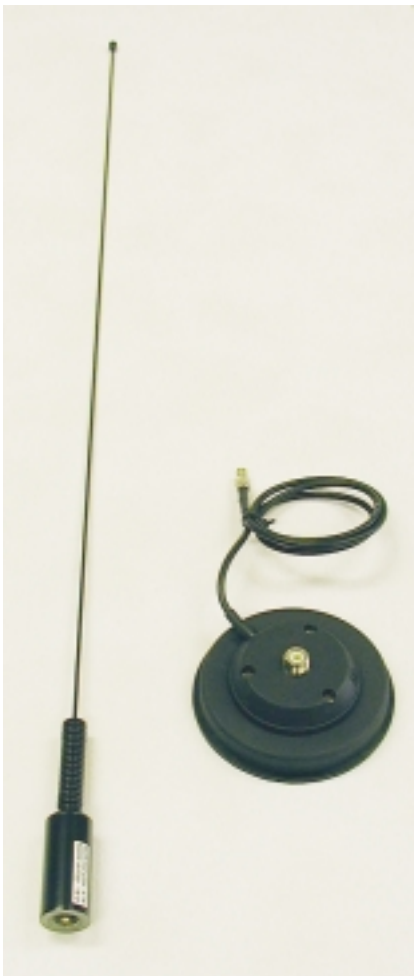
ADS-21/4-W

The antenna ADS-21/4-W is wideband monopole mobile antenna covering frequency range from 68 to 88 MHz and is intended for use with mobile radio stations together with fixed antenna support type ADN-21/UHF-S or magnetic support ADM-21/UHF-S. The antenna is composed from two parts: the radiator which is made of special strong and flexible stainless steel whip with spring at the bottom and the matching transformer unit, which is enclosed in fibreglass tube. The antenna has standard UHF (PL-259) socket. The radiator and the matching unit are painted with UV protective polyurethane black paint.

TECHNICAL DATA	
Frequency range	68-88 MHz
Impedance	50 ohm
VSWR	< 3 (see diagram)
Max. power	5 W CW
Gain (vs. 1/4 wave whip)	0 dB
Height	100 cm
Weight (without support)	220 gr.
Support weight	
- ADN-21/UHF-S	200 gr.
- ADM-21/UHF-S	800 gr.
Cable length	2 m
Input connector	FME + BNC male



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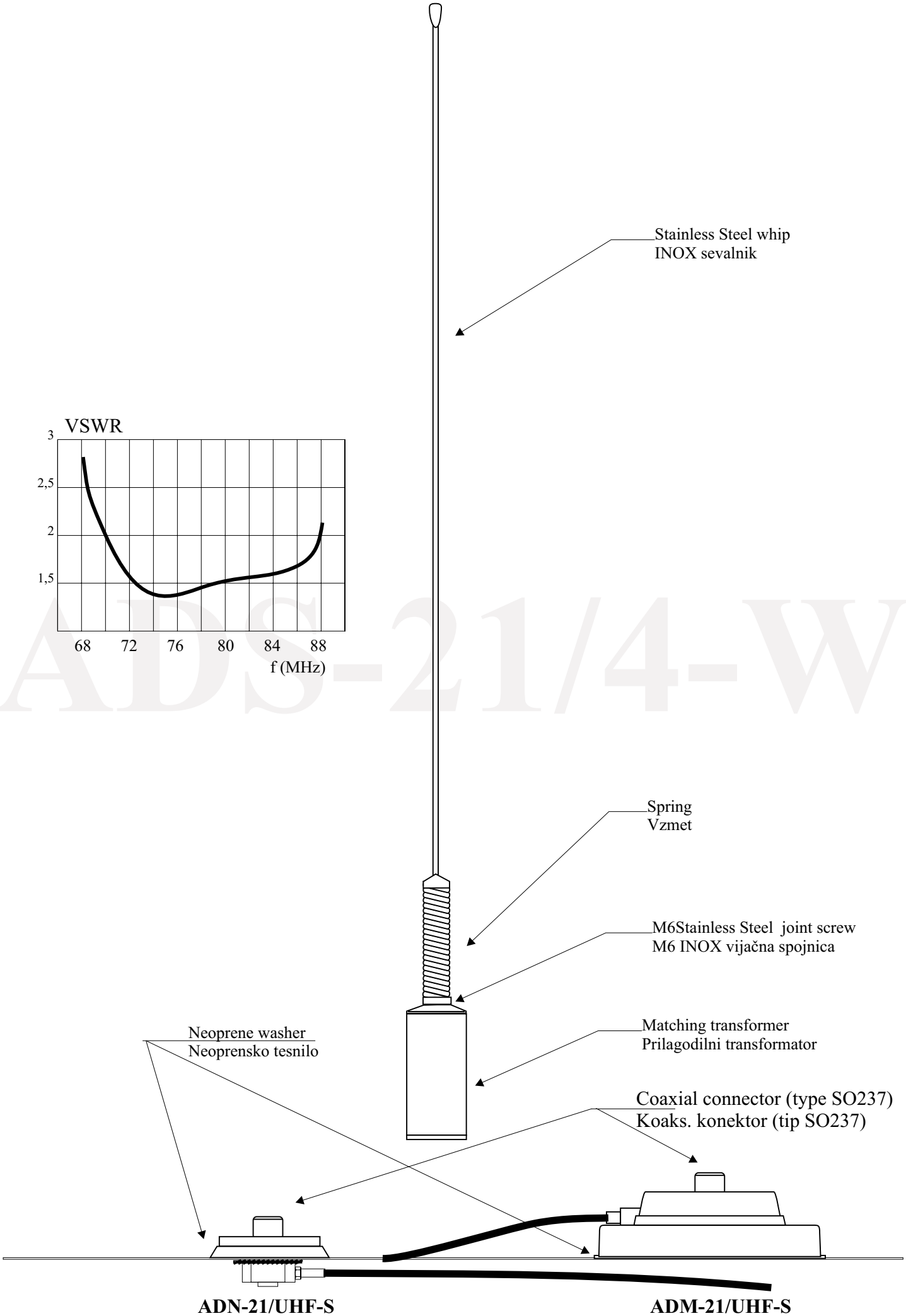
Stainless Steel whip
INOX sevalnik
VSWR
3
2,5
2
1,5
68
72
76
80
84
88
f (MHz)
Spring
Vzmet
M6Stainless Steel joint screw
M6 INOX vijačna spojnica
Matching transformer
Prilagodilni transformator
Neoprene washer
Neoprensko tesnilo
Coaxial connector (type SO237)
Koaks. konektor (tip SO237)
ADN-21/UHF-S
ADM-21/UHF-S

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ADS-21/4-WB

The antenna ADS-21/4-WB is wideband monopole mobile antenna covering frequency range from 30 to 90 MHz and is intended for use with mobile radio stations together with fixed antenna support type ADN-21/UHF-S or magnetic support ADM-21/UHF-S. The antenna is composed from two parts: the radiator which is made of special strong and flexible stainless steel whip with spring at the bottom and eye protection knob on the top and the matching transformer unit, which is enclosed in fiberglass tube. Between the matching transformer and the radiator is tiltable joint enable the radiator to be tilted continuously from 0 to 90°. The antenna has standard UHF (PL-259) socket. The radiator and the matching unit are painted with UV protective polyurethane black paint.

TECHNICAL DATA	
Frequency range	30-90 MHz
Impedance	50 ohm
VSWR	< 3
Max. power	5 W CW
Gain (vs. 1/4 wave whip)	> -8 .... -2 dB
Height	100 cm
Weight (without support)	240 gr.
Support weight	
- ADN-21/UHF-S	200 gr.
- ADM-21/UHF-S	800 gr.
Cable length	2 m
Input connector	FME + BNC male

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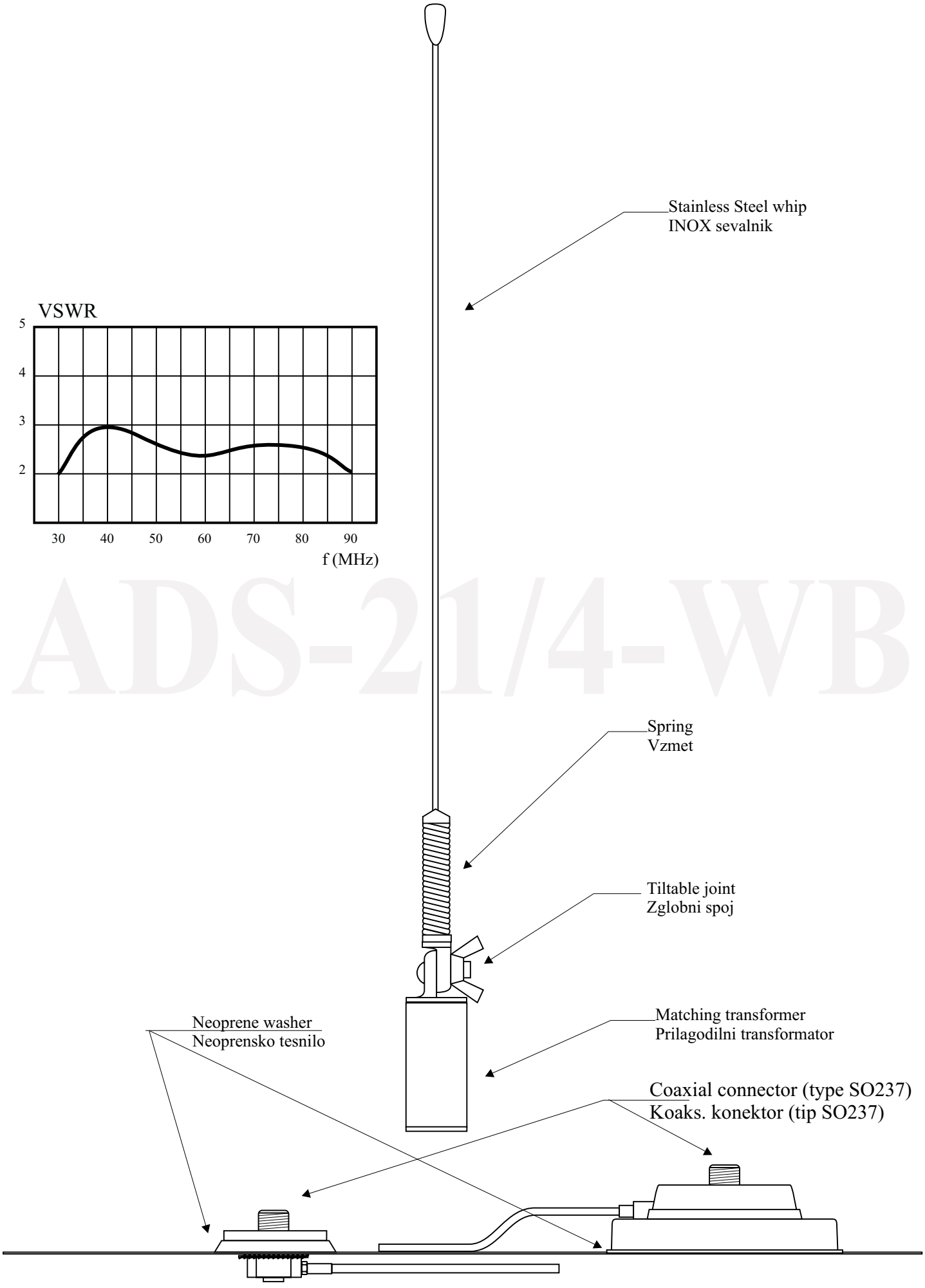

ADN-21/UHF-S **ADM-21/UHF-S**

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AD-17

The antenna AD-17 is a wideband VHF “disc-cone” antenna, intended primarily for portable tactical use. The antenna elements are made of composite materials (epoxy and polyester resin, reinforced with fiberglass), ensuring low weight and excellent resistance against atmospheric influences. In spite of a low weight the antenna is robust enough also for stationary use. The antenna is composed of the support head with the tube where a special line transformer is built-in, of six disc elements and six cone elements, the last ones are divided into two sections. With computer synthesis and optimisation, the construction with a minimum possible number of the elements is achieved together with constant electrical characteristics. This construction enables simple and quick erection. All antenna parts are packed in a handy transportable linen bag.

TECHNICAL DATA	
Frequency range	30 - 90 MHz
Impedance	50 ohm
VSWR	< 3 (DIAG. 1)
Gain	2 dBi (0 dBd)
Polarization	VER.
Maximum power	100 W CW
Radiation pattern	H-omni
Connector	N female
Height	3 m
Width	2,2 m
Mass of antenna	6.1 kg
Wind velocity	120 km/h
Temperature range	-40....+70 °C

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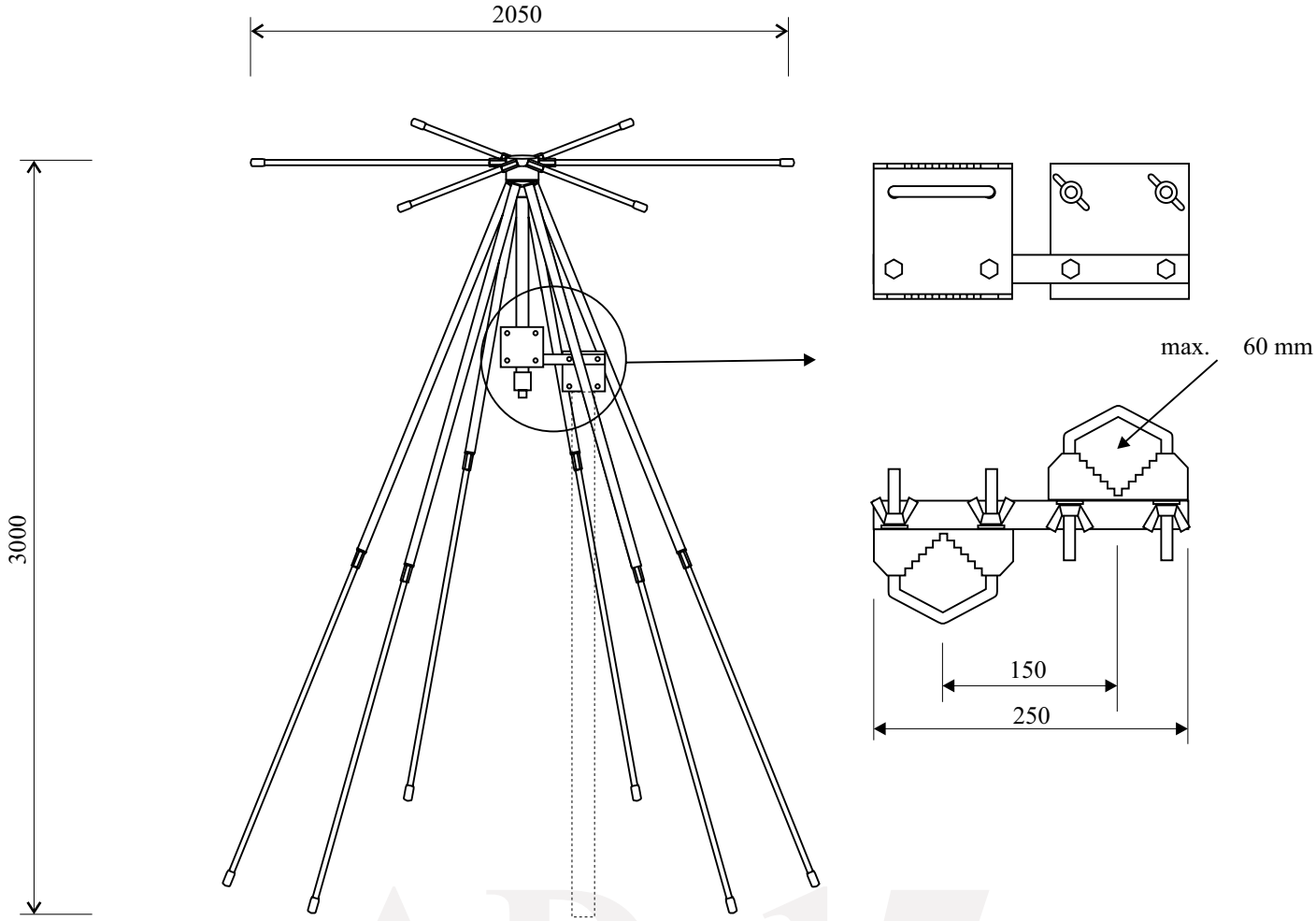
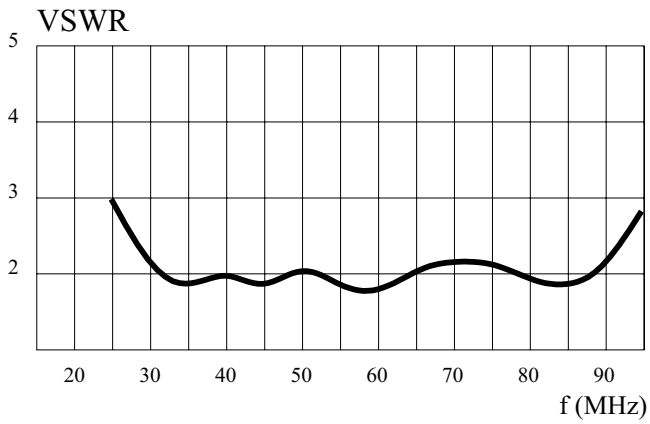
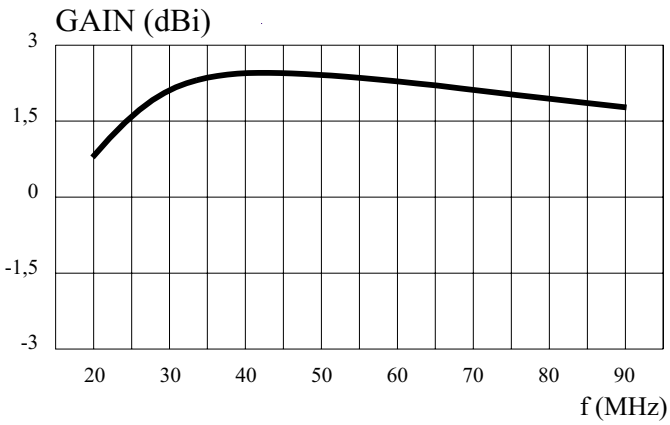

2050
3000
max. 60 mm
150
250


VSWR
5
4
3
2
20
30
40
50
60
70
80
90
f (MHz)


GAIN (dBi)
3
1,5
0
-1,5
-3
20
30
40
50
60
70
80
90
f (MHz)

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AD-17/B-110

The antenna AD-17/B-110 is a wideband VHF “disc-cone” antenna, intended for tactical transportable or stationary use. The antenna elements are made of composite materials (epoxy and polyester resin, reinforced with fiberglass), ensuring low weight and excellent resistance against atmospheric influences. In spite of a low weight the antenna is robust enough also for stationary use. The antenna is composed of the support head with the tube where a special line transformer is built-in, of six disc elements and six cone elements, the last ones are divided into two sections. Additional vertical element ensures wideband coverage up to 110 MHz with relatively constant gain and radiation pattern properties. With computer synthesis and optimisation, the construction with a minimum possible number of the elements is achieved together with constant electrical characteristics. This construction enables simple and quick erection. All antenna parts are packed in a handy transportable linen bag.

TECHNICAL DATA	
Frequency range	30 - 110 MHz
Impedance	50 ohm
VSWR	< 3
Gain	typ. 0 - 2 dBi
Polarization	VER.
Maximum power	100 W CW
Radiation pattern	H-omni
Connector	N female
Height	3.3 m
Width	2,2 m
Mass of antenna	7.3 kg
Wind velocity	
- operational	120 km/h
- survival	160 km/h
Temperature range	-40....+70 °C

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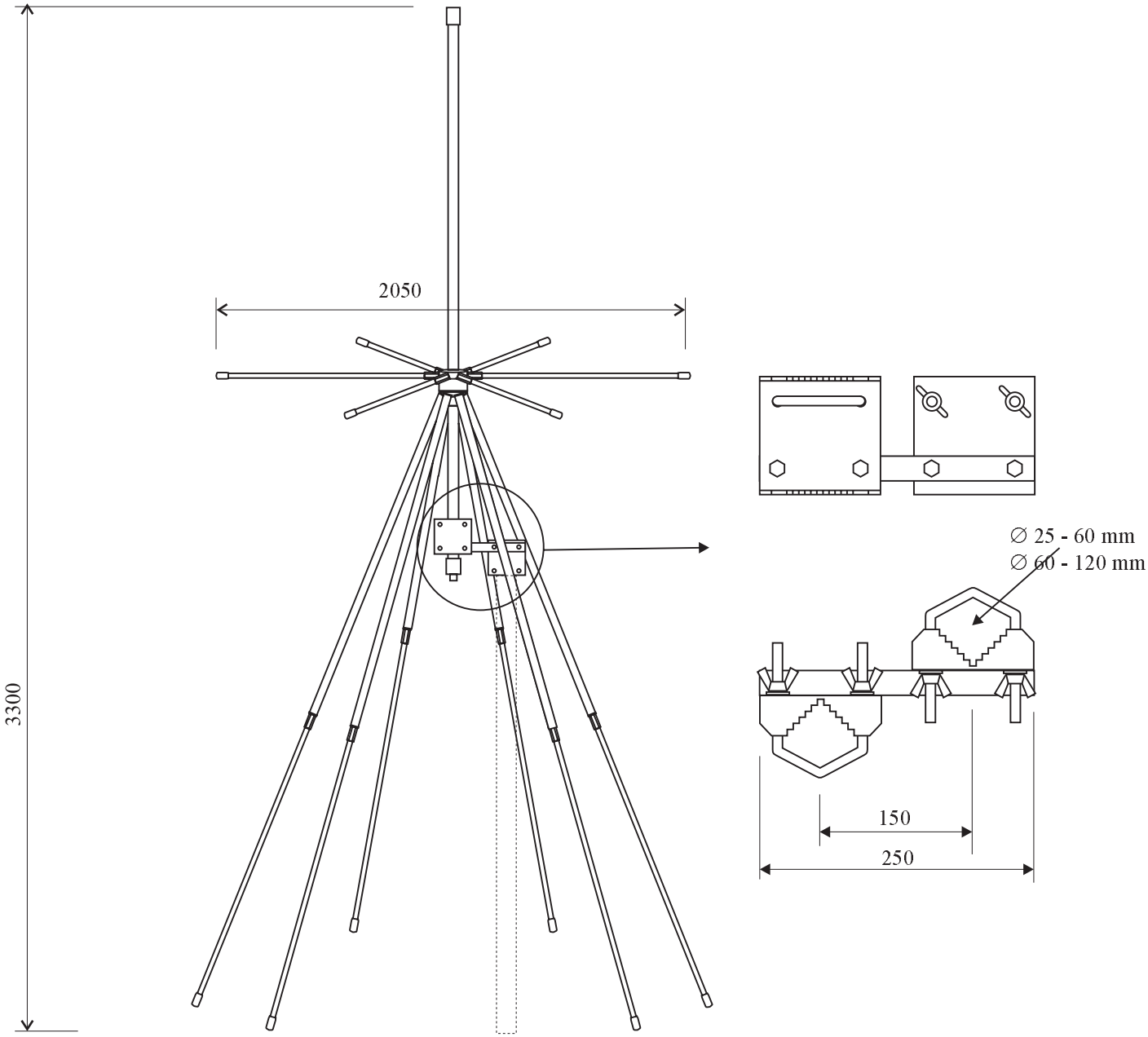
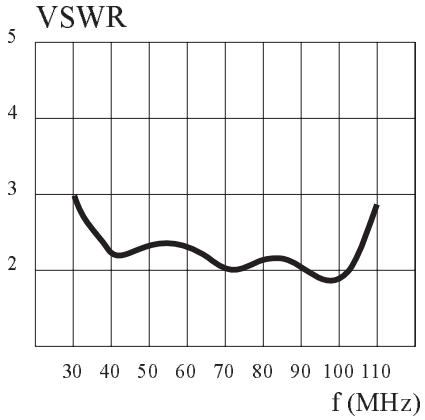
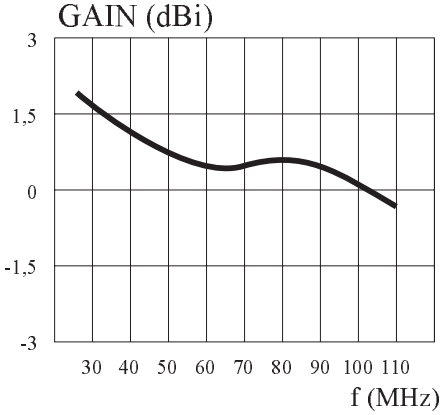

2050
3300
∅ 25 - 60 mm
∅ 60 - 120 mm
150
250


VSWR
5
4
3
2
30 40 50 60 70 80 90 100 110
f (MHz)


GAIN (dBi)
3
1,5
0
-1,5
-3
30 40 50 60 70 80 90 100 110
f (MHz)

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AD-33

The antenna AD-33 is a wideband ground plane antenna covering the frequency range from 66 to 88 MHz. The antenna is composed of the junction head with tube where a special line transformer is built-in, of radiating element and of six radial elements. With computer synthesis and optimisation a very broad band and relatively constant gain and vertical pattern is achieved. The elements are made from epoxy - glass composite ensuring light construction and mechanical roughness and is insensitive to athmospheric influences so it can be used as transportable or stationary as well. The antenna can be mounted on a standard tube with external wind R1” or it can be also mounted on our standard console elements family ADK.

TECHNICAL DATA	
Frequency range	66 - 88 MHz
Impedance	50 ohm
VSWR	< 1,5 (DIAG. 1)
Gain	DIAG. 2
Polarization	VER.
Maximum power	150 W CW
Connector	UHF, N
Height	1,8 m
Mass of antenna	2 kg
Wind velocity	120 km/h
Temperature range	-40....+70 °C

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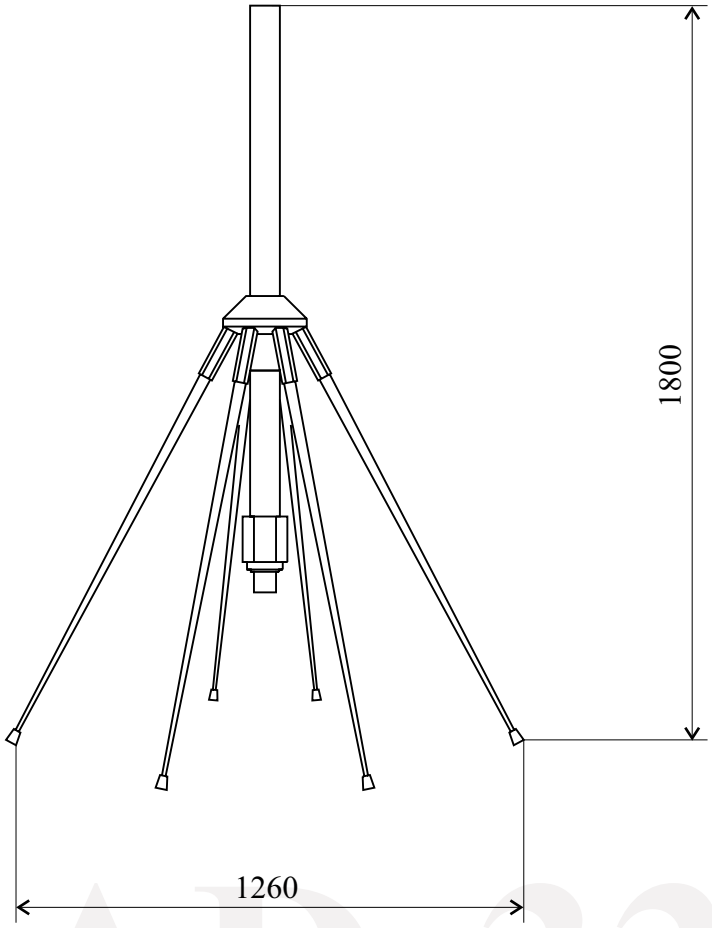
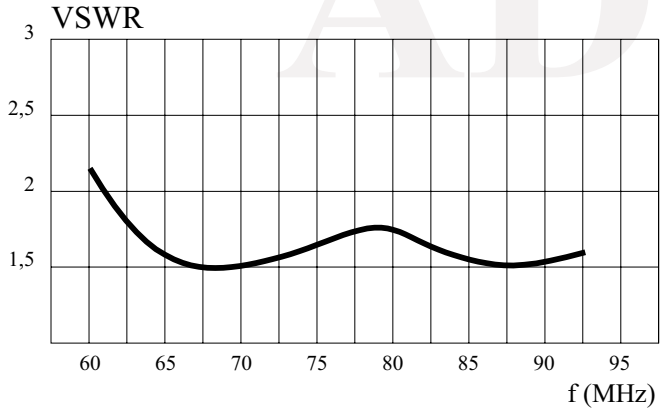
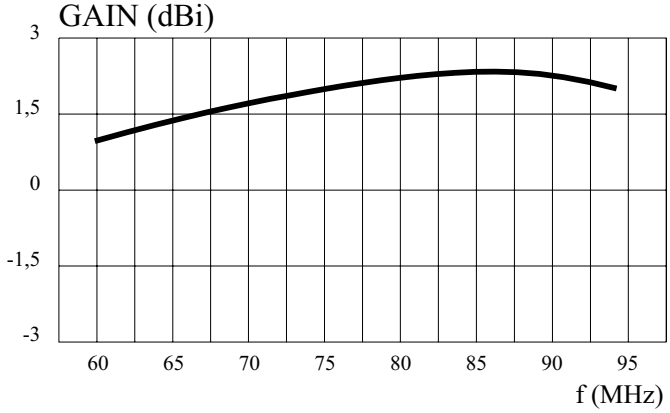

1800
1260


VSWR
3
2,5
2
1,5
60
65
70
75
80
85
90
95
f (MHz)


GAIN (dBi)
3
1,5
0
-1,5
-3
60
65
70
75
80
85
90
95
f (MHz)

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AD-15-GP/fo

The antenna AD-15-GP/fo is a ground plane antenna, composed of a junction head, vertical radiating and three radial elements, made of polyester - glass composite material. It is intended for use with portable and stationary radio stations in the VHF frequency ranges (civil defence, radio amateurs, CB, etc.). The proportion of the length of the radial elements towards the radiating element ensures maximum radiation in the horizontal plane. The antenna could be mounted on metal pipe with an outer thread R1", otherwise we recommend using some of our standard antenna masts series ST (for instance ST-5) together with the mounting console elements family ADK for transportable use. All metallic parts are galvanically protected. When ordering it is necessary to specify the frequency fo.

TECHNICAL DATA	
Frequency range	27, 36, 42 MHz 66-88, 144-176 MHz
Impedance	50 ohm
VSWR	< 1,5 (DIAG. 1)
Gain	0 dBd
Polarization	VER.
Maximum power	100 W CW
Connector type	UHF m
Height	max. 4,5 m
Mass of antenna	max. 1,5 kg
Wind velocity	120 km/h
Temperature range	-40....+70 °C

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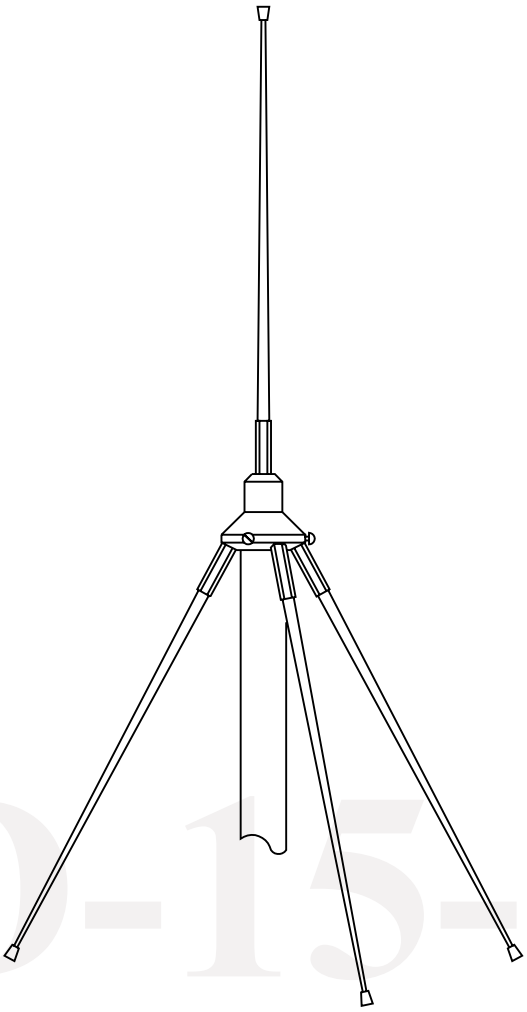

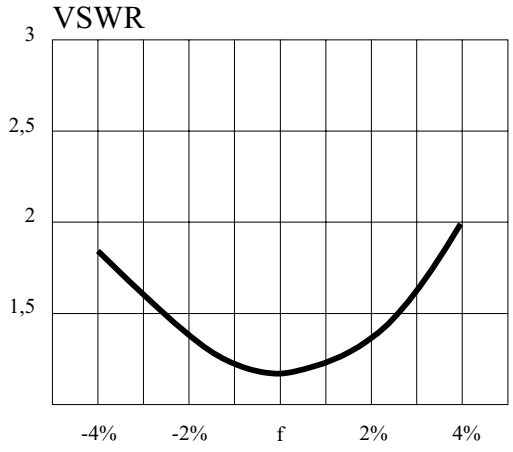

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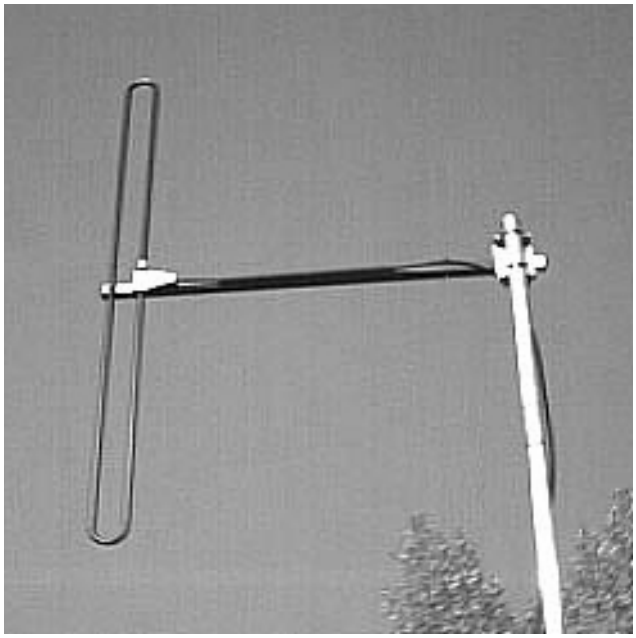
AD-39/4



The family of wideband antennas AD-39 is composed of so called folded dipoles and is primarily intended for use as stationary antenna on VHF and UHF frequency range. The antenna is composed of a folded dipole mounted on a supporting boom. The dipole has 3 m of coaxial cable type RG-213/U with N female type of connector. The antenna is appropriate for side mast mounting with 2 dBd gain together with offset radiation pattern. With different combinations of several antennas together with appropriate power dividers type APS-38 a different radiation patterns with different gains could be easily achieved depending on our signal coverage requirement. Dipoles are made of aluminum alloy tube with 18 mm of diameter and mounted on square aluminum boom together with mounting console enables the antenna to be mounted on antenna mast with external diameter up to 60 mm. All aluminium parts are transparent anodized enable long life and reliable work even in hardest climatic conditions.

TECHNICAL DATA	
Frequency range	68 - 88 MHz
Impedance	50 ohm
VSWR	< 1,8
Gain	0 - 2 dBd
Polarization	VERT.
Maximum power	100 W
Connector	N
Height	170 cm
Lenght	100 cm
Mass of antenna	2,5 kg

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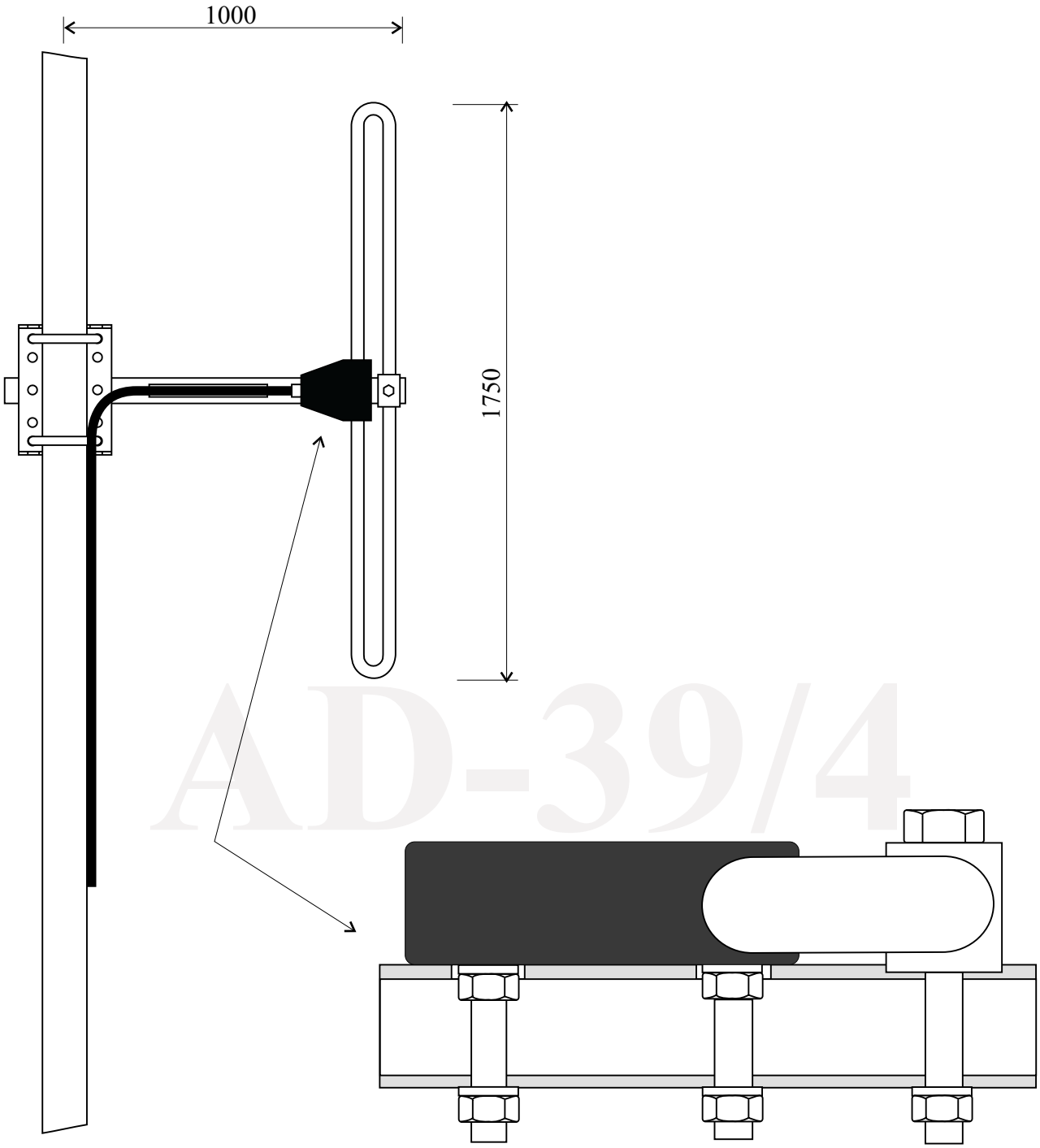
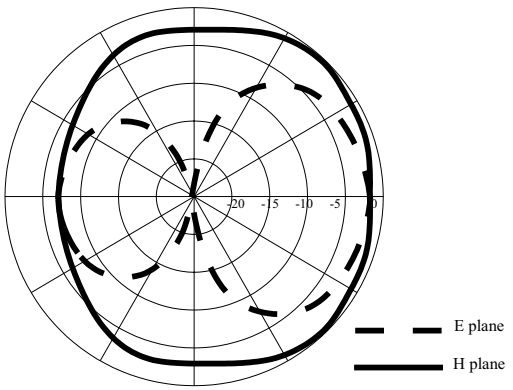
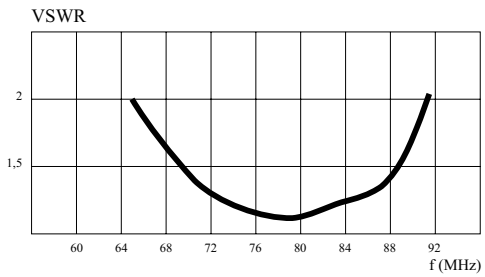

1000
1750


-20
-15
-10
-5
0
E plane
H plane


VSWR
2
1,5
60
64
68
72
76
80
84
88
92
f (MHz)

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AD-38/4

The family of wideband antennas AD-38 is composed of so called double folded dipoles primarily intended for use as stationary antennas on VHF and UHF frequency range. The antenna is composed of two folded dipoles mounted on common supporting boom. Each dipole has 3 m of coaxial cable type RG-213/U with N male type connector which must be connected on two-way power divider type APS-38/4-2. Such antenna system has elliptical horizontal radiation pattern with 3 dBd gain. With different combinations of several antennas a different radiation patterns with different gains could be easily achieved depending on our signal coverage requirement. Dipoles are made of aluminum alloy tube with 18 mm of diameter and mounted on square aluminum boom 30 x 30 mm together with mounting console enables the antenna to be mounted on antenna mast with external diameter up to 60 mm. All aluminium parts are transparent anodized enable long life and reliable work even in hardest climatic conditions.

TECHNICAL DATA	
Frequency range	68-88 MHz
Impedance	50 ohm
VSWR	< 1,8
Gain	3 dBd
Polarization	VERT.
Maximum power	200 W
Connector	N
Height	175 cm
Lenght	200 cm
Mass of antenna	5 kg

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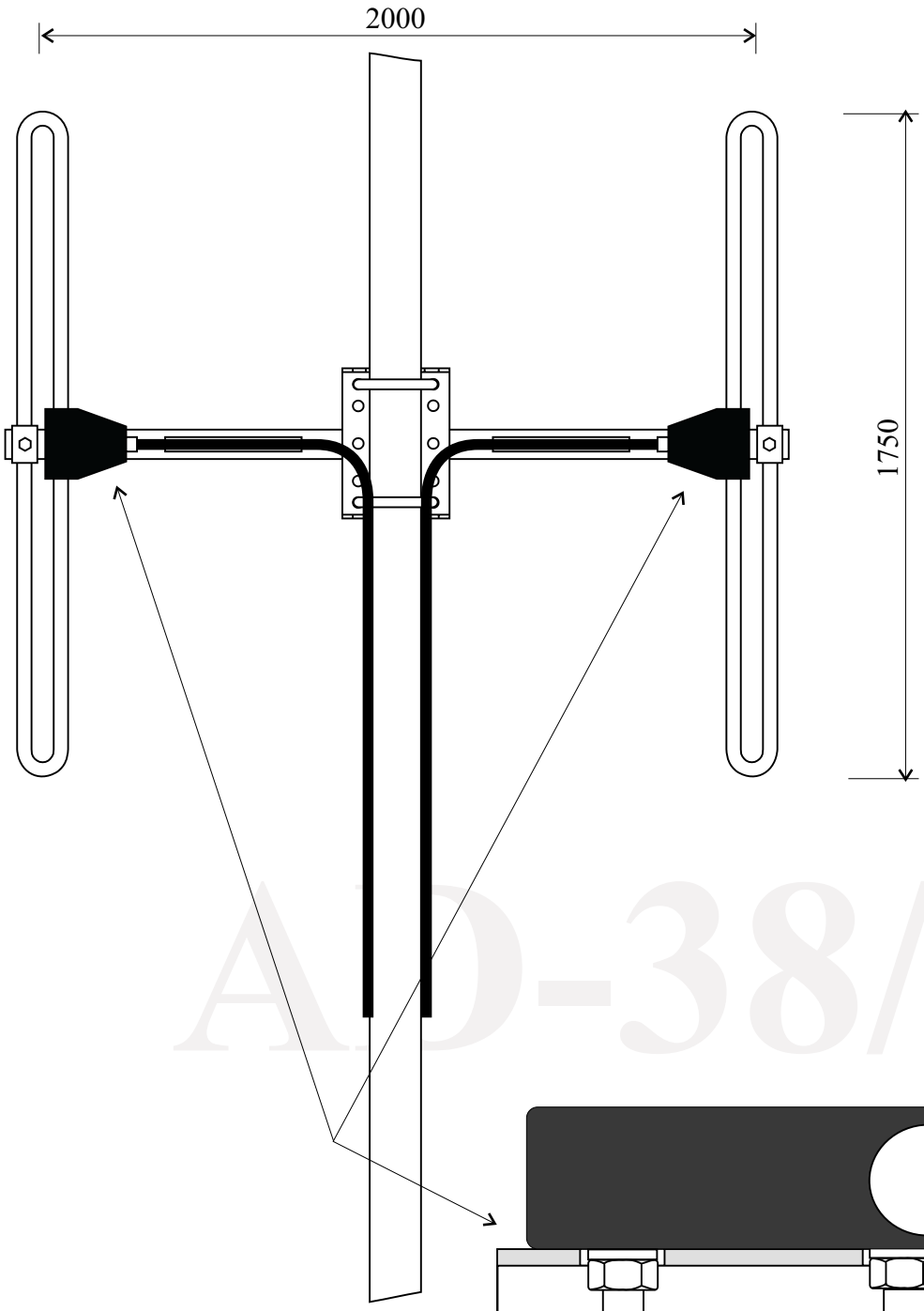
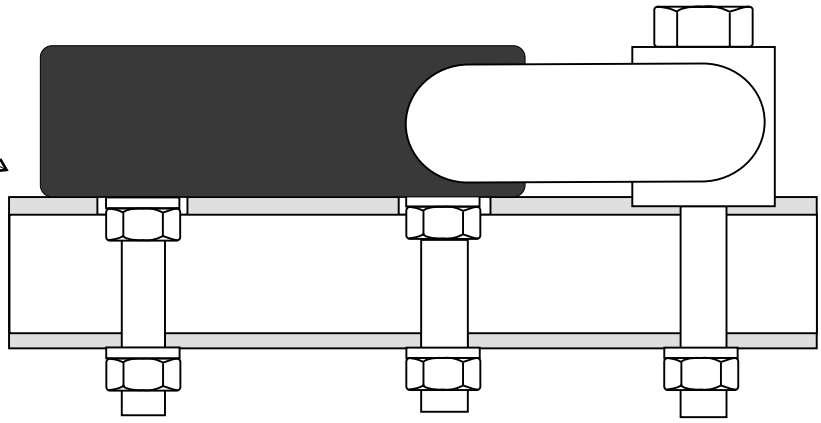
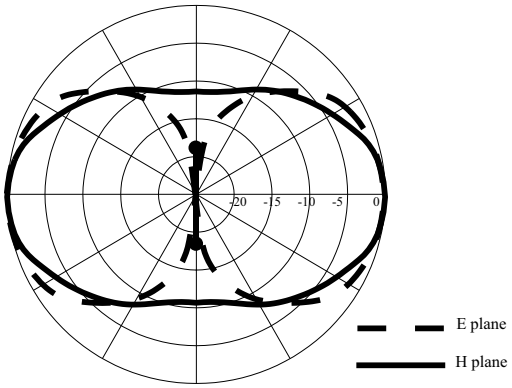
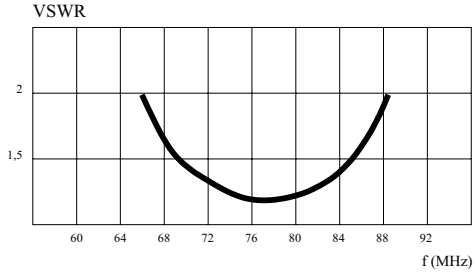

2000
1750




-20
-15
-10
-5
0
E plane
H plane


VSWR
2
1,5
60
64
68
72
76
80
84
88
92
f (MHz)

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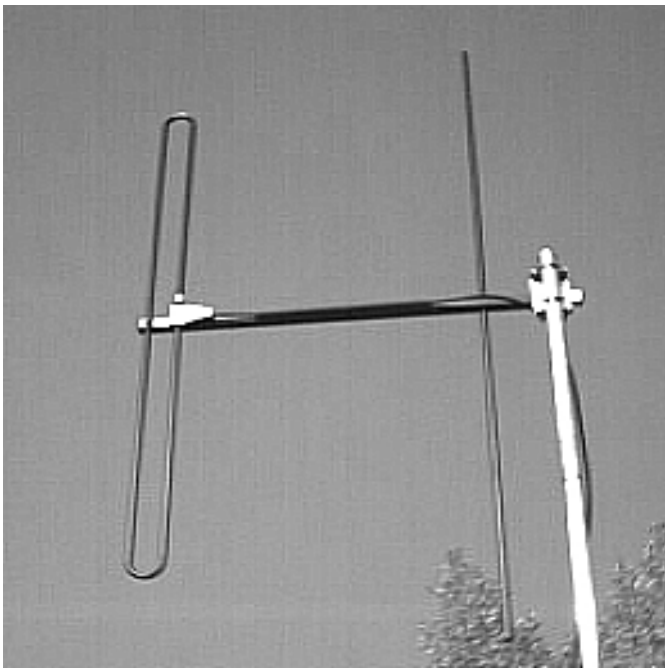
AD-40/4-2

The antenna AD-40/4-2 is 2-element wideband yagi antenna, primarily intended for stationary use on standard VHF frequency range from 72 to 86 MHz. The antenna is directional with 3 dBd gain. The radiator is made of folded dipole enables constant characteristics on whole frequency band. The elements are made of aluminum alloy tube 18/16 mm and inserted into aluminum square tube boom 30 x 30 mm. The universal mounting adapter is on back side of the boom enables vertical or horizontal polarization as well. All joint elements are made of stainless steel, matching unit is built in plastic protective housing and all aluminium parts are transparent anodized enable long life and reliable work even in hardest climatic conditions. All metal parts are DC grounded.



TECHNICAL DATA	
Frequency range	72 - 86 MHz
Impedance	50 ohm
VSWR	< 1,8
Gain	3 dBd
Front to Back ratio	> 12 dB
Polarization	VERT./HOR.
Maximum power	100 W
Connector	1,5 m RG-213 + N
Width	205 cm
Length	120 cm
Mass of antenna	3,5 kg

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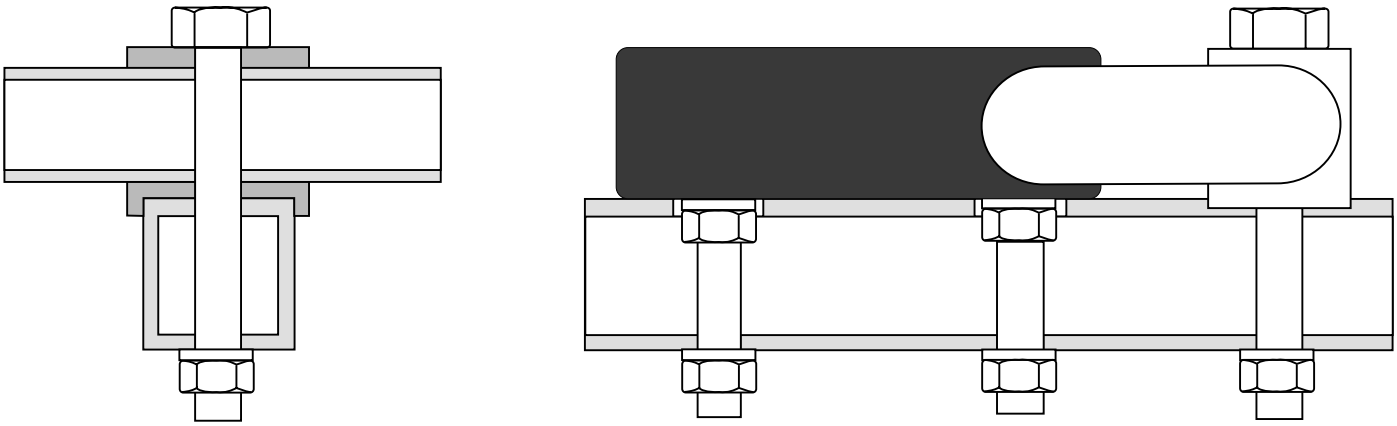
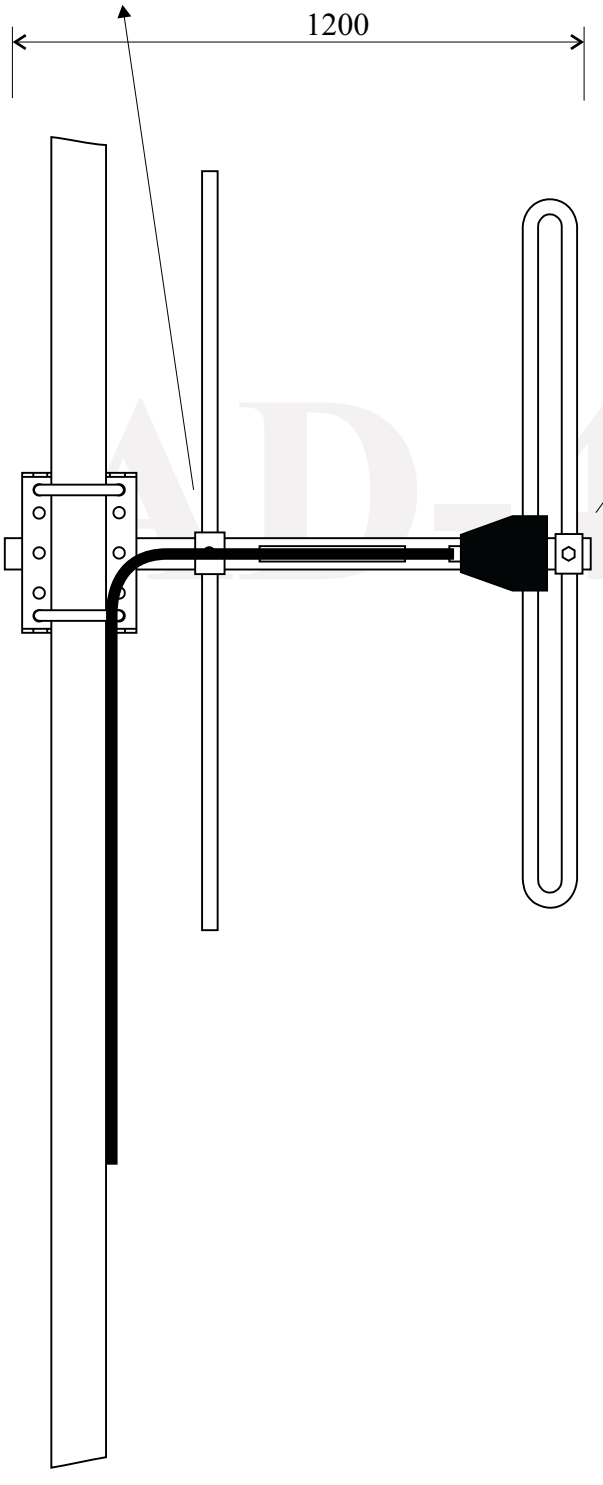
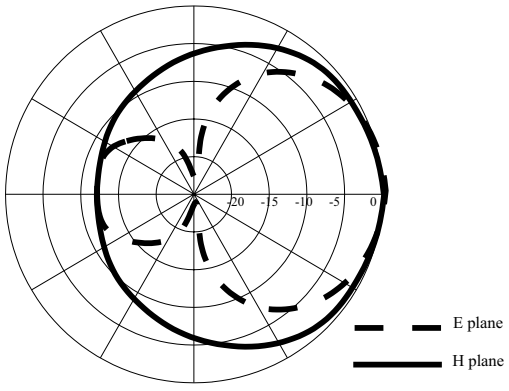
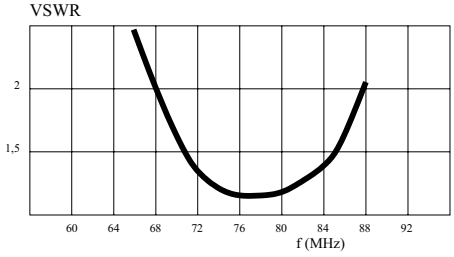



1200


-20
-15
-10
-5
0
E plane
H plane


VSWR
2
1,5
60
64
68
72
76
80
84
88
92
f (MHz)

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AD-40/4-3

The antenna AD-40/4-3 is 3-element wideband yagi antenna, primarily intended for stationary use on standard VHF frequency range from 72 to 86 MHz. The antenna is directional with 4,5 dBd gain. The radiator is made of folded dipole enables constant characteristics on whole frequency band. The elements are made of aluminum alloy tube 18/16 mm and inserted on the aluminum square tube boom 30 x 30 mm. The universal mounting adapter is on the back side of the boom enables vertical or horizontal polarization as well. All joint elements are made of stainless steel, matching unit is built in plastic protective housing and all aluminium parts are transparent anodized enable long life and reliable work even in hardest climatic conditions. All metal parts are DC grounded.

TECHNICAL DATA	
Frequency range	72 - 86 MHz
Impedance	50 ohm
VSWR	< 1,8
Gain	4.5 dBd
Front to Back ratio	> 15 dB
Polarization	VERT./HOR.
Maximum power	100 W
Connector	3 m RG-213 + N
Width	205 cm
Length	160 cm
Mass of antenna	5 kg

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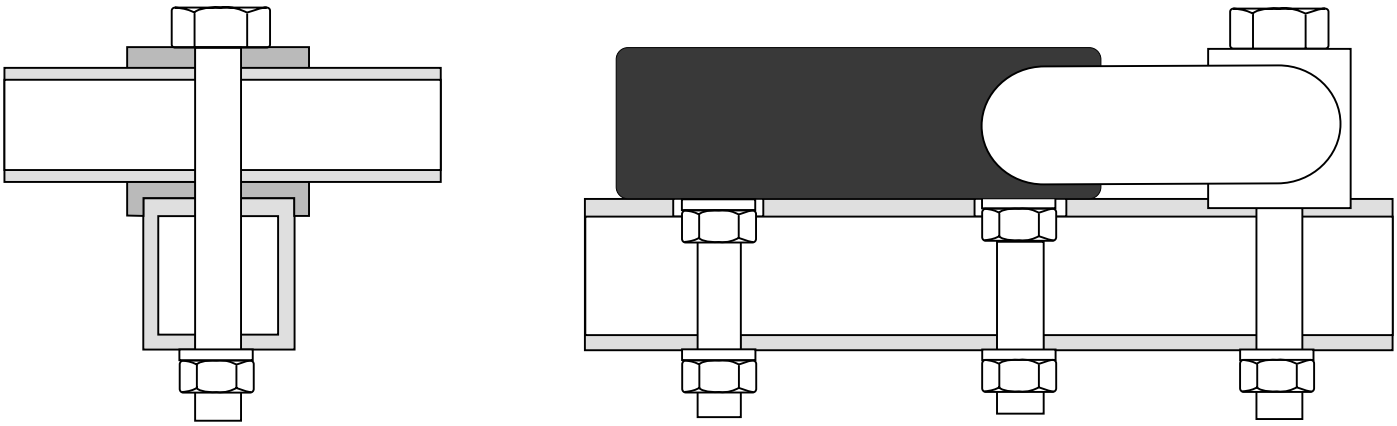
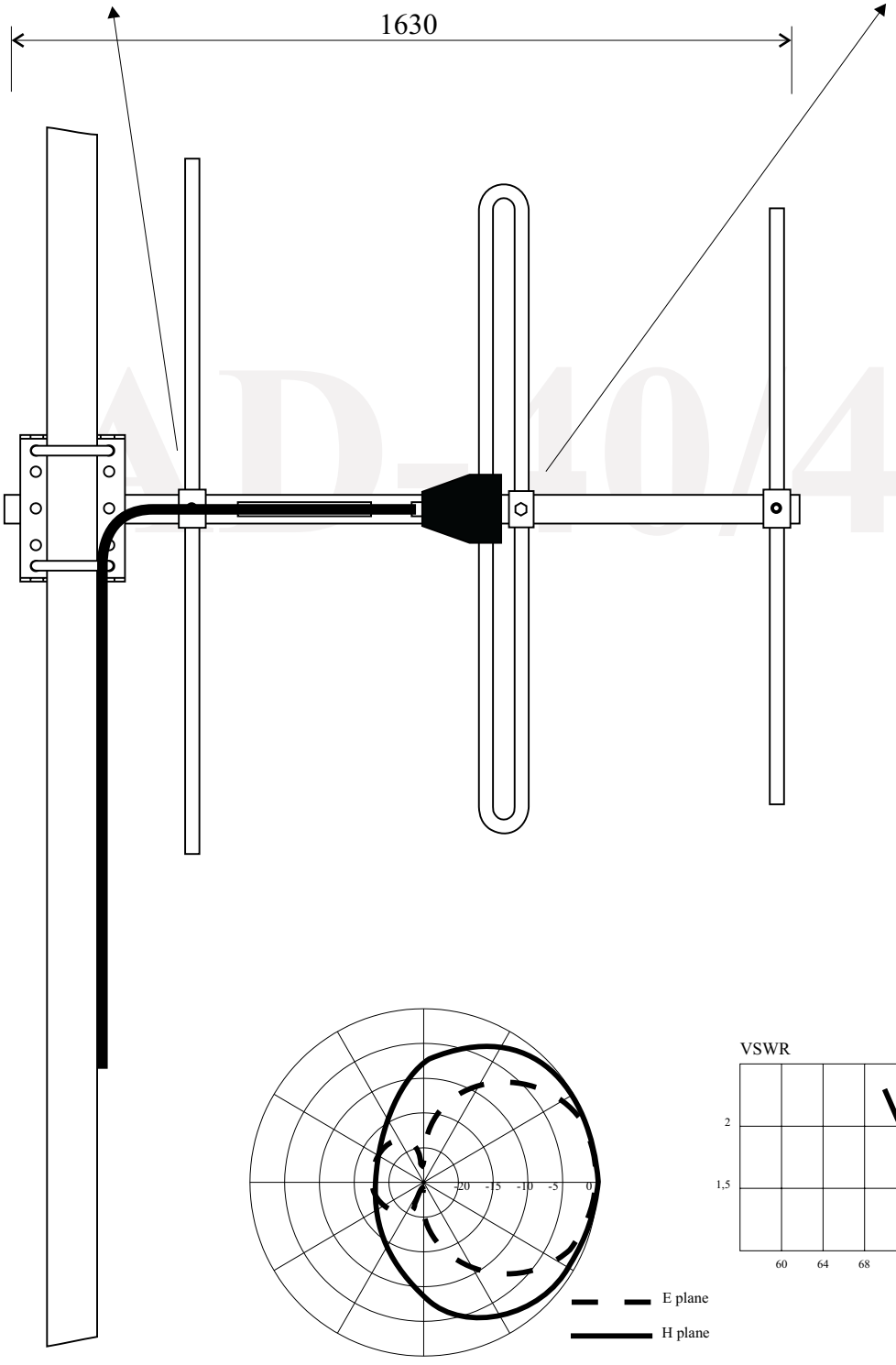
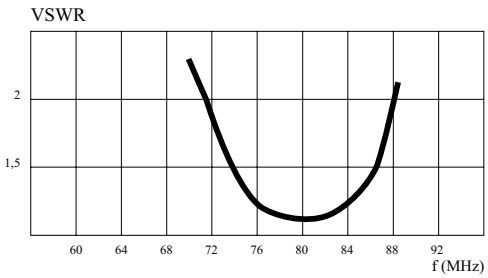



1630

-20
-15
-10
-5
0
E plane
H plane


VSWR
2
1,5
60
64
68
72
76
80
84
88
92
f (MHz)

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MOBILE ANTENNAS

Mobile antennas are composed of the antenna radiators type ADS-21, fixed mounts type ADN-21 and magnet mounts type ADM-21. The antenna radiators are made of Stainless Steel or composite material (fiberglass) and painted with black protective paint, covering the frequency range from 27 MHz (CB) to 900 MHz (GSM). Main advantage of the whole family is beside quality materials and simple use also simple combining of different types of the radiators with different types of the mounts through M6 screw joint (male on the mount side and female on the radiator side). In that way user could easily combine the appropriate radiator with different mount according to his requirements. All the mounts are equipped with coaxial cable type RG-58 terminated with connector type FME on which we could easily fit different adapters from FME to PL 259, BNC, TNC, N, MINI UHF or SMA.

TECHNICAL DATA antennas	**ADS-21/ CB-B**	**ADS-21/ 4-A**	**ADS-21/ 4-B**	**ADS-21/ 4-C**
Antenna type	1/4 short.	1/4	1/4	1/4 w. spring
Frequency	27 MHz	66-88 MHz	66-88 MHz	66-88 MHz
Impedance	50	50	50	50
VSWR	1.2	1.2	1.2	1.2
GAIN	0 dB	0 dB	0 dB	0 dB
Bandwith (MHz at SWR<2)	0.8	8	8	8
Material	SS	fiberglass	SS	SS
Colour	natur.	black	black	black
Height	600 mm	1030 mm	1090 mm	1090 mm

TECHNICAL DATA mounts	**ADN-21/1**	**ADN-21/2**	**ADM-21/ MA6**
Mount type	fixed bendable	fixed with swivel	magnet 90 mm-swivel
Colour	black	black	black
Cable	5 m RG-58	5 m RG-58	3.5 m RG-58
Radiator joint	screw M6	screw M6	screw M6
Height	40 mm	42 mm	80 mm
Weight w. cable	250 gr.	250 gr.	750 gr.

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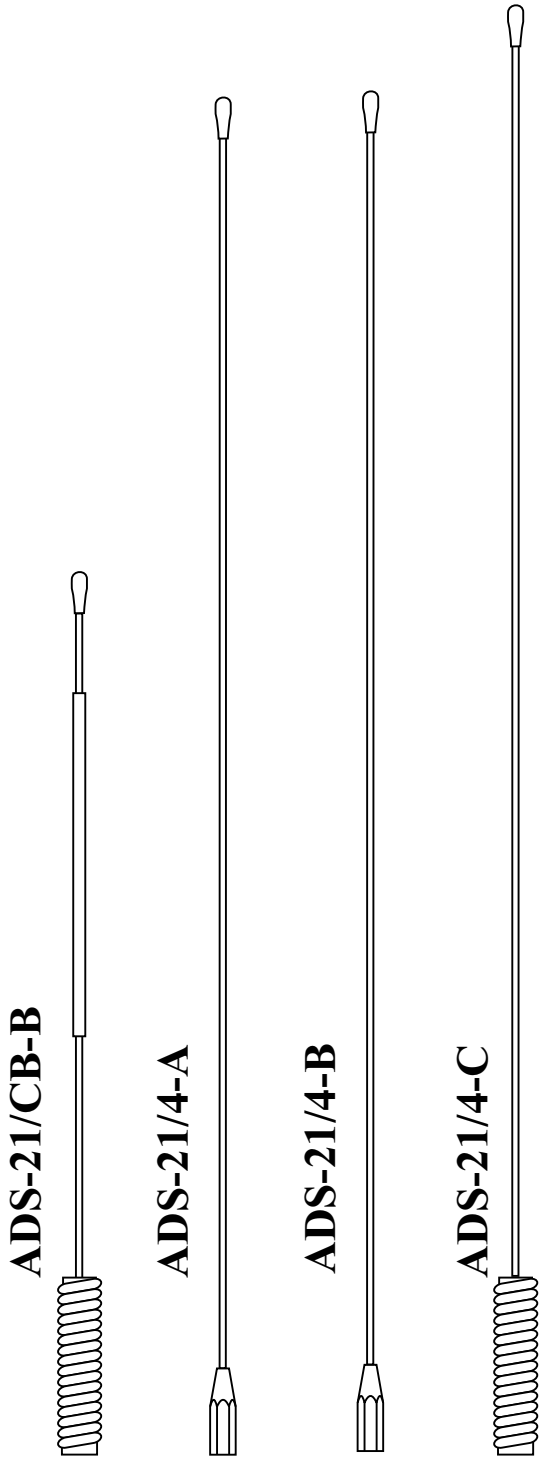

ADN-21/1

ADN-21/2

ADM-21/MA6

ADK-21/1

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AD-11/G

Antenna AD-11/G is wideband antenna covering frequency range from 144 to 176 MHz and is intended for stationary and portable use. Electrically the antenna is designed as a dipole with capacitive continuously distributed loading along the upper radiating element. All metal parts of the antenna are DC grounded and enclosed in tube made of composite material epoxy-glass ensuring good resistance against atmospheric influences and long life time. The antenna could be mounted on any metal tube with inner diameter greater than 30 mm and outer diameter less than 49 mm (for instance standard tube 1 1/4”). The antenna could also be mounted by our standard mounting console and adapter elements ADK.

TECHNICAL DATA	
Frequency range	144 - 176 MHz
Impedance	50 ohm
VSWR	< 1,6 (DIAG. 1)
Gain	0 - 1 dBd
Polarization	VER.
Maximum power	400 W CW
Connector	N
Height	1,37 m
Diameter	28 mm
Mass of antenna	1,6 kg
Wind velocity	150 km/h
Temperature range	-40....+70 °C

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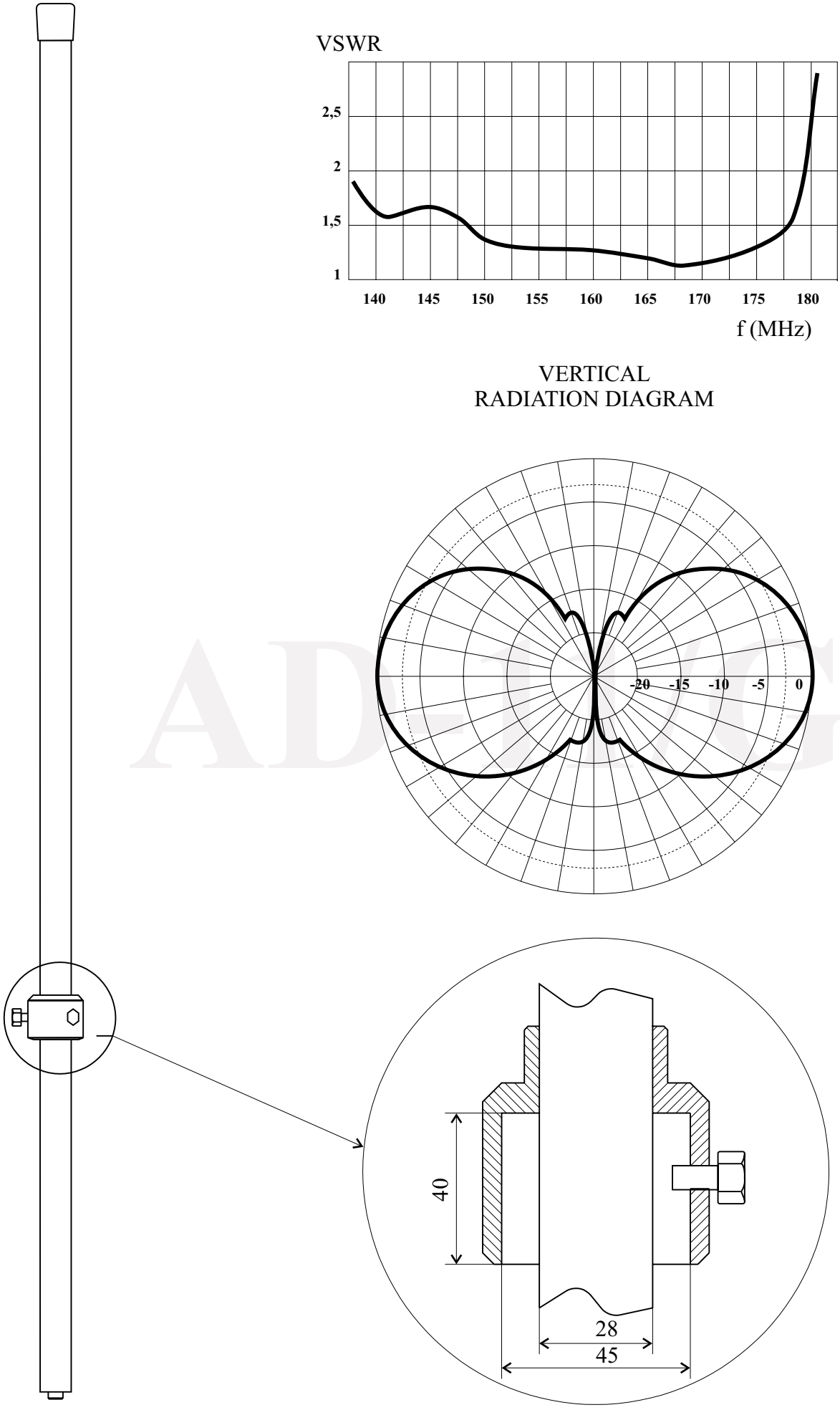
VSWR
2,5
2
1,5
1
140
145
150
155
160
165
170
175
180
f (MHz)
VERTICAL
RADIATION DIAGRAM
-20
-15
-10
-5
0
40
28
45

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AD-23/2-2

The antenna AD-23/2-2 is a collinear dipole for use on VHF frequency range from 144 to 176 MHz in separate frequency bands. The antenna is electrically designed as collinear dipole, composed of two elements half wave length each. The phasing coil between the elements is used for proper current phase shift on the radiating elements. At the antenna base a matching circuit is built-in by which all radiating elements are also DC grounded. All elements are enclosed in a tube made of composite material enabling excellent mechanical and atmospheric resistance. For antenna mounting on mast our standard family of mounting consoles type ADK could be used.

TECHNICAL DATA	
Frequency range	144 - 176 MHz
Impedance	50 ohm
VSWR	< 1,8 (fo +/- 4%fo)
Gain	6 dBi
Polarization	VER.
Maximum power	200 W CW
Height	3 m
Mass	1,5 kg
Connector	N female
Wind velocity	160 km/h

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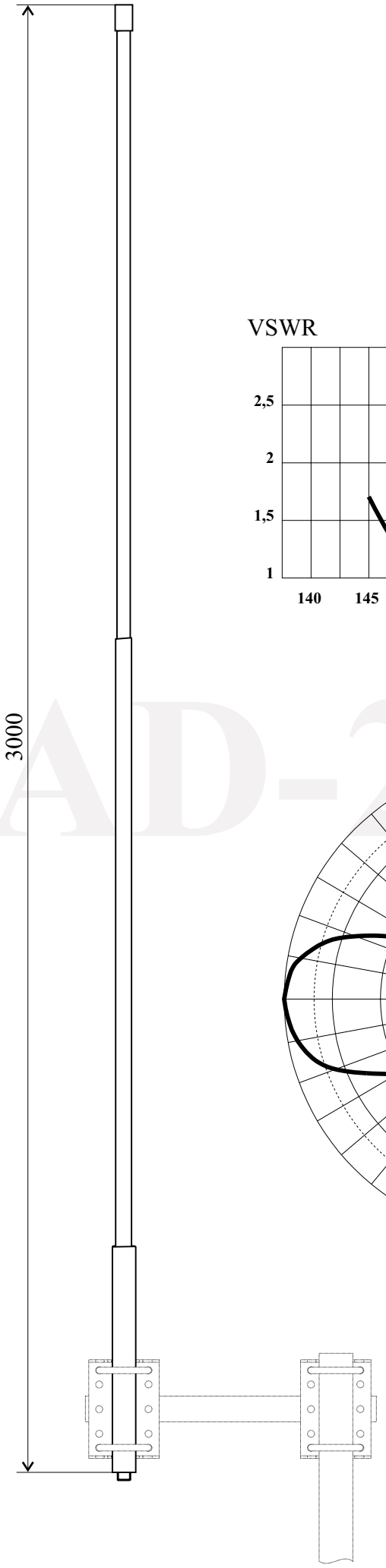
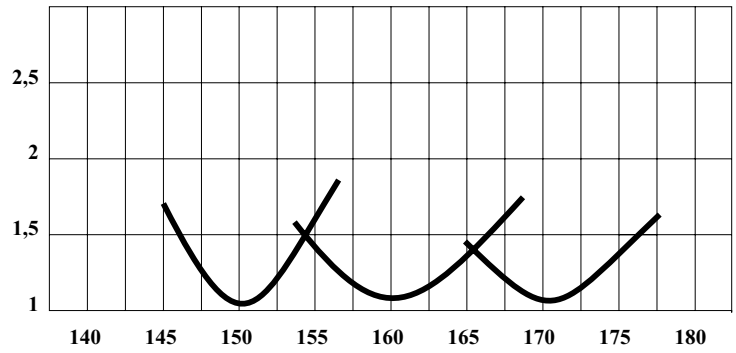
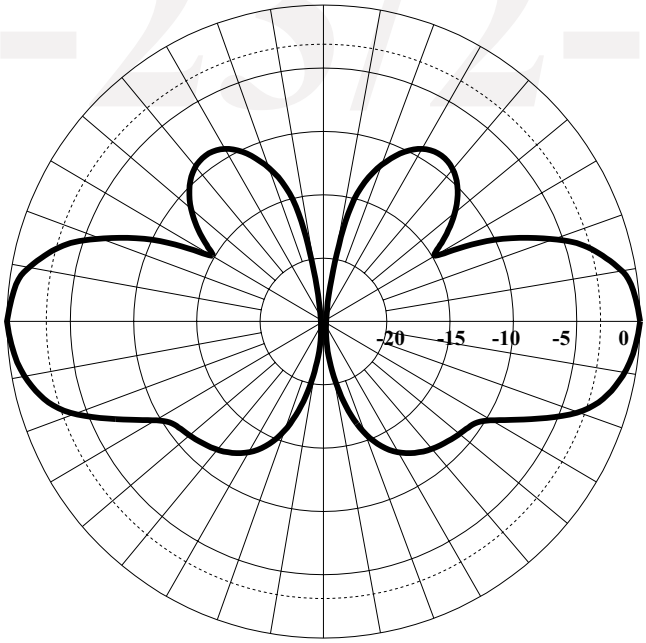


VSWR



f (MHz)

VERTICAL
RADIATION DIAGRAM



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AD-39/2

The family of wideband antennas AD-39 is composed of so called folded dipoles and is primarily intended for use as stationary antenna on VHF and UHF frequency range. The antenna is composed of a folded dipole mounted on a supporting boom. The dipole has 3 m of coaxial cable type RG-213/U with N female type of connector. The antenna is appropriate for side mast mounting with 2 dBd gain together with offset radiation pattern. With different combinations of several antennas together with appropriate power dividers type APS-38 a different radiation patterns with different gains could be easily achieved depending on our signal coverage requirement. Dipoles are made of aluminum alloy tube with 18 mm of diameter and mounted on square aluminum boom together with mounting console enables the antenna to be mounted on antenna mast with external diameter up to 60 mm. All aluminium parts are transparent anodized enable long life and reliable work even in hardest climatic conditions.

TECHNICAL DATA	
Frequency range	146 - 176 MHz
Impedance	50 ohm
VSWR	< 1,6
Gain	0 - 2 dBd
Polarization	VERT.
Maximum power	100 W
Connector	N
Height	85 cm
Lenght	56 cm
Mass of antenna	2 kg

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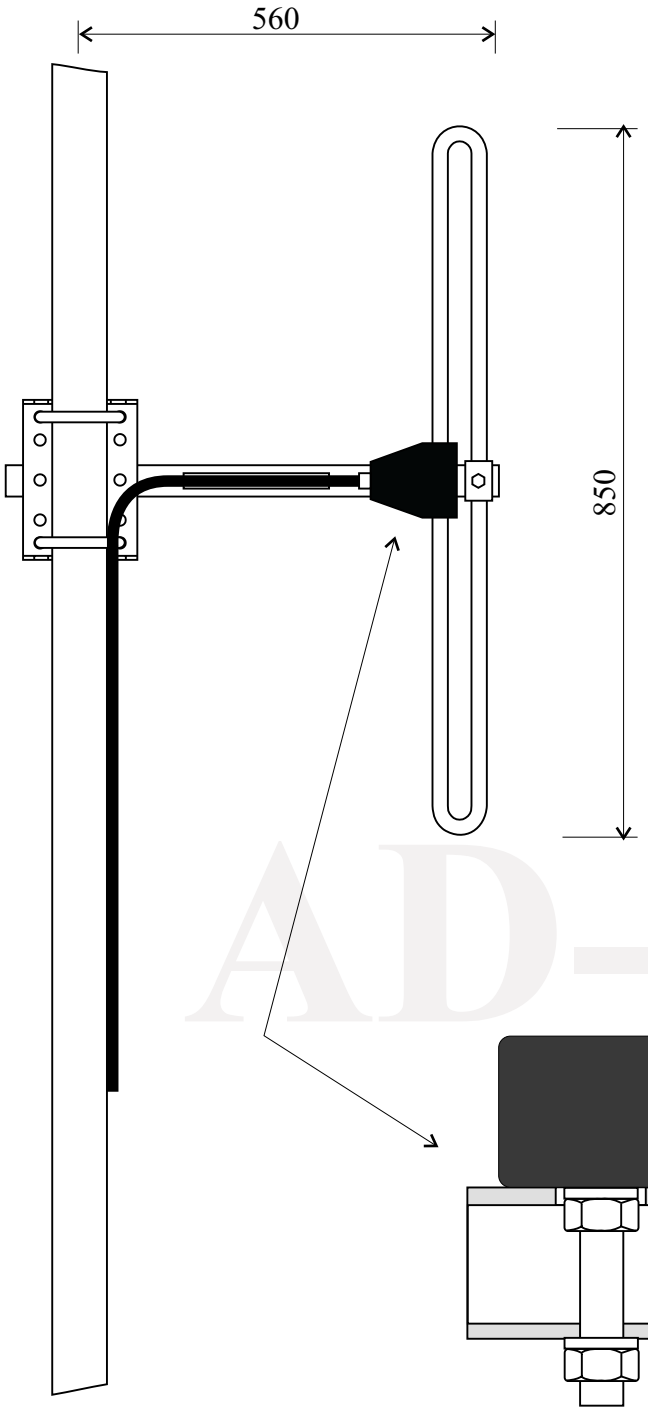
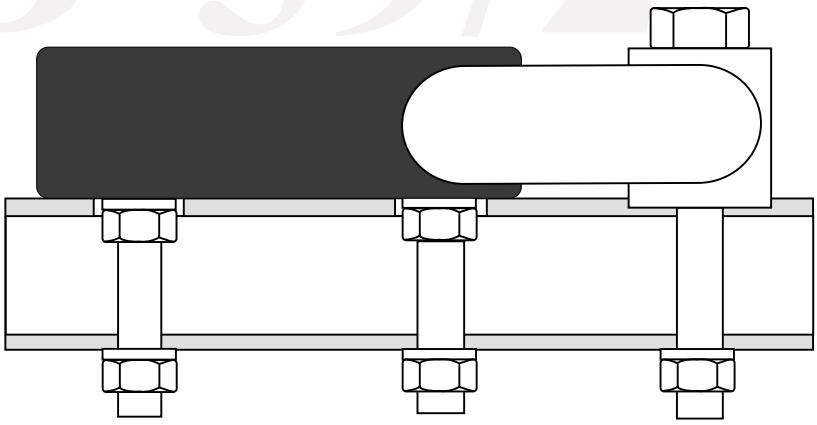
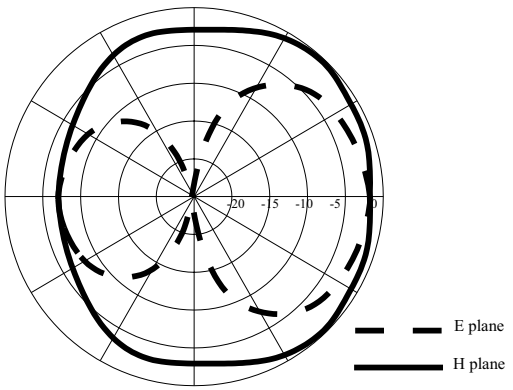
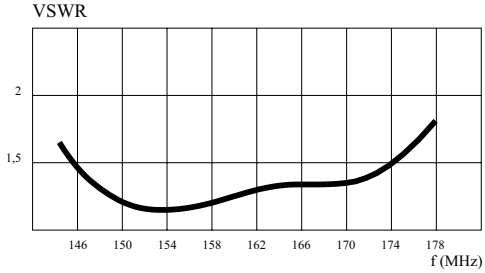

560
850




-20
-15
-10
-5
0
E plane
H plane


VSWR
2
1,5
146
150
154
158
162
166
170
174
178
f (MHz)

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AD-38/2

The family of wideband antennas AD-38 is composed of so called double folded dipoles primarily intended for use as stationary antennas on VHF and UHF frequency range. The antenna is composed of two folded dipoles mounted on common supporting boom. Each dipole has 3 m of coaxial cable type RG-213/U with N male type connector which must be connected on two-way power divider type APS-38/2-2. Such antenna system has elliptical horizontal radiation pattern with 3 dBd gain. With different combinations of several antennas a different radiation patterns with different gains could be easily achieved depending on our signal coverage requirement. Dipoles are made of aluminum alloy tube with 18 mm of diameter and mounted on square aluminum boom 30 x 30 mm together with mounting console enables the antenna to be mounted on antenna mast with external diameter up to 60 mm. All aluminium parts are transparent anodized enable long life and reliable work even in hardest climatic conditions.

TECHNICAL DATA	
Frequency range	146 - 176 MHz
Impedance	50 ohm
VSWR	< 1,8
Gain	3 dBd
Polarization	VERT.
Maximum power	200 W
Connector	N
Height	85 cm
Lenght	110 cm
Mass of antenna	3 kg

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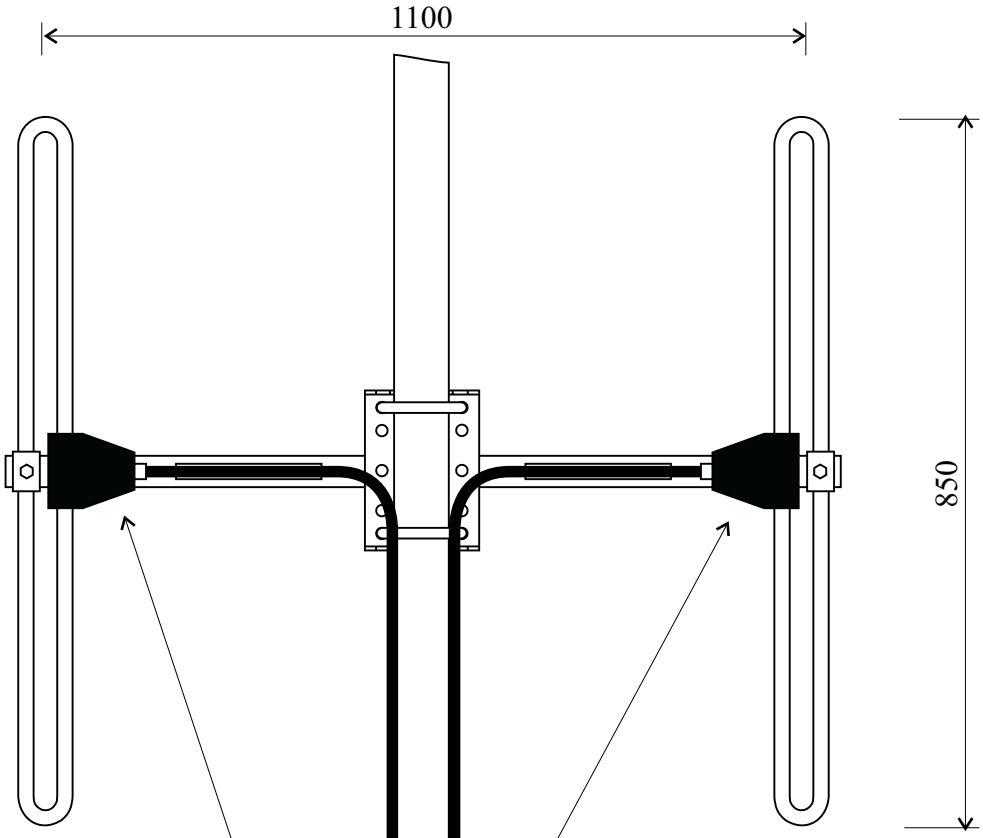
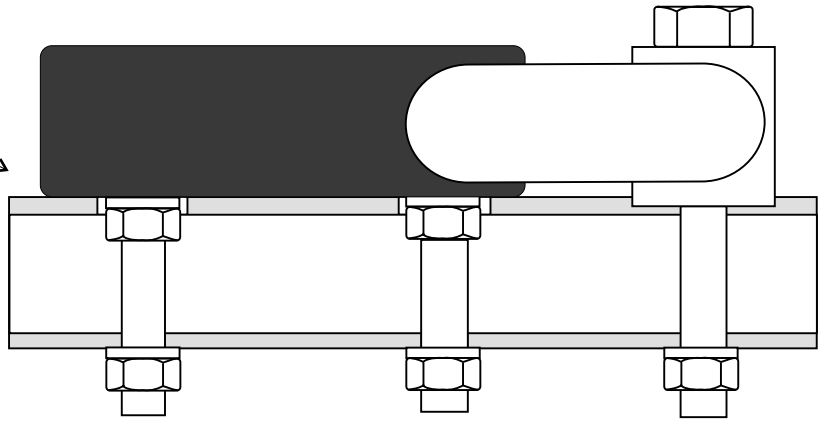
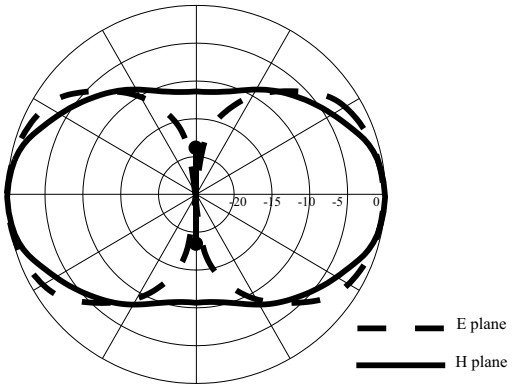
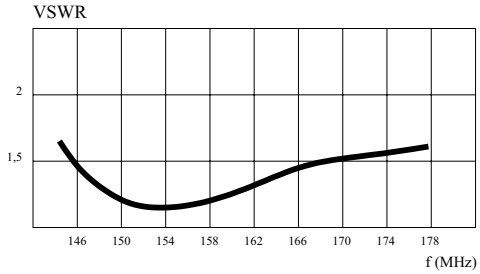

1100
850




-20
-15
-10
-5
0
E plane
H plane


VSWR
2
1,5
146
150
154
158
162
166
170
174
178
f (MHz)

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AD-40/2-2

The antenna AD-40/2-2 is 2-element wideband yagi antenna, primarily intended for stationary use on standard VHF frequency range from 146 to 176 MHz. The antenna is directional with 3 dBd gain. The radiator is made of folded dipole enables constant characteristics on whole frequency band. The elements are made of aluminum alloy tube 18/16 mm and inserted on the aluminum square tube boom 30 x 30 mm. The universal mounting adapter is on the back side of the boom enables vertical or horizontal polarization as well. All joint elements are made of stainless steel, matching unit is built in plastic protective housing and all aluminium parts are transparent anodized enable long life and reliable work even in hardest climatic conditions. All metal parts are DC grounded.

TECHNICAL DATA	
Frequency range	146 - 176 MHz
Impedance	50 ohm
VSWR	< 1,6
Gain	3 dBd
Front to Back ratio	> 14 dB
Polarization	VERT./HOR.
Maximum power	100 W
Connector	1.5 m RG-213 + N
Width	100 cm
Length	85 cm
Mass of antenna	3 kg

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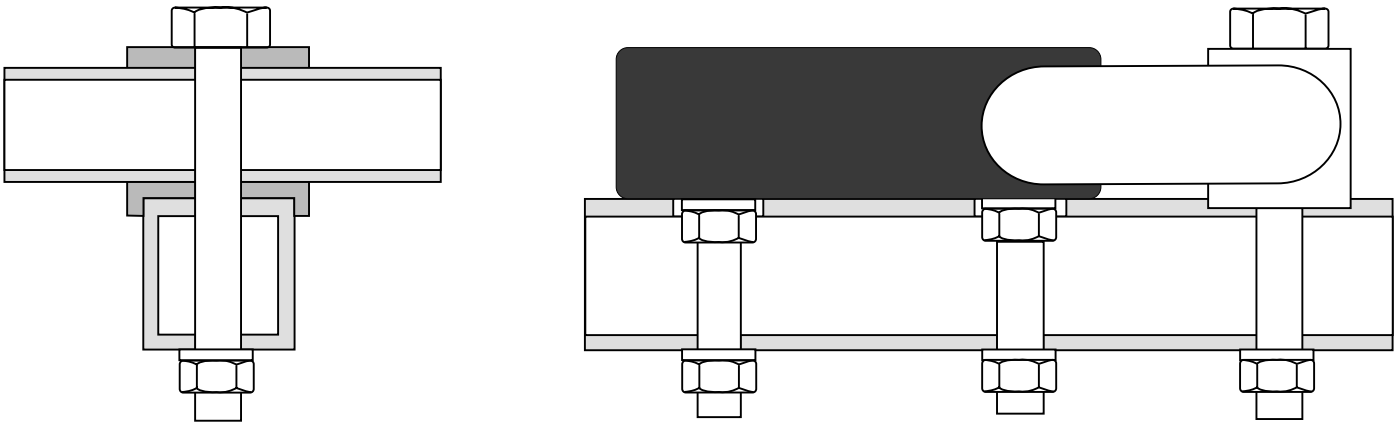
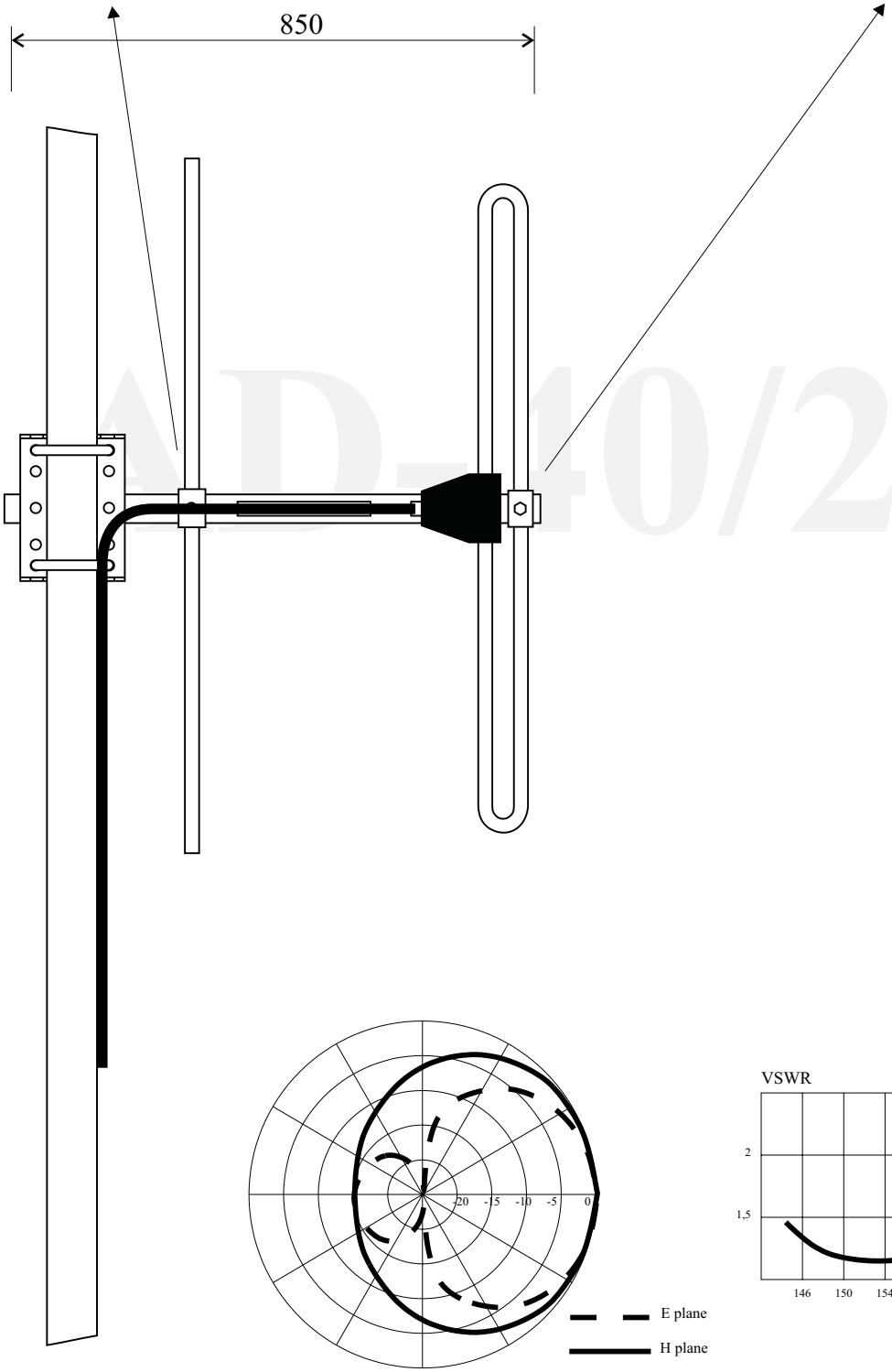
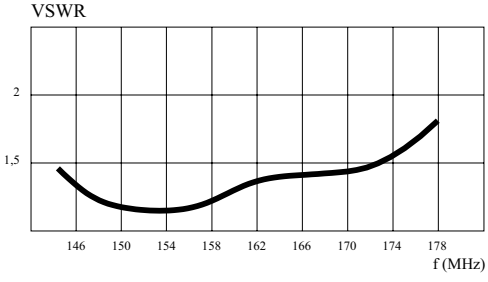



850

-20
-15
-10
-5
0
E plane
H plane


VSWR
2
1,5
146
150
154
158
162
166
170
174
178
f (MHz)

trival
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AD-40/2-3

The antenna AD-40/2-3 is 3-element wideband yagi antenna, primarily intended for stationary use on standard VHF frequency range from 146 to 176 MHz. The antenna is directional with 5 dBd gain. The radiator is made of folded dipole enables constant characteristics on whole frequency band. The elements are made of aluminum alloy tube 18/16 mm and inserted on the aluminum square tube boom 30 x 30 mm. The universal mounting adapter is on the back side of the boom enables vertical or horizontal polarization as well. All joint elements are made of stainless steel, matching unit is built in plastic protective housing and all aluminium parts are transparent anodized enable long life and reliable work even in hardest climatic conditions. All metal parts are DC grounded.

TECHNICAL DATA	
Frequency range	146 - 176 MHz
Impedance	50 ohm
VSWR	< 1,6
Gain	5 dBd
Front to Back ratio	> 16 dB
Polarization	VERT./HOR.
Maximum power	100 W
Connector	1.5 m RG-213 + N
Width	100 cm
Length	110 cm
Mass of antenna	3,5 kg

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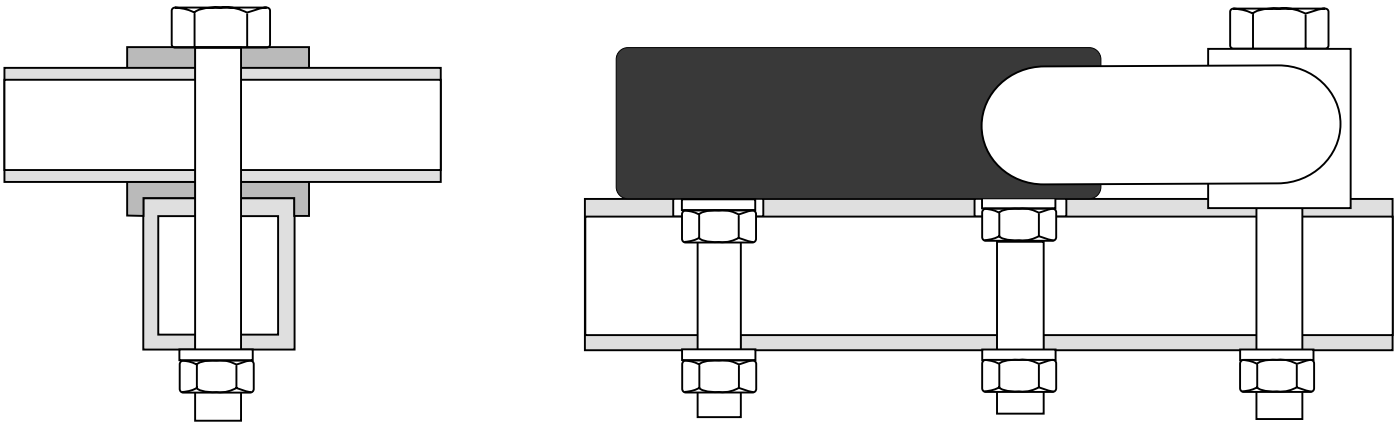
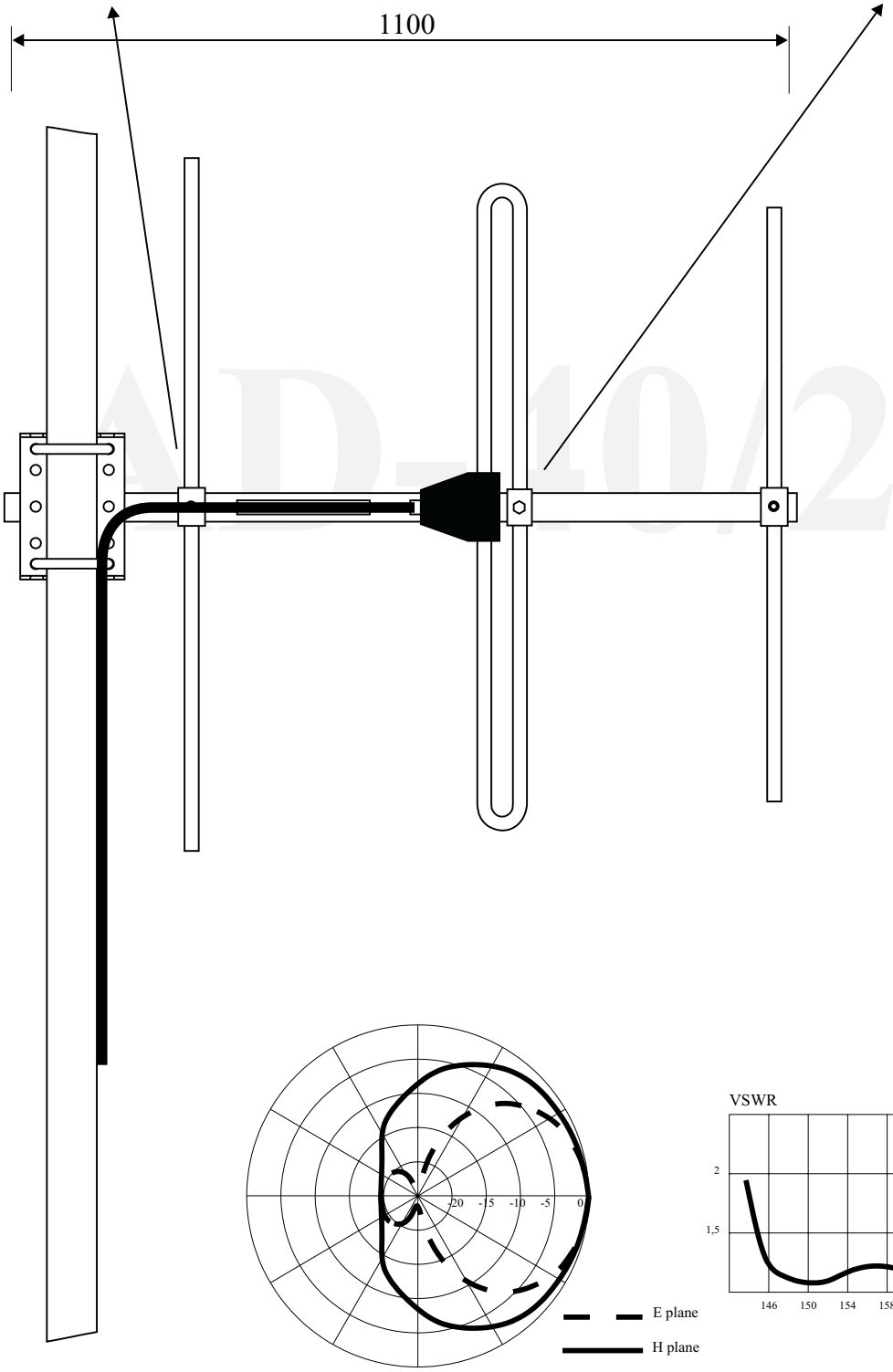
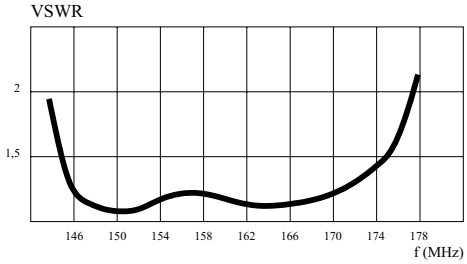



1100

-20
-15
-10
-5
0
E plane
H plane


VSWR
2
1,5
146
150
154
158
162
166
170
174
178
f (MHz)

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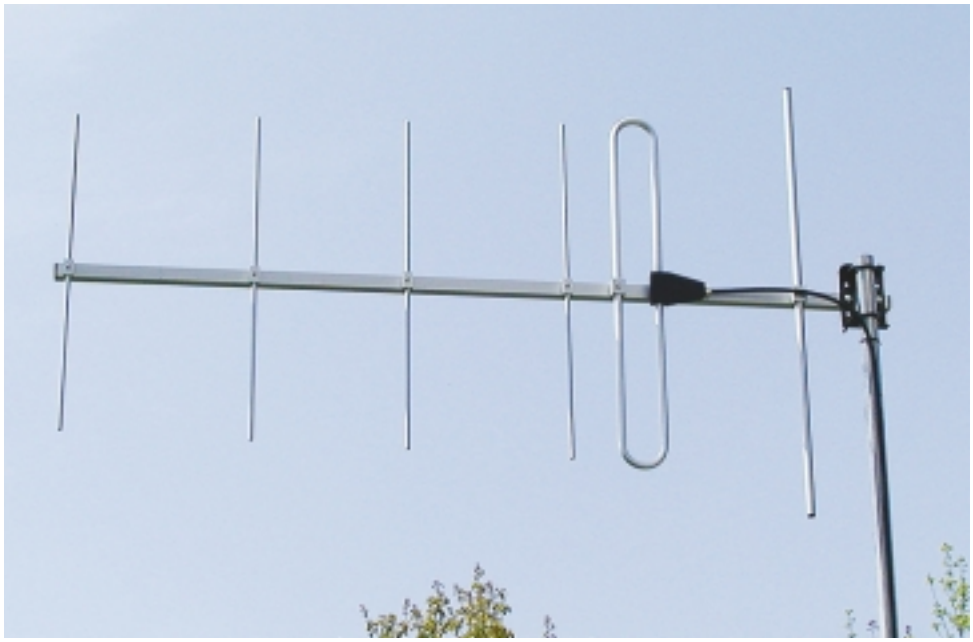
oprema za telekomunikacije

AD-40/2-6

The antenna AD-40/2-6 is 6-element wideband yagi antenna, primarily intended for stationary use on standard VHF frequency range from 146 to 176 MHz. The antenna is directional with 8 dBd gain. The radiator is made of folded dipole enables constant characteristics on whole frequency band. The elements are made of aluminum alloy tube 18/16 mm and of aluminum rods 10 mm and inserted on the aluminum square tube boom 30 x 30 mm. The universal mounting adapter is on the back side of the boom enables using vertical or horizontal polarization as well. All joint elements are made of stainless steel, matching unit is built in plastic protective housing and all aluminium parts are transparent anodized enable long life and reliable work even in hardest climatic conditions. All metal parts are DC grounded.



TECHNICAL DATA	
Frequency range	146 - 176 MHz
Impedance	50 ohm
VSWR	< 2
Gain	8 dBd
Front to Back ratio	> 14 dB
Polarization	VERT./HOR.
Maximum power	100 W
Connector	1.5 m RG-213 + N
Width	100 cm
Length	180 cm
Mass of antenna	5 kg

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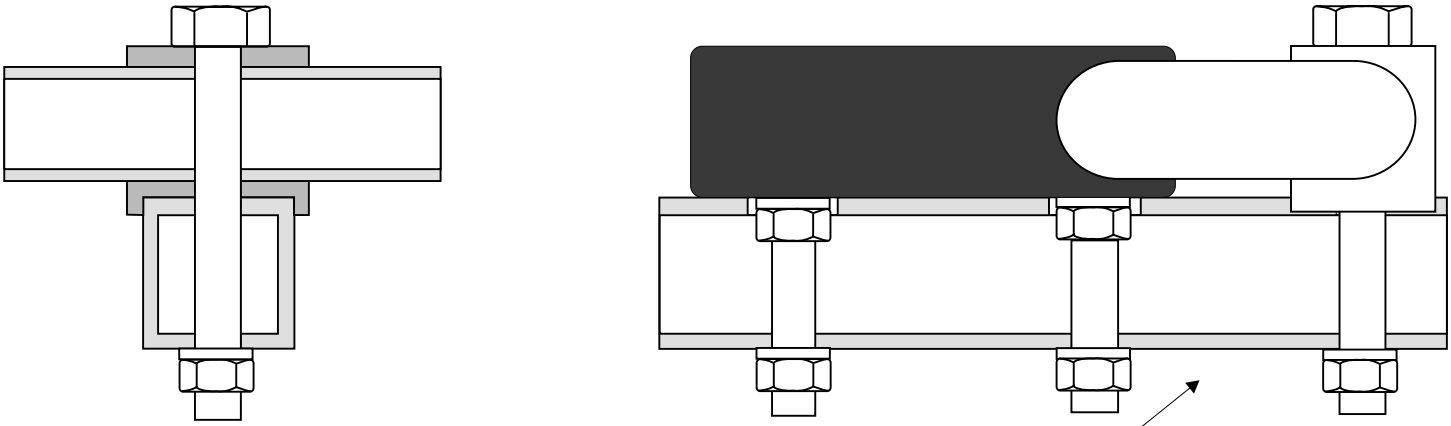
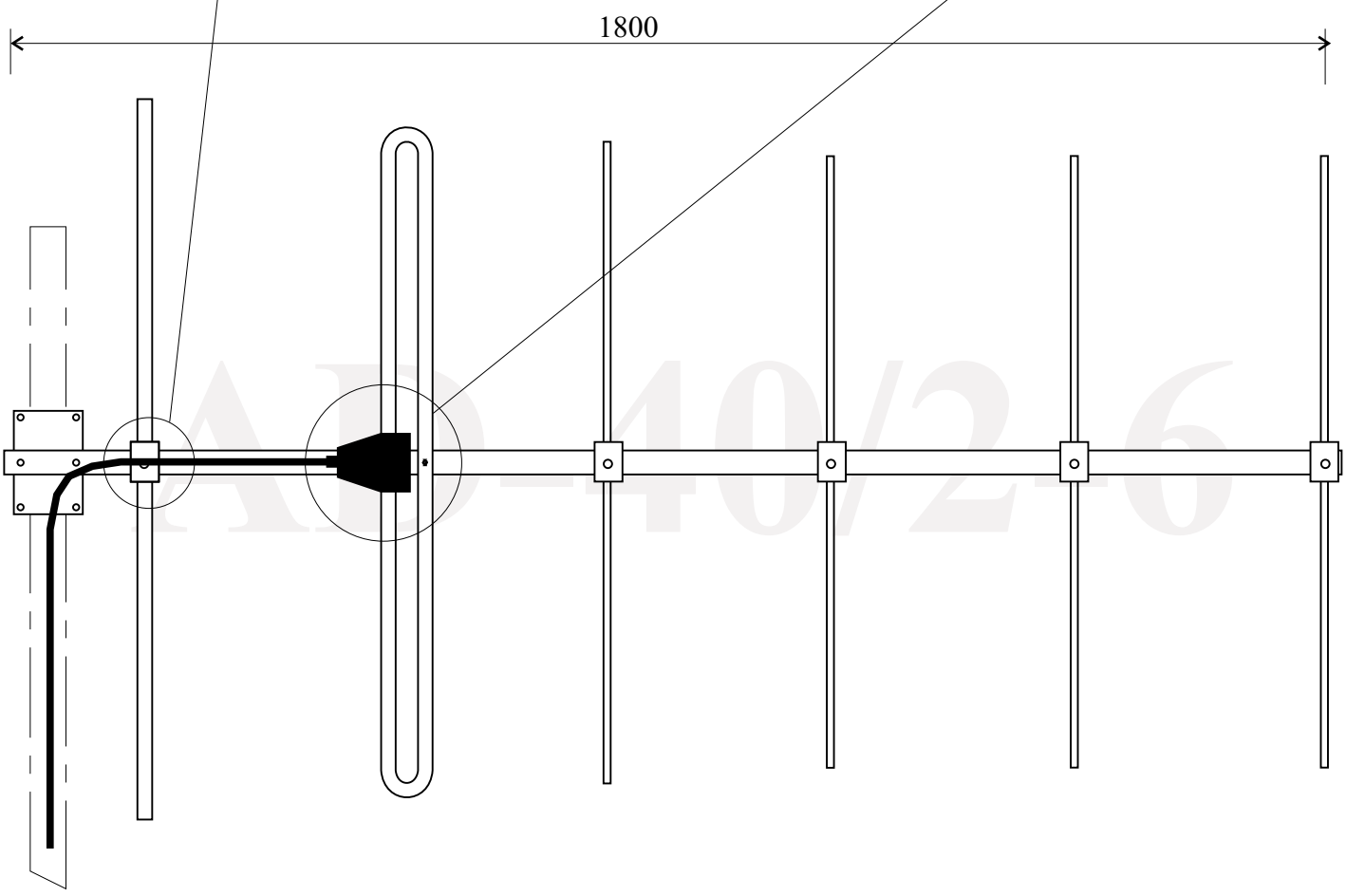
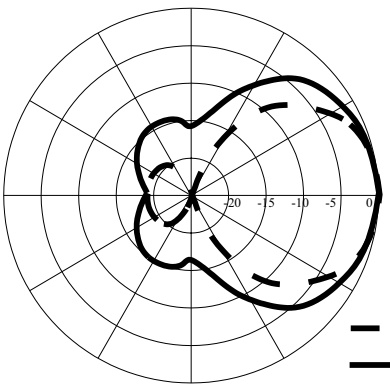
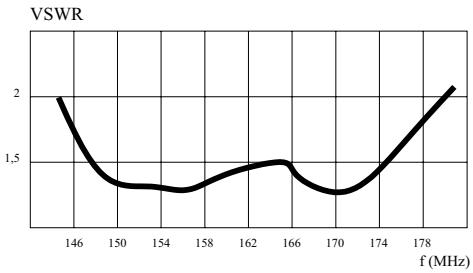



1800


-20
-15
-10
-5
0
E plane
H plane


VSWR
2
1,5
146
150
154
158
162
166
170
174
178
f (MHz)

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AD-36/2-10

The antenna AD-36/2-10 is a corner-reflector type of the antenna intended for stationary use as a base station antenna for directional communications. High gain and Front-to-Back ratio together with low side lobes enable use of the antenna with low power transmitters and with minimum interference with another antennas on the same antenna mast. It's rugged construction enables using in hardest environment conditions.

The antenna is composed of the reflector elements made of welded tubes and square profiles and of radiating element designed as folded dipole. All main antenna parts are made of aluminium alloy and anodized. All joint parts and mounting brackets are made of Stainless Steel.

For enabling more gain the antennas could be stacked together forming an antenna array by use of the antenna dividing transformers series APS-38/2... For that purpose the antennas AD-36/2-10 are made with coaxial feeder cable 1.5 m long. All antenna elements are DC grounded.

TECHNICAL DATA	
Frequency range	145 - 175 MHz
Impedance	50 ohm
VSWR	< 1.6
Gain	10 dBd
Front to Back ratio	> 20 dB
3 dB radiation angle	
- E plane	60°
- H plane	50°
Polarization	VERT./HOR.
Maximum power	200 W
Connector	1.5 m RG-213 + N fem.
Width	280 cm
Height	120 cm
Length	140 cm
Weight	20 kg
Max. wind velocity	150 km/h
Wind area CxA	0.4 m^2

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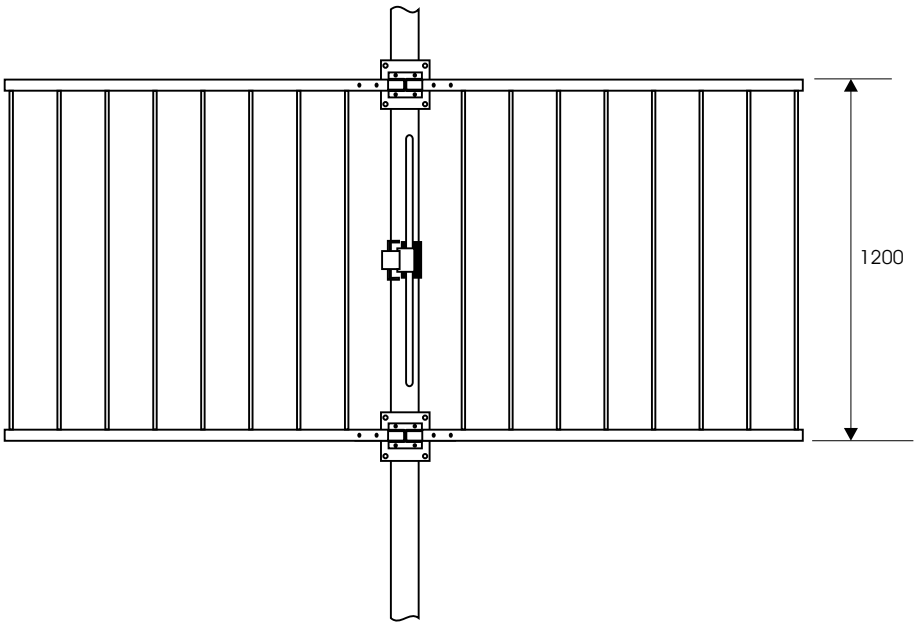
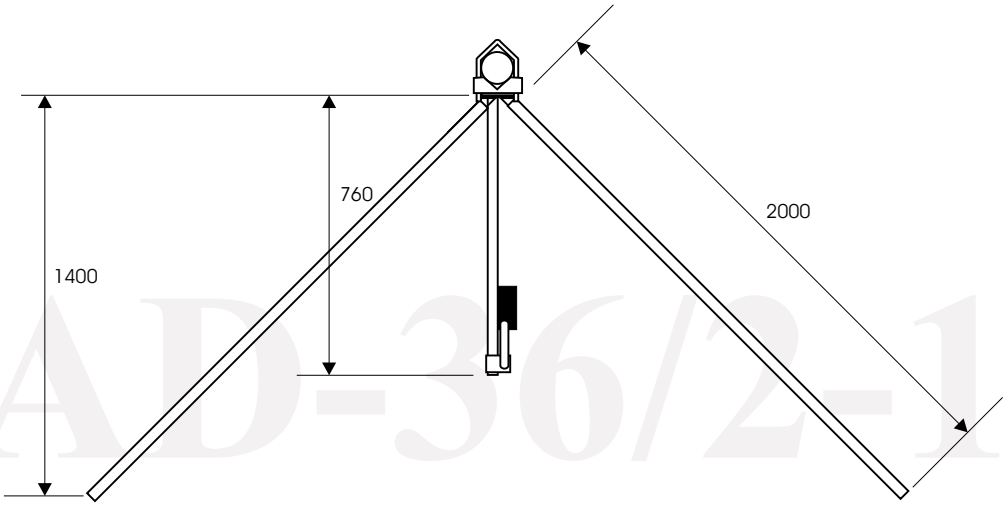
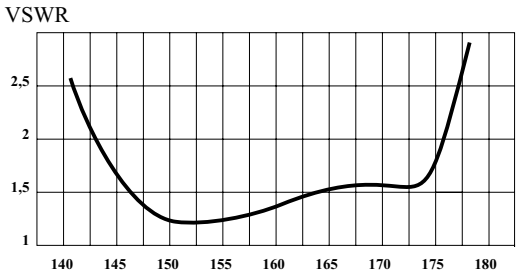
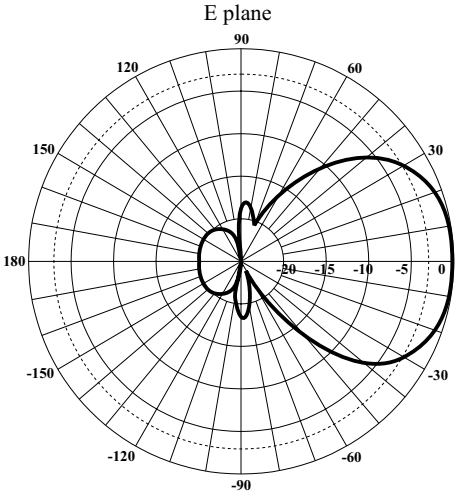
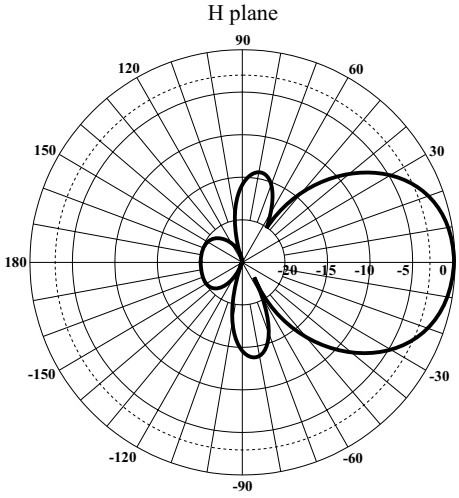

1200


760
2000
1400


VSWR
2,5
2
1,5
1
140
145
150
155
160
165
170
175
180
f (MHz)


E plane
90
120
60
150
30
180
-20
-15
-10
-5
0
-150
-30
-120
-60
-90


H plane
90
120
60
150
30
180
-20
-15
-10
-5
0
-150
-30
-120
-60
-90

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AD-23/2-144

The antenna AD-23/2-144 is collinear dipole for use on VHF radioamateur frequency range from 144 to 146 MHz. The antenna is electrically designed as collinear dipole, composed of two elements half wave length each. The phasing coil between the elements is used for proper current phase on the radiating elements. At the antenna base a matching circuit is built-in by which all radiating elements are DC grounded. All elements are enclosed in tube made of composite material enabling excellent mechanical and atmospheric resistance. For antenna mounting on mast our standard family of mounting consoles type ADK could be used.

TECHNICAL DATA	
Frequency range	143 - 147 MHz
Impedance	50 ohm
VSWR	< 1,5
Gain	6 dBi
Polarization	VER.
Maximum power	200 W CW
Height	3 m
Mass	1,5 kg
Connector	UHF, N
Wind velocity	160 km/h

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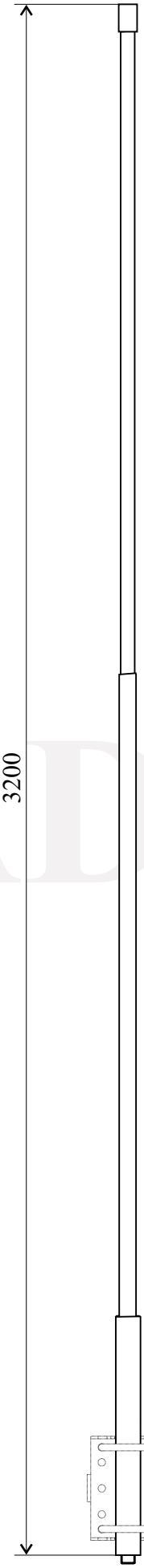
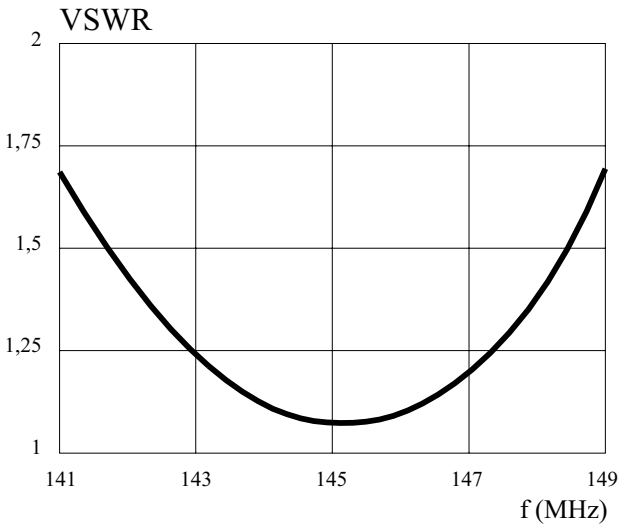
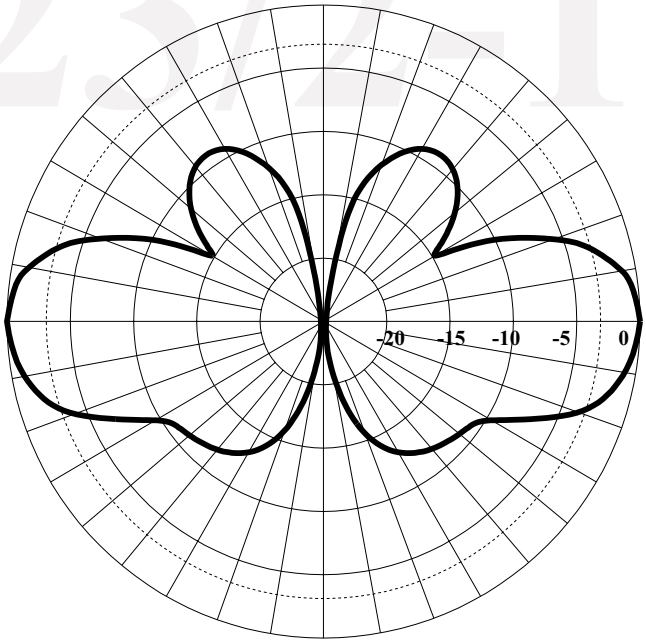
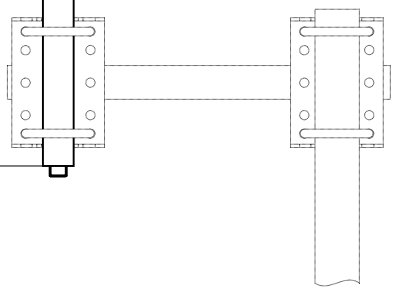




VERTICAL
RADIATION DIAGRAM





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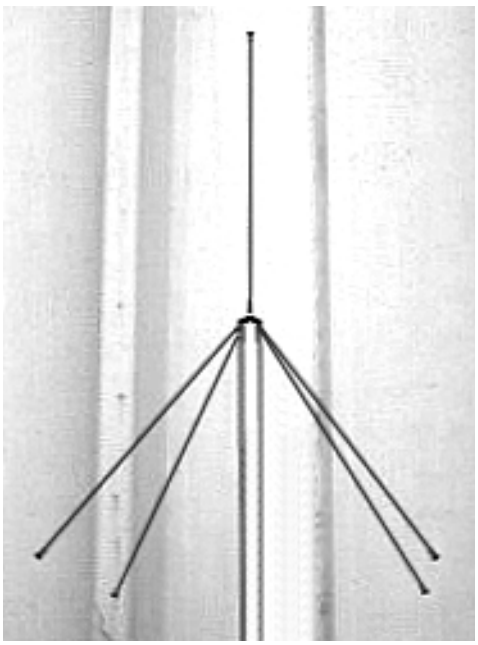
AD-34/2-A

The family of antennas type AD-34 represents antennas type “ground plane” intended for use on VHF and UHF frequency range. The antenna type AD-34/2-A is also GP antenna composed of junction head, three radial elements and radiator, electrically quarter wave long. All antenna types have junction head made of anodized aluminum alloy and radiating elements made of strong stainless steel black coated rods. Instead of simple and lightweight construction the antennas are also usable in hard climatic conditions. The antenna could be mounted on standard metal 1 1/4” water pipe or some appropriate combination of mounting elements from our program could be used.



TECHNICAL DATA	
Frequency range	144-176MHz
Impedance	50 ohm
VSWR	<1,5 (fo+/-2%fo)
Gain	0 dBd
Polarization	VERT.
Maximum power	100 W
Connector	N, UHF
Height	90 cm
Mass of antenna	0.2 kg

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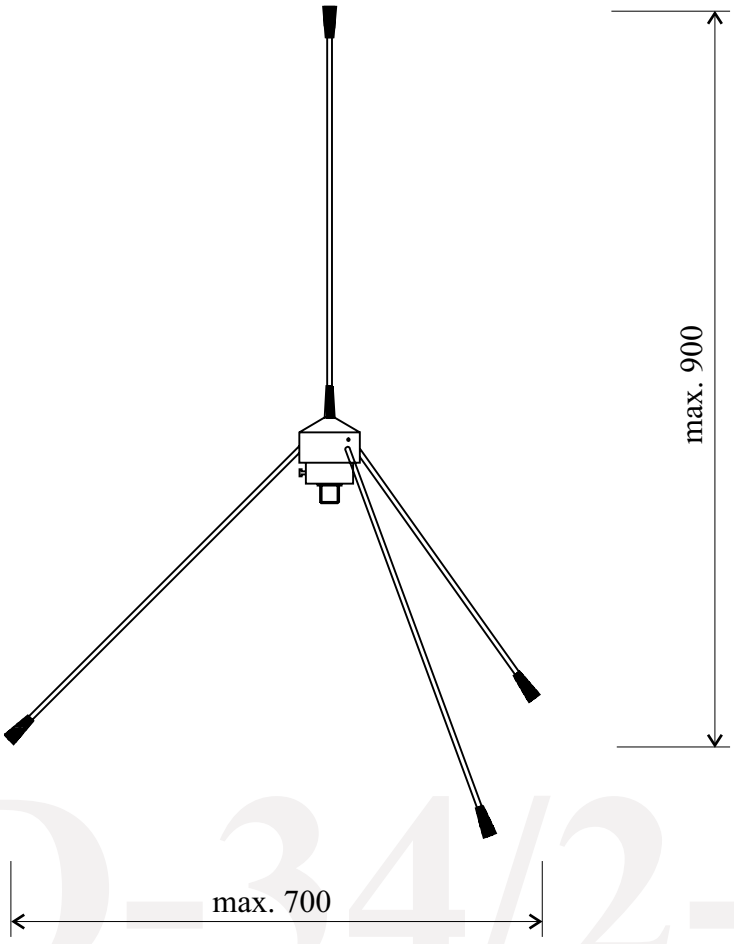

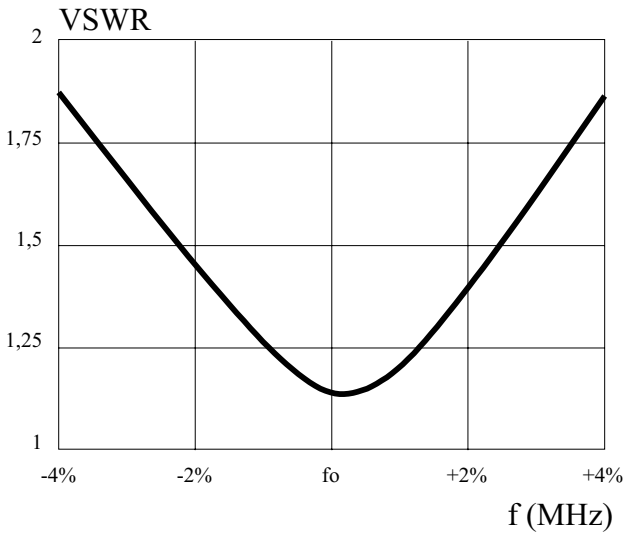

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AD-34/2-G

The family of antennas type AD-34 represents antennas type “ground plane” intended for use on VHF and UHF frequency range. The antenna type AD-34/2-G is also GP antenna composed of junction head, four horizontally placed radial elements and radiator, electrically 5/8 wave long, enables 3 dBd gain. All antenna types have junction head made of anodized aluminum alloy and radiating elements made of strong stainless steel black coated rods. Instead of simple and lightweight construction the antennas are also usable in hard climatic conditions. The antenna could be mounted on standard metal 1 1/4” water pipe or some appropriate combination of mounting elements from our program could be used.

TECHNICAL DATA	
Frequency range	144-176MHz
Impedance	50 ohm
VSWR	< 2 (fo+/-2%fo)
Gain	3 dBd
Polarization	VERT.
Maximum power	100 W
Connector	N, UHF
Height	150 cm
Mass of antenna	0.3 kg

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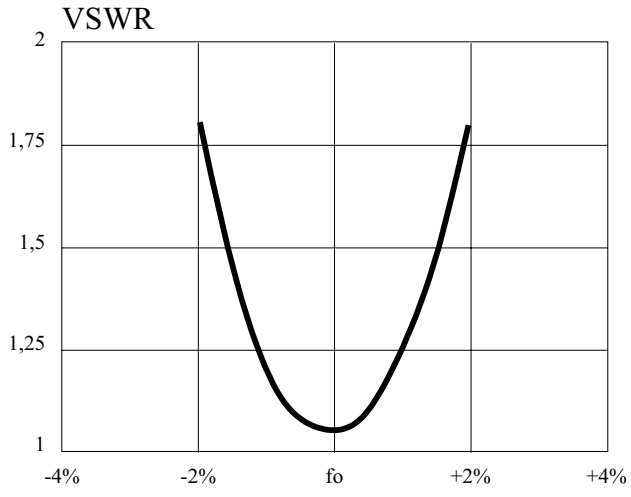

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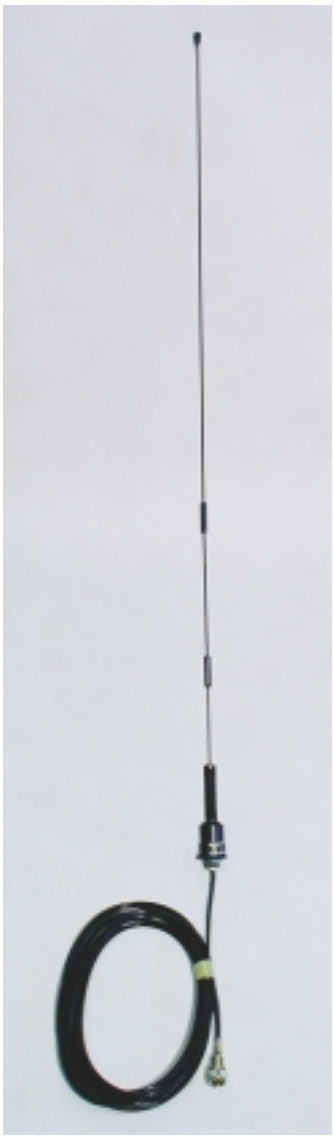
AD-32

The antenna AD-32 is a wideband monopole for the frequency range from 144 to 176 MHz and is primarily intended for use on all types of vehicles. There is no need for tuning the antenna as we must do with standard mobile antennas. That property and also other advantages have been achieved with computer synthesis and optimisation. The antenna is composed of a base with coaxial cable and connector, of a spring and of a radiating element, made of stainless-steel whip with two concentrated elements built in. Besides these, wideband characteristics are achieved with a special line transformer network built in the antenna base. Under the base is a washer for connector protection against water.

TECHNICAL DATA	
Frequency range	144 - 176 MHz
Impedance	50 ohm
VSWR	< 2 (DIAG. 1)
Gain	DIAG. 2
Polarization	VER.
Maximum power	50 W CW
Connector	4 m RG-58 + FME
Height	1025 mm
Mass of antenna	350 g
Wind velocity	180 km/h
Temperature range	-40....+70 °C



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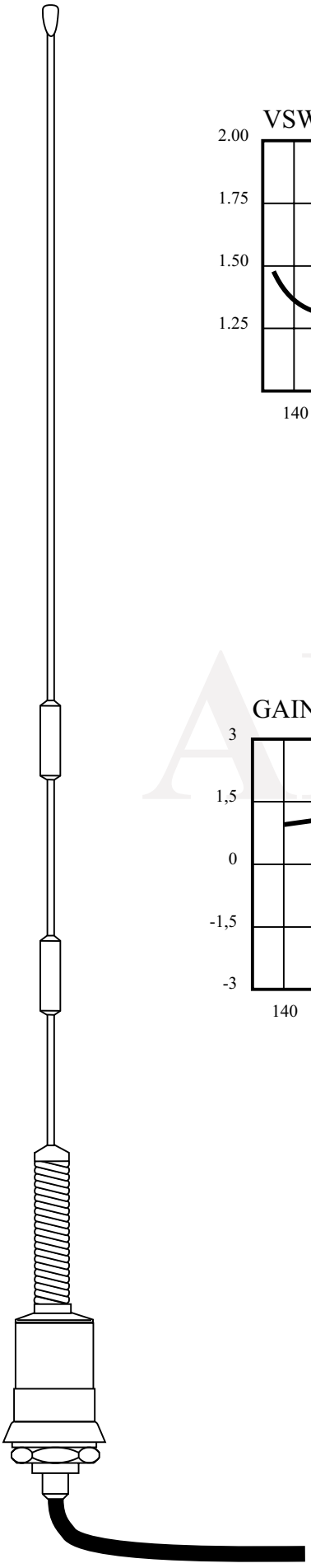
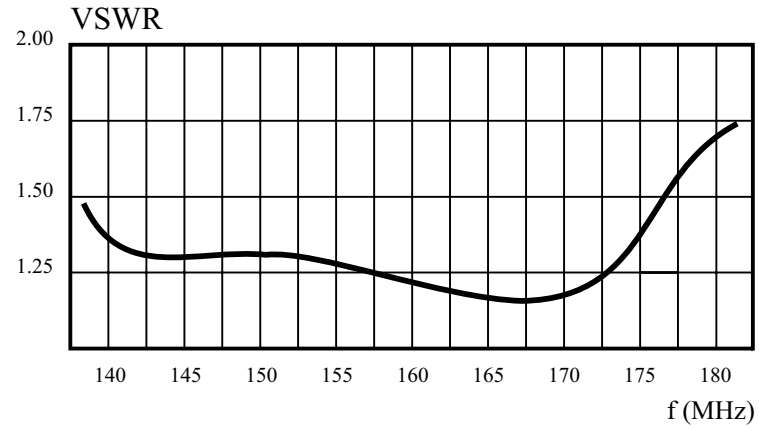
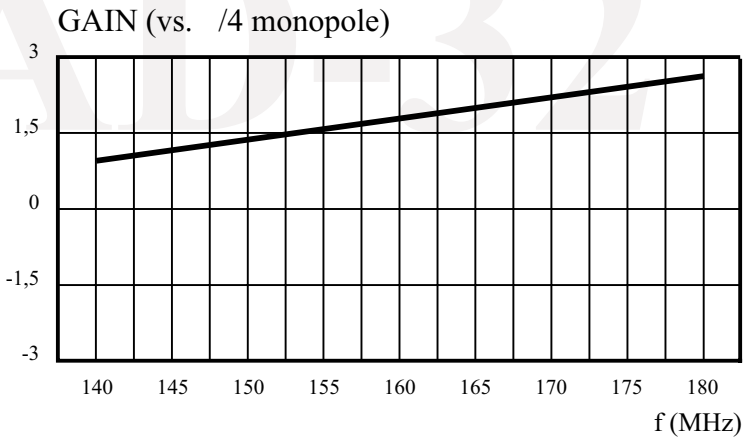
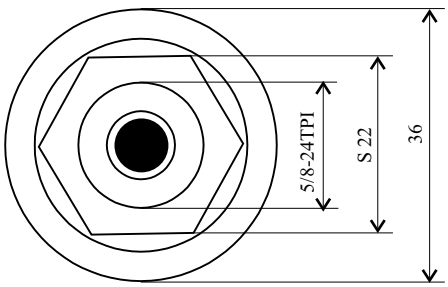



VSWR
2.00
1.75
1.50
1.25
140
145
150
155
160
165
170
175
180
f (MHz)


GAIN (vs. /4 monopole)
3
1,5
0
-1,5
-3
140
145
150
155
160
165
170
175
180
f (MHz)


5/8-24TPI
S 22
36

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AD-70/C

The antenna AD-70/C is a halfwave dipole for use on frequency range from 156 to 163 MHz primarily intended for use on yachts and motor boats. The antenna is electrically designed as end fed halfwave dipole allowing mounting on nonmetallic surfaces or on top of the mast through a console built at the bottom of the antenna. A radiating element is made of a conical rod made of composite material. A special transformer unit is built-in at the antenna base. The antenna could be mounted also on flat surface by eliminating the console. The antenna comprises also 21 m of coaxial cable RG-58/U and the coaxial connector PL 259 (UHF male).

TECHNICAL DATA	
Frequency range	156 - 163 MHz
Impedance	50 ohm
VSWR	< 1,8
Gain	0 dBd
Polarization	VER.
Maximum power	50 W
Connector	PL 259
Height	0,9 m
Mass	170 g
Wind velocity	180 km/h

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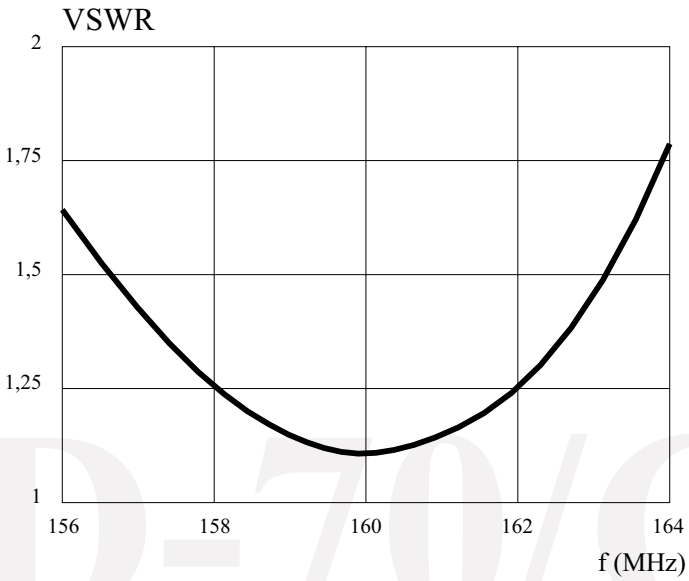

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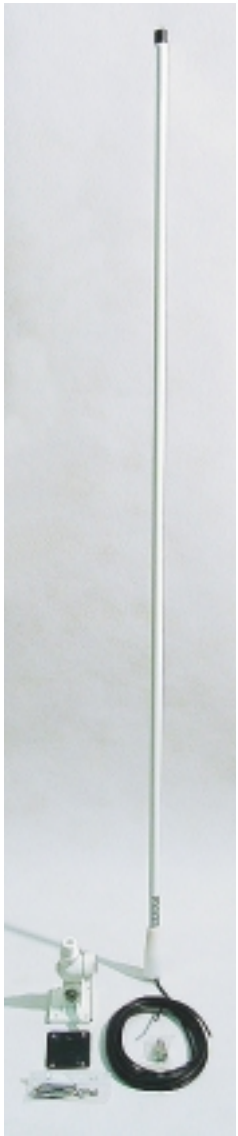
AD-71/S

The antenna AD-71/S is halfwave dipole for use on frequency range from 156 to 163 MHz primarily intended for use on yachts and motor boats. The antenna is electrically designed as halfwave “J” dipole allowing mounting on nonmetallic surfaces. By built-in two-way swivel mount we could mount the antenna also on inclined surfaces. A radiating element is closed in a tube made of composite material. The antenna comprises also 6 m of coaxial cable RG-58/U and the coaxial connector PL 259 (UHF male).

TECHNICAL DATA	
Frequency range	156 - 163 MHz
Impedance	50 ohm
VSWR	< 1,8
Gain	0 dBd
Polarization	VER.
Maximum power	50 W
Connector	PL 259
Height	1,4 m
Mass	360 g
Wind velocity	180 km/h



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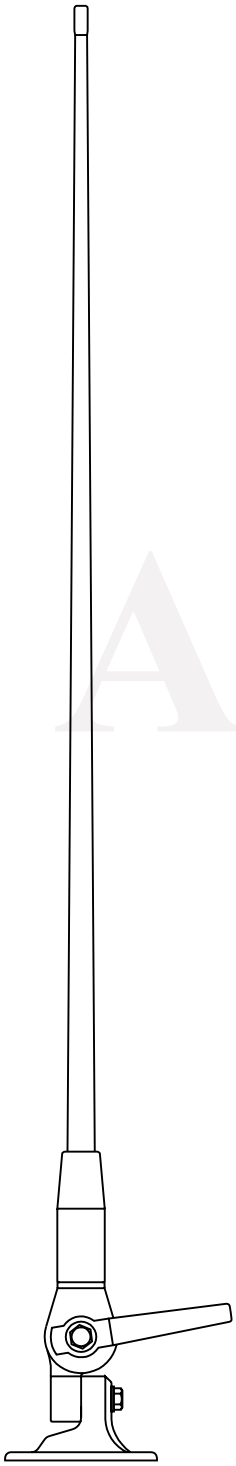

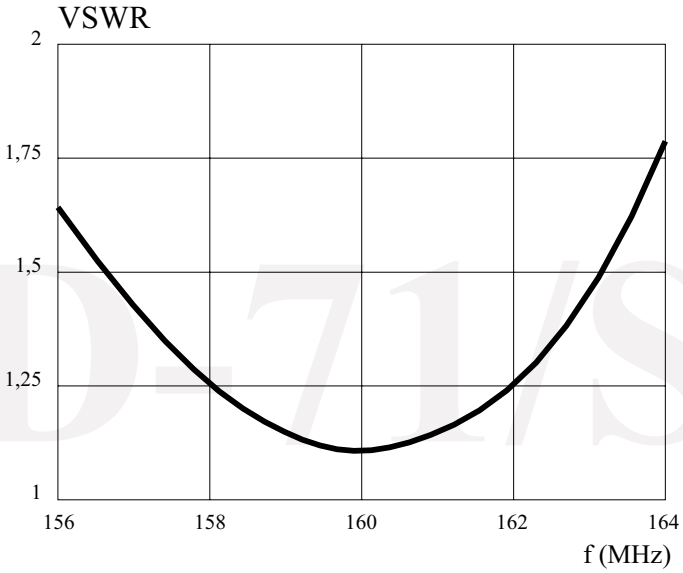

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AD-72/C

The antenna AD-72/C is collinear dipole for use on frequency range from 156 to 163 MHz primarily intended for use on motor boats and yachts. The antenna is electrically designed as two element end fed collinear dipole allowing mounting on nonmetallic surfaces and by two-way swivel mount we could mount the antenna on inclined surfaces. A radiating elements are closed in a conical tube made of composite material. A special transformer unit is built-in at the antenna base. The antenna comprises also 6 m of coaxial cable RG-58/U and the coaxial connector PL 259 (UHF male).

TECHNICAL DATA	
Frequency range	156 - 163 MHz
Impedance	50 ohm
VSWR	< 2
Gain	3 dBd
Polarization	VER.
Maximum power	50 W
Connector	PL 259
Height	2,4 m
Mass	0,9 kg
Wind velocity	180 km/h

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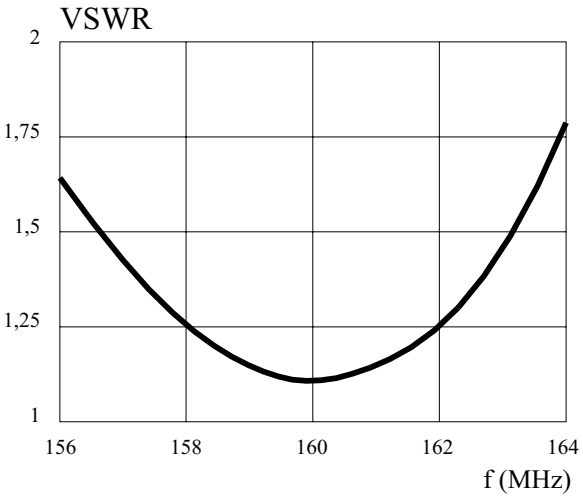
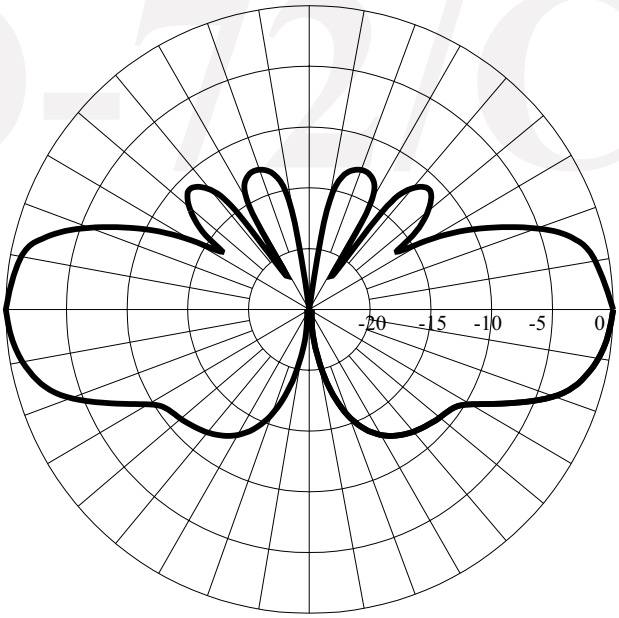


VERTICAL
RADIATION DIAGRAM



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AD-44/BW-D

The antenna AD-44/BW-D is a wideband monopole whip, primarily intended for use with portable and handheld radio stations in VHF frequency range from 138 to 176 MHz. Electrically the antenna is optimised for all exploatation conditions (radio in hand, at the side, etc.) so it is not necessary to additionaly tune the antenna. The antenna is composed of radiating part made of special wounded wire and covered with a heatshrinkable tube with silicone underlayer ensuring high flexibility and roughness. The antenna has built-in a special passive tranformer tuning network enclosed in fiberglass housing above the input coaxial connector. Input connector is TNC male (BNC or N male are available by request).

TECHNICAL DATA	
Frequency range	138 - 176 MHz
Impedance	50 ohm
VSWR	< 2
Polarization	VERT.
Gain	~ 0 dB
Maximum power	10 W
Connector type	TNC male
Height	382 mm
Mass of antenna	110 gr.

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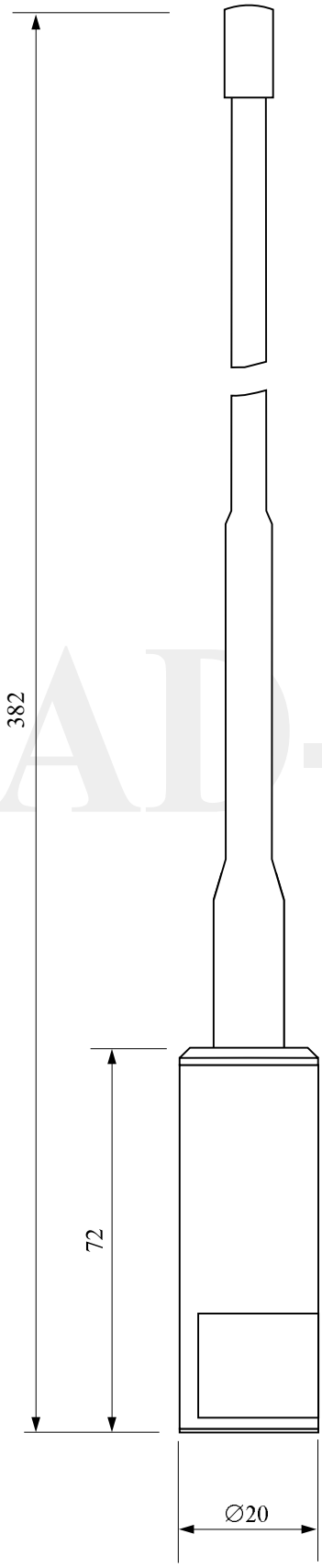

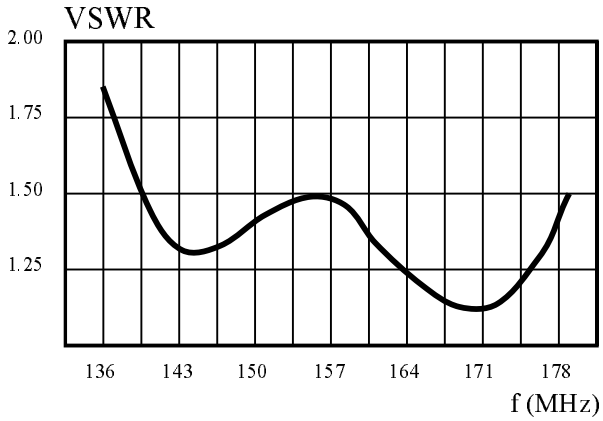

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MOBILE ANTENNAS

Mobile antennas are composed of the family of antenna radiators type ADS-21, fixed mounts type ADN-21 and magnet mounts type ADM-21. The antenna radiators are made of Stainless Steel or composite material (fiberglass) and painted with black protective paint, all covering the frequency range from 27 MHz (CB) to 900 MHz (GSM). Main advantage of the all family is beside quality materials and simple use also simple combining of different types of the radiators with different types of the mounts through M6 screw joint (male on the mount side and female on the radiator side). In that way user could easily combine the appropriate radiator with different mount according to his requirements. All the mounts are equipped with coaxial cable type RG-58 terminated with connector type FME on which we could easily fit different adapters from FME to PL 259, BNC, TNC, N, MINI UHF or SMA.

TECHNICAL DATA antennas	**ADS-21/ 2-A**	**ADS-21/ 2-B**	**ADS-21/ 2-D**
Antenna type	1/4	1/4 w. spring	5/8
Frequency	144-176	144-176	144-176
Impedance	50	50	50
VSWR	1.2	1.2	1.2
GAIN	0 dB	0 dB	3 dB
Bandwith (MHz at SWR<2)	15	15	6
Material	SS	SS	SS
Colour	black	black	black
Height	470 mm	470 mm	1350 mm

TECHNICAL DATA mounts	**ADN-21/1**	**ADN-21/2**	**ADM-21/ MA6**	**ADM-21/ MI6**
Mount type	fixed bendable	fixed with swivel	magnet 90 mm-swivel	magnet 60 mm
Colour	black	black	black	black
Cable	5 m RG-58	5 m RG-58	3.5 m RG-58	3 m RG-58
Radiator joint	screw M6	screw M6	screw M6	screw M6
Height	40 mm	42 mm	80 mm	58 mm
Weight w. cable	250 gr.	250 gr.	750 gr.	350 gr.

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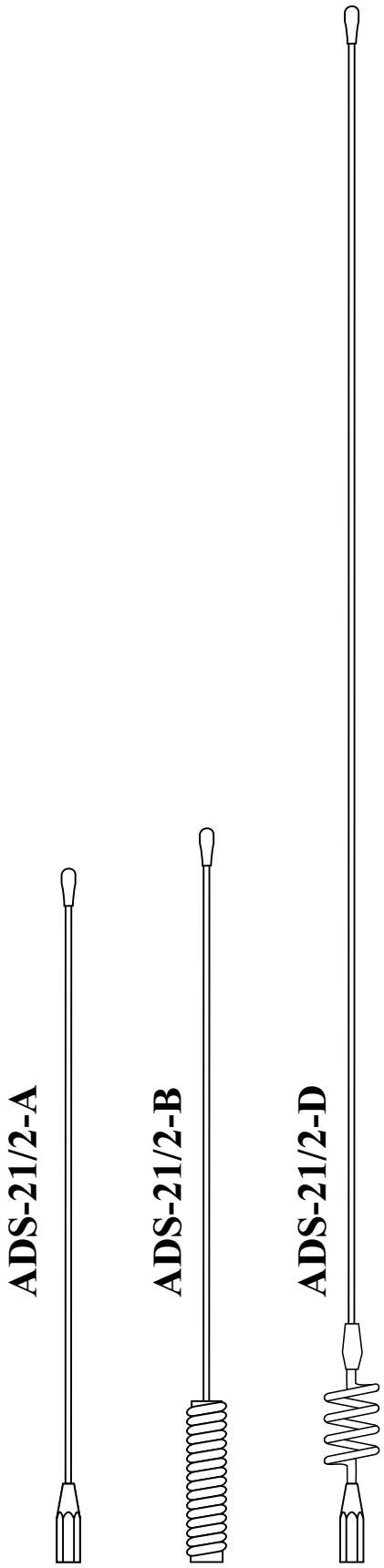

ADN-21/1

ADN-21/2

ADM-21/MI6

ADM-21/MA6

ADK-21/1

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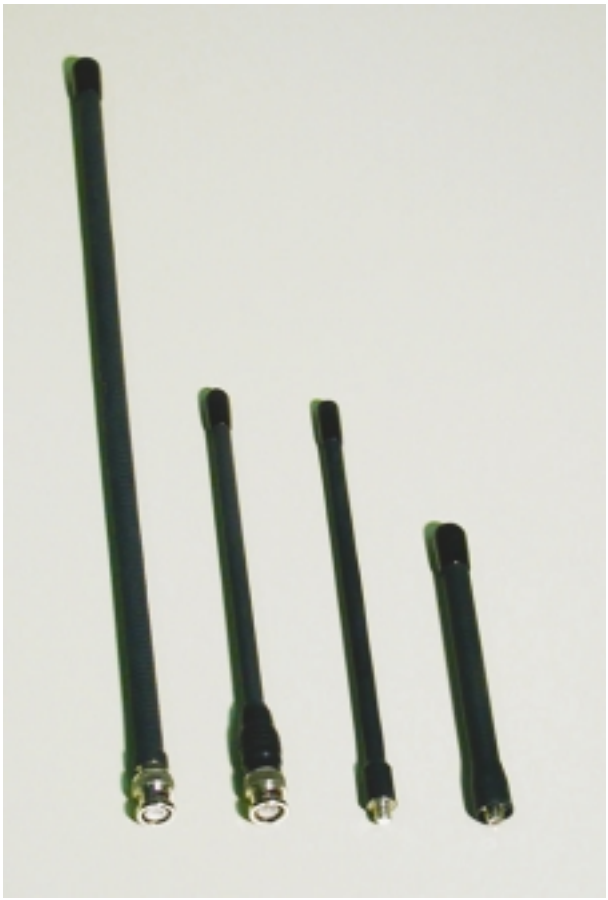
AD-20

The antennas AD-20 represent the family of so called “rubber antennas”, primarily intended for use with hand held radios. Difference between particular antennas are in frequency range, type of radiating element and in type of connecting element or connector. Common properties are in good electrical conductivity (the radiating element is galvanically coated with copper), perfect mechanical and climatic properties and roughness enabled with special coating of heatshrinkable tube with silicone layer. The code of the antenna is AD-20/x-y-z, where “x” means frequency range, “y” means type of radiating element and “z” means type of connecting element. The table shows the meaning of particular numbers. All antennas are tuned on the beginning of the frequency band or on customer request.



	X-frequency range	Y-type of radiating element	Z-type of connector
1	36 - 42 MHz	helix	5/32"
2	66 - 88 MHz	wire	3/8"-24G
3	144 -174 MHz		5/8"-24G
4	400 - 500 MHz		M6x0,75x6
5	800 - 1000 MHz		1/4"
6			
7			
8			
9			UHF (PL-259)
10			BNC (UG-88/U)
11			N (UG-21/U)
12			TNC

EXAMPLE: AD-20/3-1-10 is spring rubber antenna with BNC connector for frequency range 144-174 MHz

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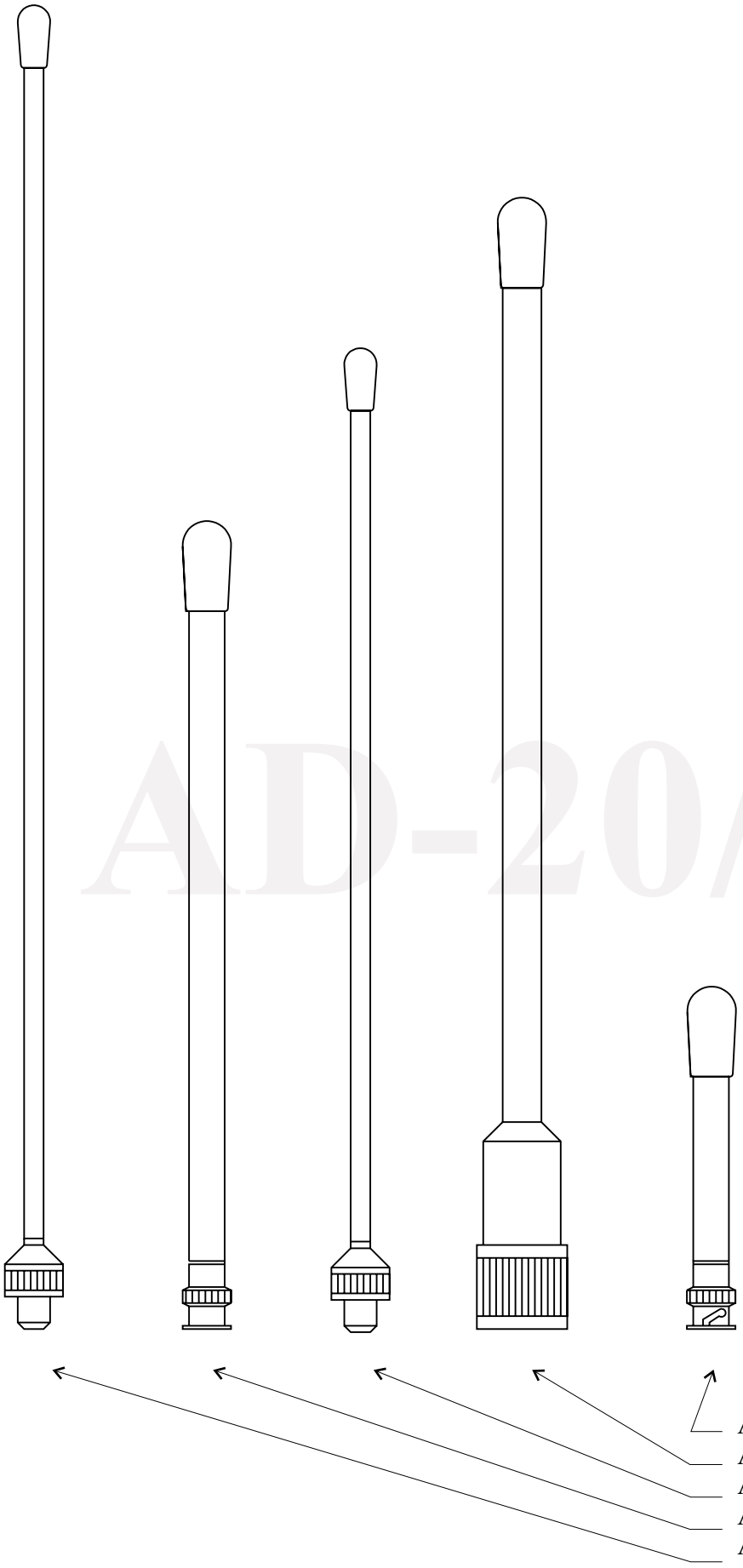

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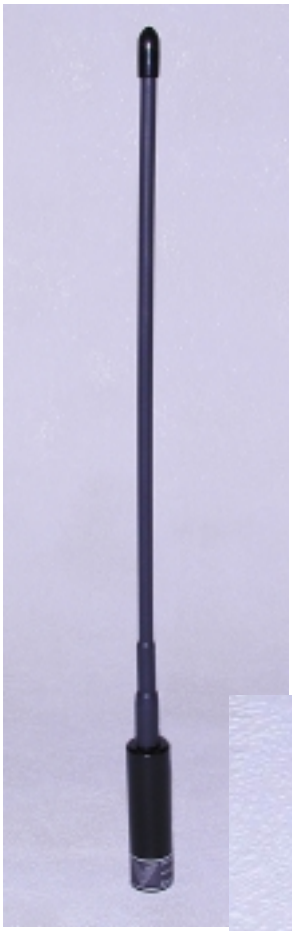
AD-44/BW-AS-30-512

The antenna AD-44/BW-AS-30-512 is a wideband monopole whip, primarily intended for use with portable and handheld radio stations. Electrically the antenna is optimized for all exploitation conditions (radio in hand, at the side, at the breast etc.) so it is not necessary to tune the antenna with cutting. The antenna is composed of special wounded wire and covered with a heatshrinkable tube with silicone undercover ensuring high flexibility and roughness. The antenna has built-in a special transformer tuning network over the input coaxial connector. The antenna AD-44/BW-AS-30-512 is specially designed for use in the frequency range from 30 to 512 MHz.



TECHNICAL DATA	
Frequency range	30 - 512 MHz
Impedance	50 ohm
VSWR	< 3
Gain	see diagram
Polarization	VER.
Maximum power	5 W CW
Connector	TNC male
Length	380 mm
Mass of antenna	100 g

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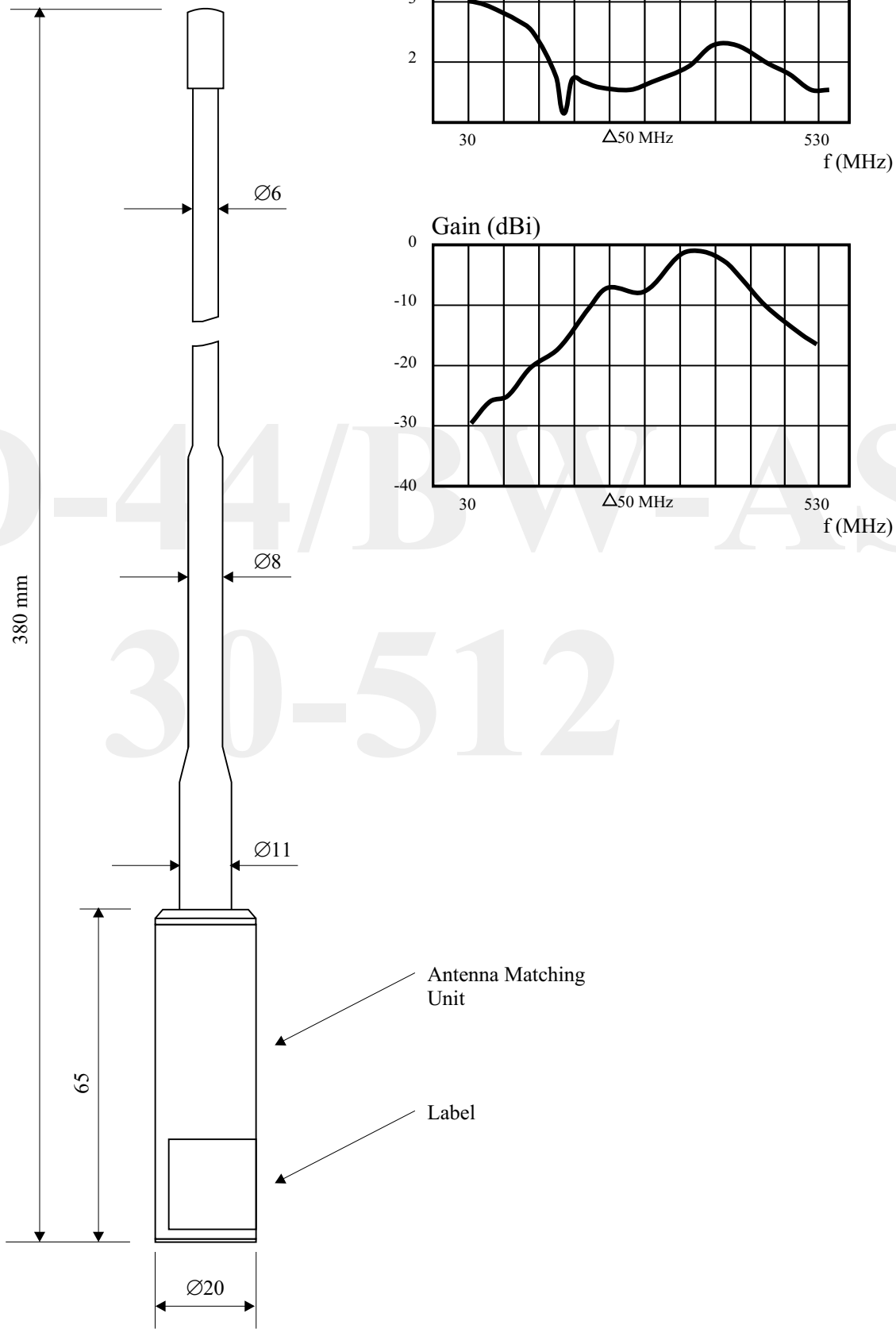

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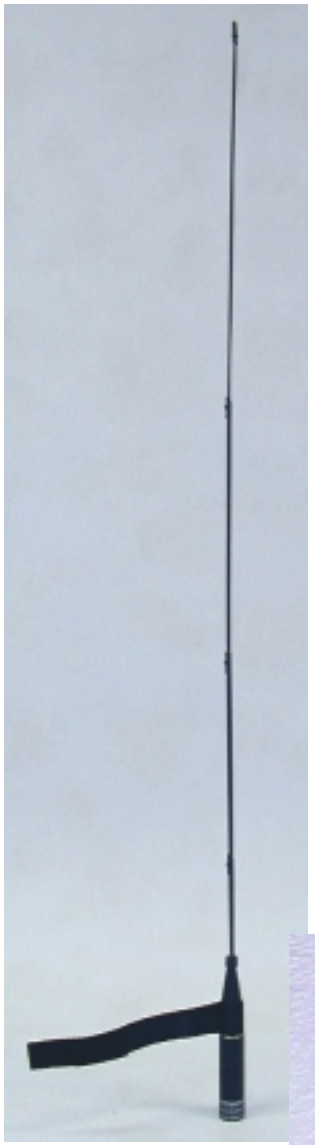
AD-44/CW-AS-30-512

The antenna AD-44/CW-AS-30-512 is a wideband monopole whip, primarily intended for use with portable and handheld radio stations in VHF frequency range from 30 to 512 MHz. Electrically the antenna is optimised for all exploitation conditions (radio in hand, at the side, etc.) so it is not necessary to additionally tune the antenna. The antenna is composed of radiating part made of tape radiator and of the antenna matching unit with built-in a special passive transformer tuning network enclosed in fiberglass housing above the input coaxial connector.



TECHNICAL DATA	
Frequency range	30 - 512 MHz
Impedance	50 ohm
VSWR	< 3
Gain	see diagram
Polarization	VER.
Maximum power	5 W CW
Connector	825 mm
Length	TNC male
Mass of antenna	155 g

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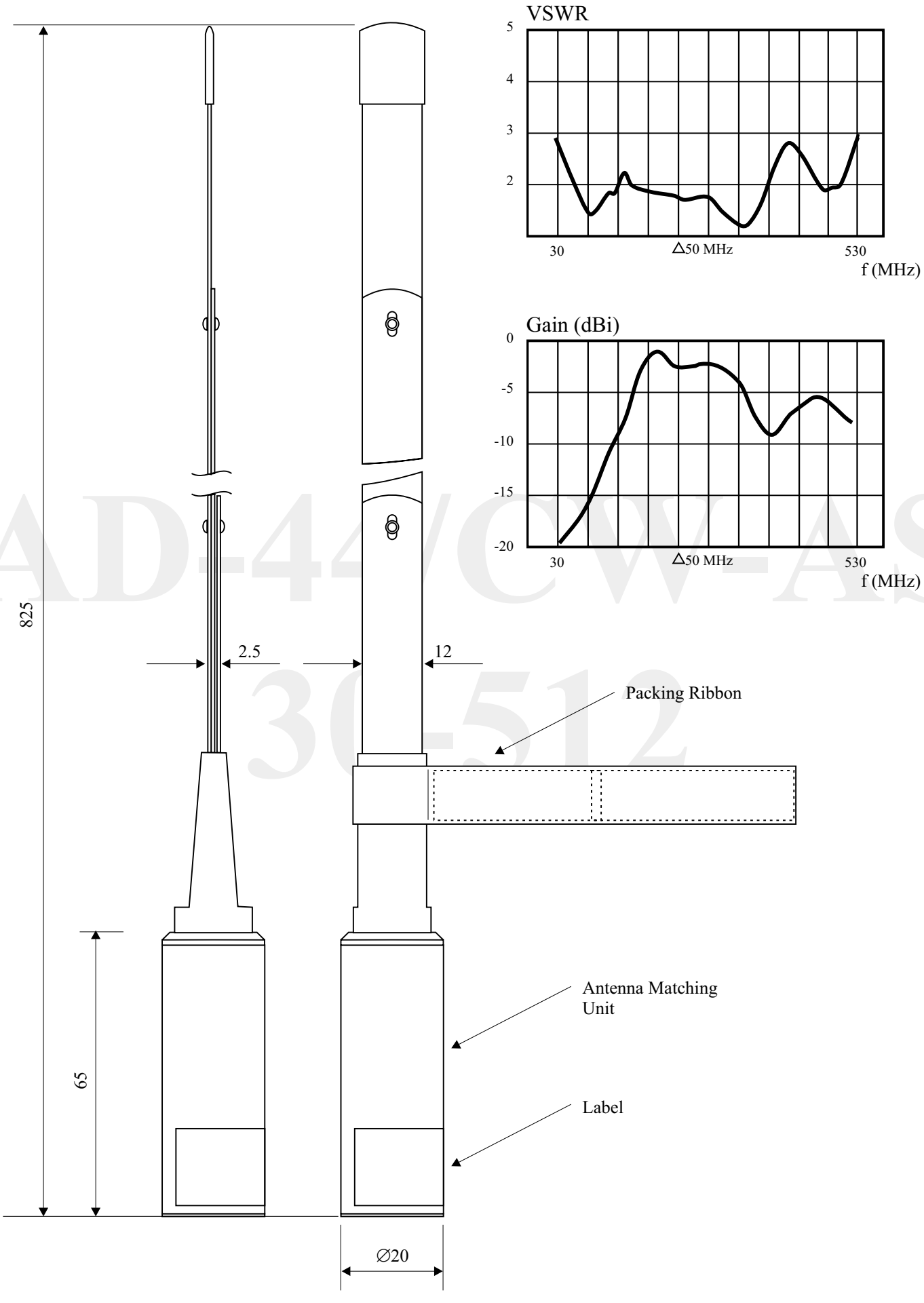

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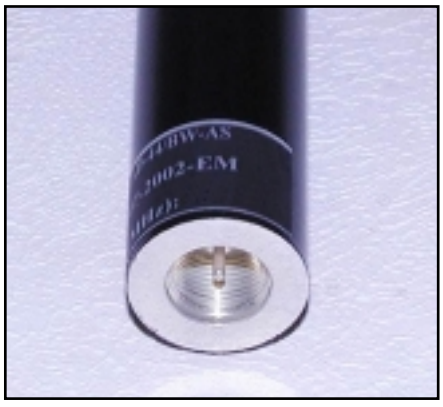
AD-44/CW-TA-30-512

The antenna AD-44/CW-TA-30-512 is a wideband monopole whip, primarily intended for use with portable and handheld radio stations in VHF/UHF frequency range from 30 to 512 MHz. Electrically the antenna is optimised for all exploitation conditions (radio in hand, at the side, etc.) so it is not necessary to additionally tune the antenna. The antenna is composed of radiating part made of tape radiator and of the antenna matching unit with built-in a special passive transformer tuning network enclosed in fiberglass housing above the input coaxial connector.

TECHNICAL DATA	
Frequency range	30 -512 MHz
Impedance	50 ohm
VSWR	< 3.5 (typ. < 3)
Polarization	VER.
Maximum power	5 W CW
Height	504 mm
Weight	120 g
Connector	TNC male



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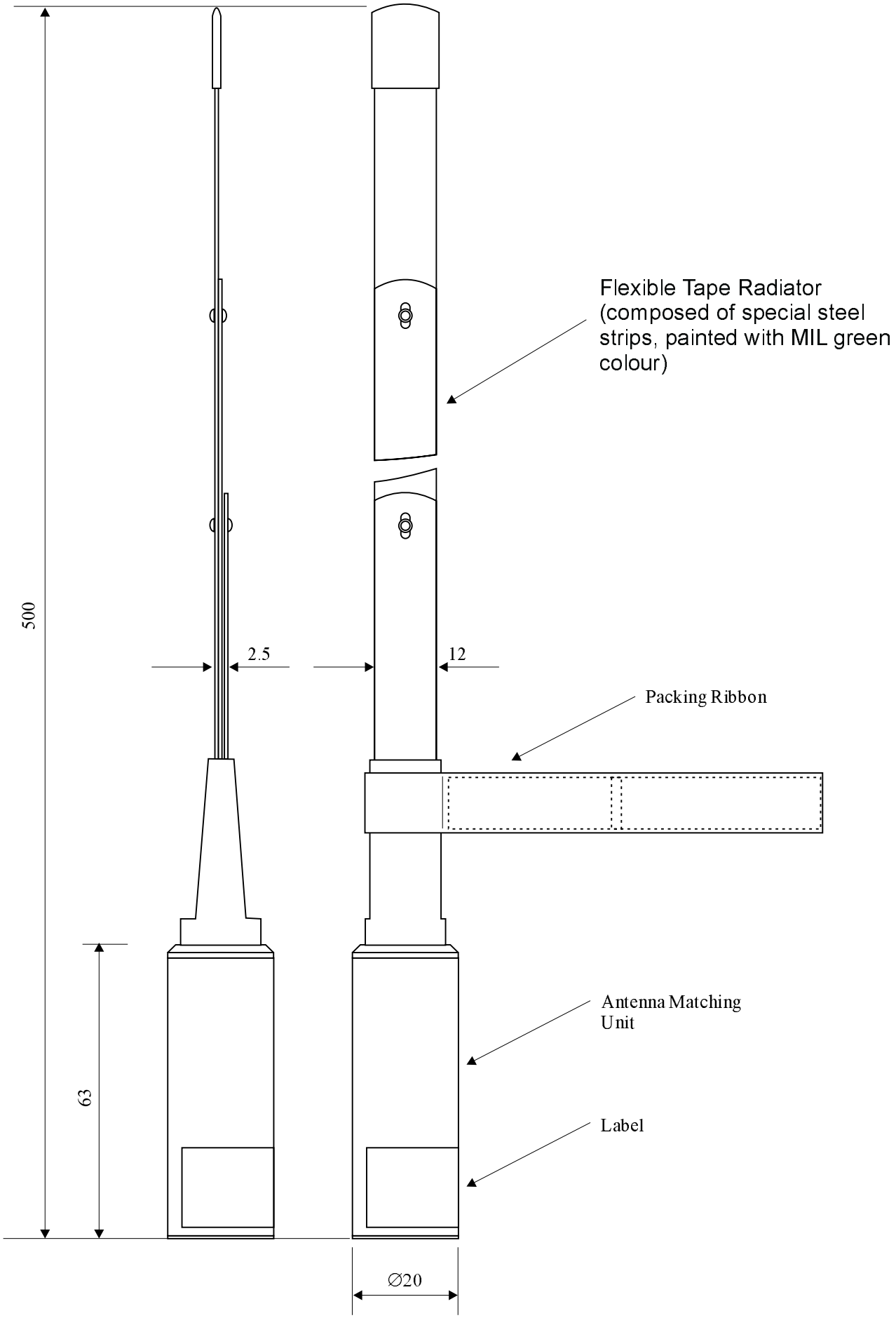
Flexible Tape Radiator
(composed of special steel strips, painted with MIL green colour)
500
2.5
12
Packing Ribbon
63
Antenna Matching Unit
Label
∅20

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AD-10/S

The antenna AD-10/S is a wideband vertical polarized dipole covering the frequency range from 100 to 512 MHz. All elements of the antenna are enclosed in an epoxy - glass composite tube. The antenna is intended for stationary use. Electrically the antenna is designed so that the upper radiating element is divided on two axially placed elements, mutually connected so that each element works in its active region. Such design enables a large bandwith and relatively constant vertical radiation diagram. The antenna has built-in a coaxial cable length of 1 m with coaxial connector N female type at the end. A special mounting tube with mounting console adapter enables to mount the antenna on the mast with diam. up to 60 mm.

TECHNICAL DATA	
Frequency range	100 - 512 MHz
Impedance	50 ohm
VSWR	< 3 (DIAG. 1)
Gain	0 - 2 dBi
Ver. radiation pattern	DIAG. 2, 3
Polarization	VER.
Maximum power	400 W CW
Height	1170 mm
Diameter	133 mm
Mass of antenna	8,5 kg
Wind velocity	150 km/h
Temperature range	-40....+70 °C

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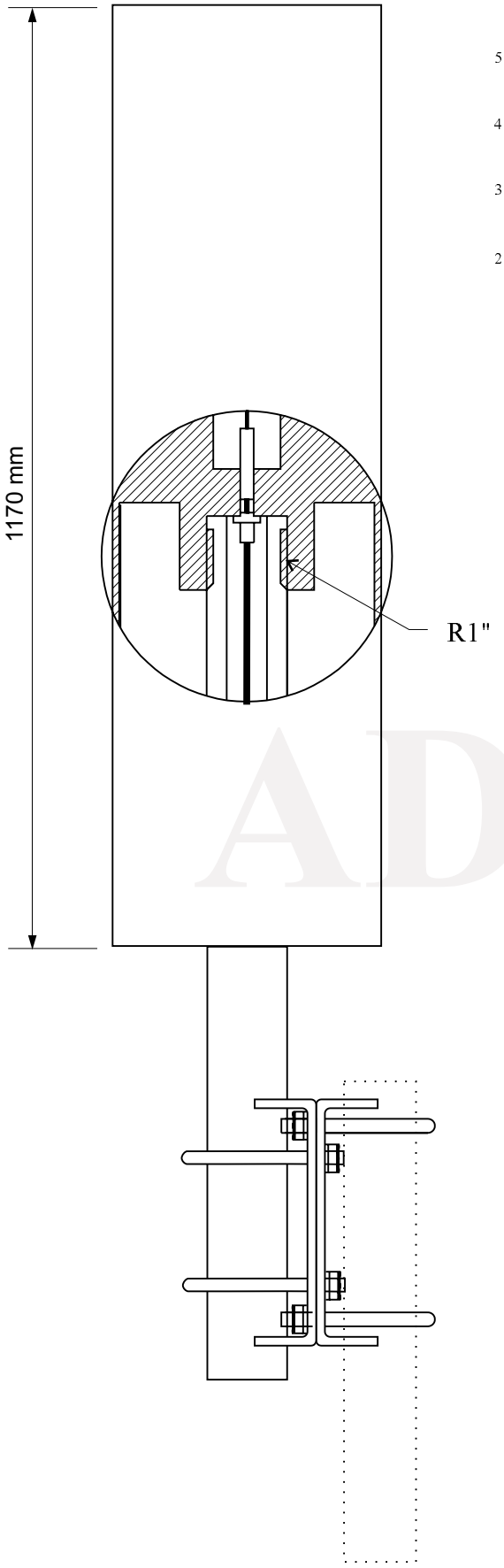
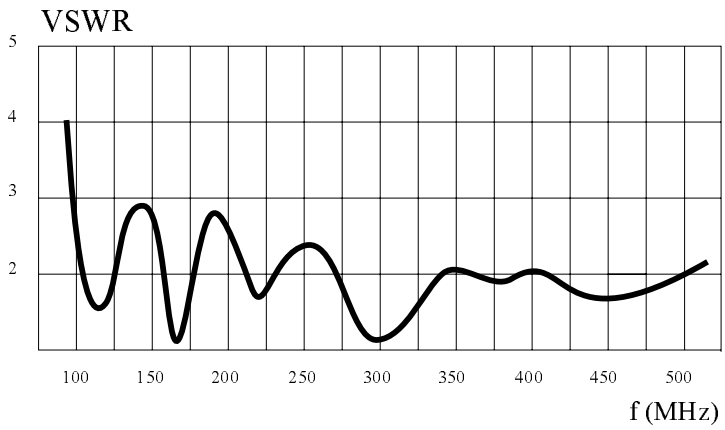
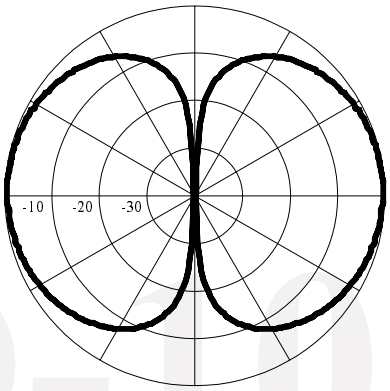
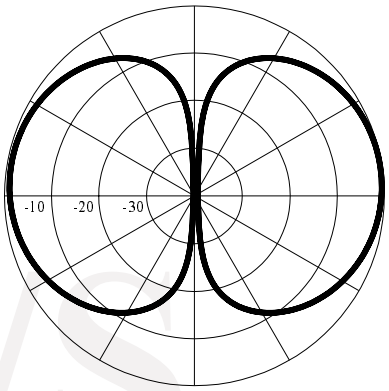




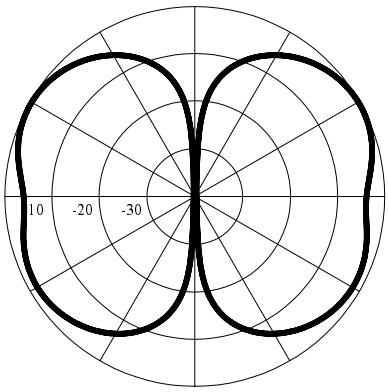
Radiation Pattern
F = 100 MHz



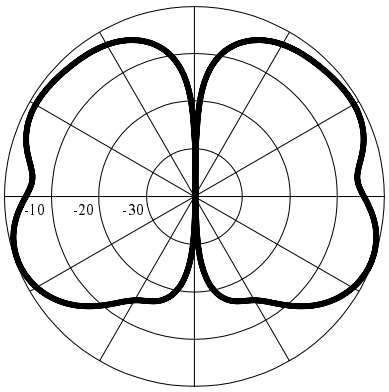
Radiation Pattern
F = 200 MHz



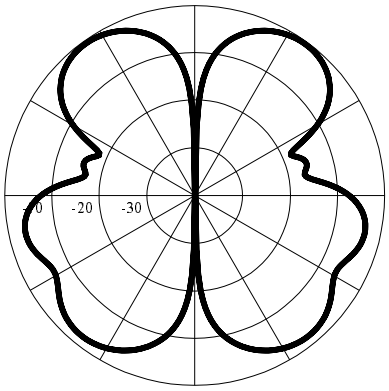
Radiation Pattern
F = 300 MHz



Radiation Pattern
F = 400 MHz



Radiation Pattern
F = 500 MHz



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AD-10/A

The antenna AD-10/A is a wideband vertical polarised dipole covering the frequency range from 200 to 512 MHz. All elements of the antenna are enclosed in an epoxy - glass composite tube. The antenna is intended for stationary use. Electrically the antenna is designed so that the upper radiating element is divided on two axially placed elements, mutually connected so that each element works in its active region. Such design enables a large bandwith and relatively constant vertical radiation diagram. The antenna has built-in a coaxial cable length of 1 m with coaxial connector N female type at the end. A special mounting tube with mounting console adapter enables to mount the antenna on the mast with diam. up to 60 mm (2”).

TECHNICAL DATA	
Frequency range	200 - 512 MHz
Impedance	50 ohm
VSWR	< 2.5 (DIAG. 1)
Gain	0 - 2 dBi
Ver. radiation pattern	DIAG. 2, 3
Polarization	VER.
Maximum power	200 W CW
Height	630 mm
Diameter	120 mm
Mass of antenna	5 kg
Wind velocity	150 km/h
Temperature range	-40....+70 °C

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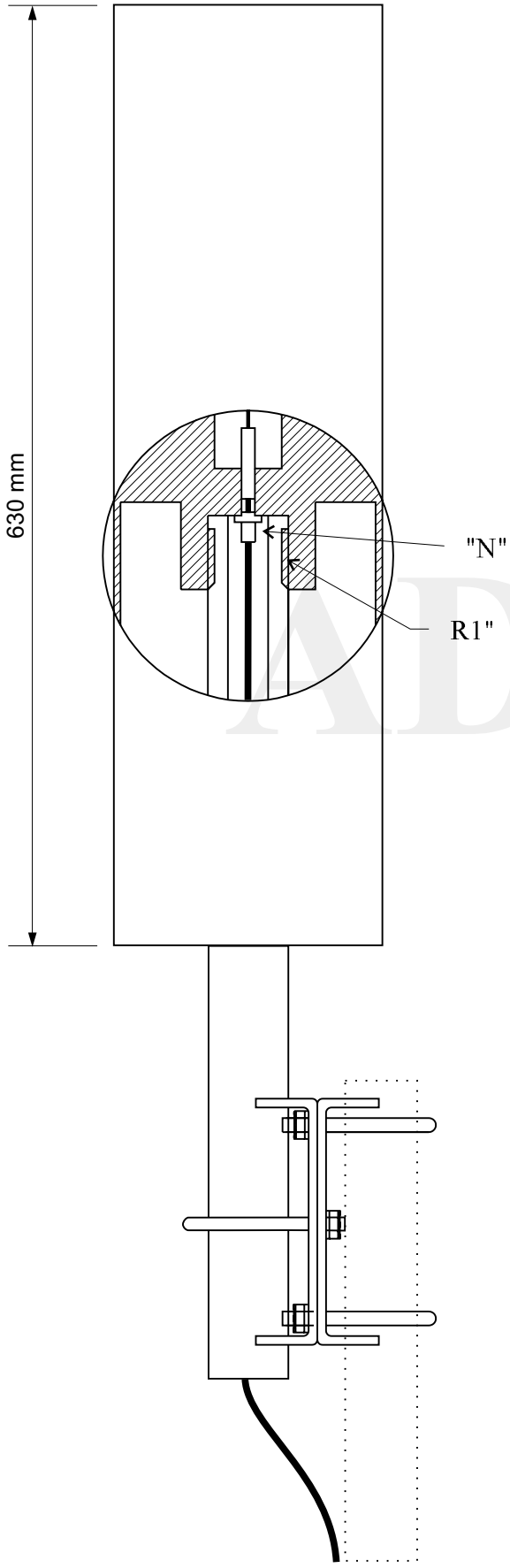
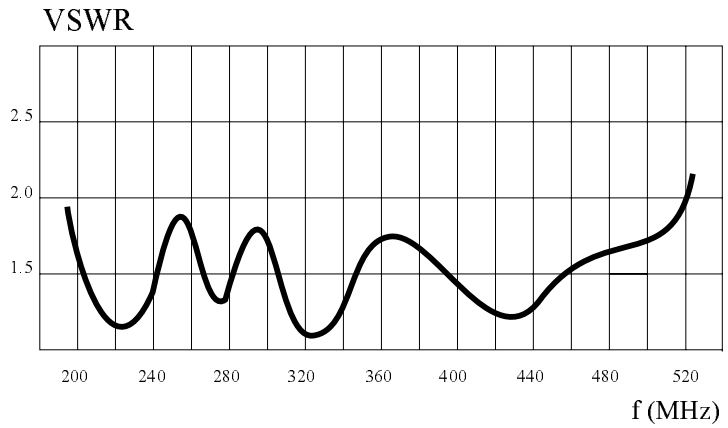
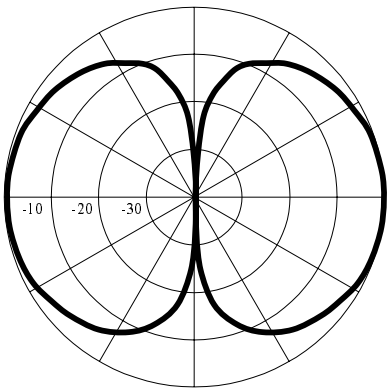
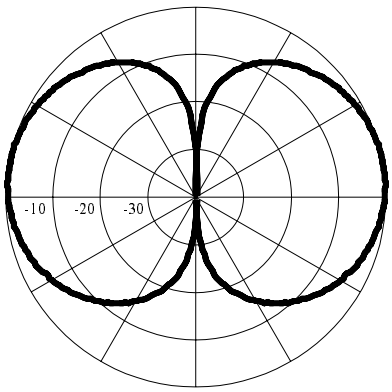




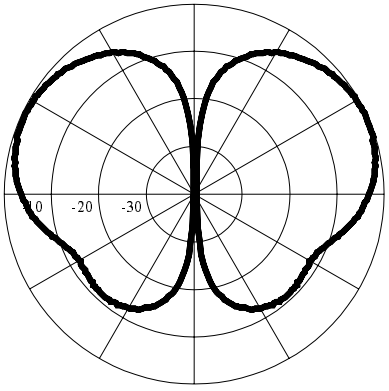
Radiation Pattern
F = 220 MHz



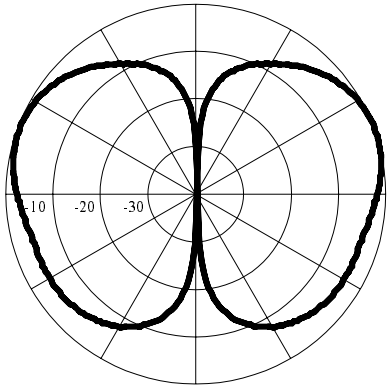
Radiation Pattern
F = 300 MHz



Radiation Pattern
F = 400 MHz



Radiation Pattern
F = 500 MHz



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AD-16

The antenna AD-16 is a wideband ground plane antenna covering the frequency range from 108 to 240 MHz. The antenna is composed of junction head with tube, where a special line transformer is built-in, of a radiating element and of six radial elements. With computer synthesis and optimisation a very broad band and relatively constant gain and vertical pattern is achieved. The elements are made from epoxy - glass composite material ensuring light construction and mechanical roughness and is insensitive to athmospheric influences so it can be used as transportable or stationary as well. The antenna can be mounted on a standard tube with the external thread R1” or it can be also mounted on our standard consoles (ADK).

TECHNICAL DATA	
Frequency range	108 - 240 MHz
Impedance	50 ohm
VSWR	< 2 (DIAG. 1)
Gain	DIAG. 2
Polarization	VER.
Maximum power	150 W CW
Connector	N female
Height	1,1 m
Mass of antenna	0,9 kg
Wind velocity	120 km/h
Temperature range	-40....+70 °C

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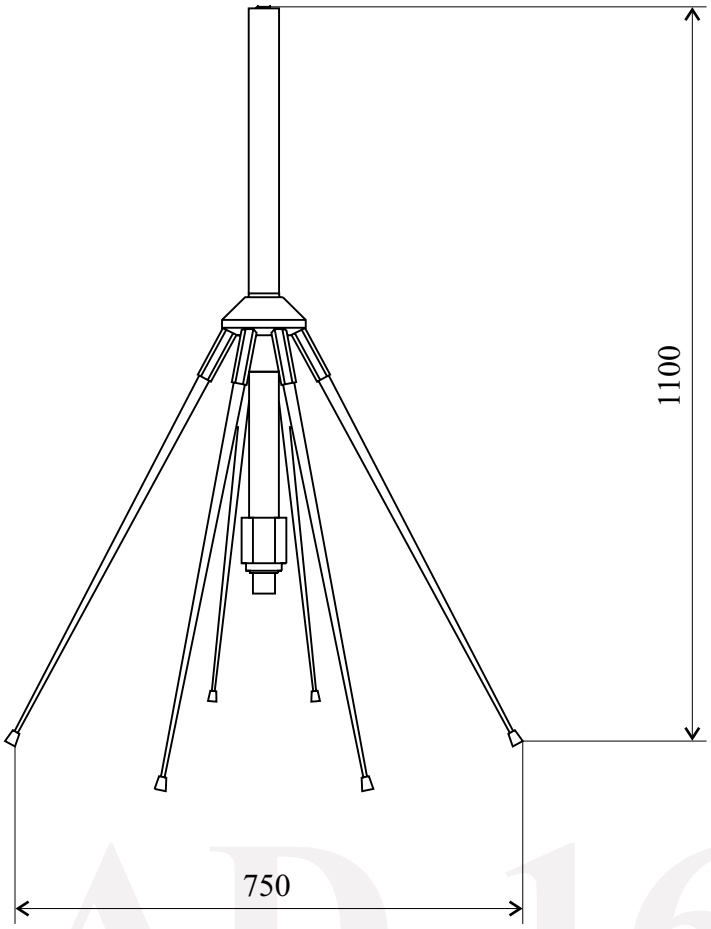
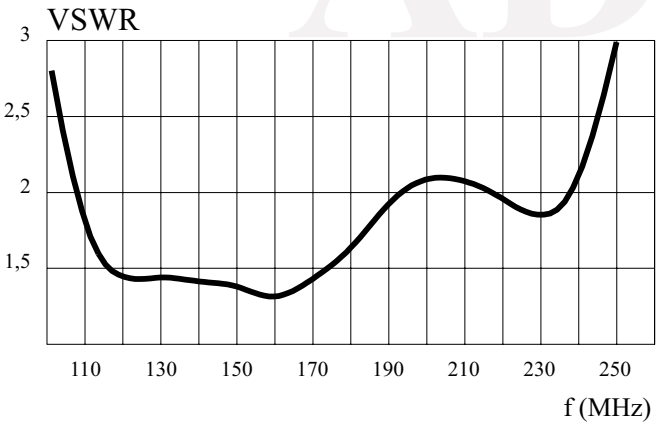
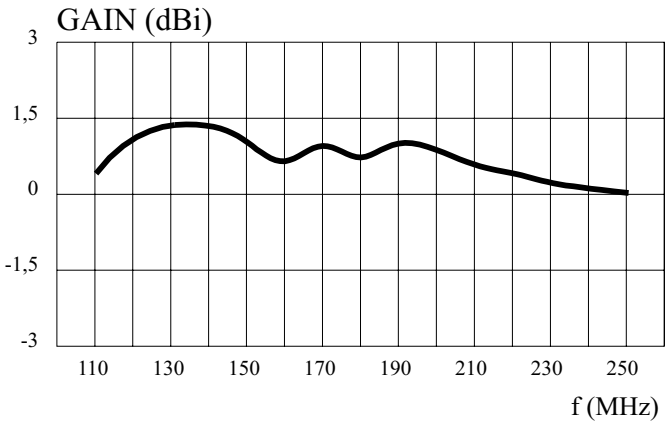

1100
750


VSWR
3
2,5
2
1,5
110
130
150
170
190
210
230
250
f (MHz)


GAIN (dBi)
3
1,5
0
-1,5
-3
110
130
150
170
190
210
230
250
f (MHz)

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AD-22/A

The antenna AD-22/A is a log-periodic dipole antenna covering frequency range from 100 to 470 MHz. The antenna is composed of a boom element and 9 dipoles connected to the boom by special screw joints. All dipole elements and boom are made of aluminum alloy and joints are made of stainless steel. Beside that there is also an antenna support mounted on the boom element, constructed for easy change of the antenna polarization. The antenna support enable mounting the antenna on masts with outer diameter between 20 and 60 mm. The antenna is primarily intended for use as transportable but it can be used also as stationary due to construction of elements and materials enabling long life. All metal parts of the antenna are painted with UV resistant polyurethane paint. The antenna is packed in a handy transportable linen bag.

TECHNICAL DATA	
Frequency range	100 - 470 MHz
Impedance	50 ohm
VSWR	< 2
Gain	6 dBi
Front-to-back ratio	> 20 dB
Polarization	HOR./VER.
Maximum power	200 W CW
Length	1,2 m
Width	1,4 m
Mass	3 kg
Wind velocity	120 km/h
Temperature range	-40...+70 C

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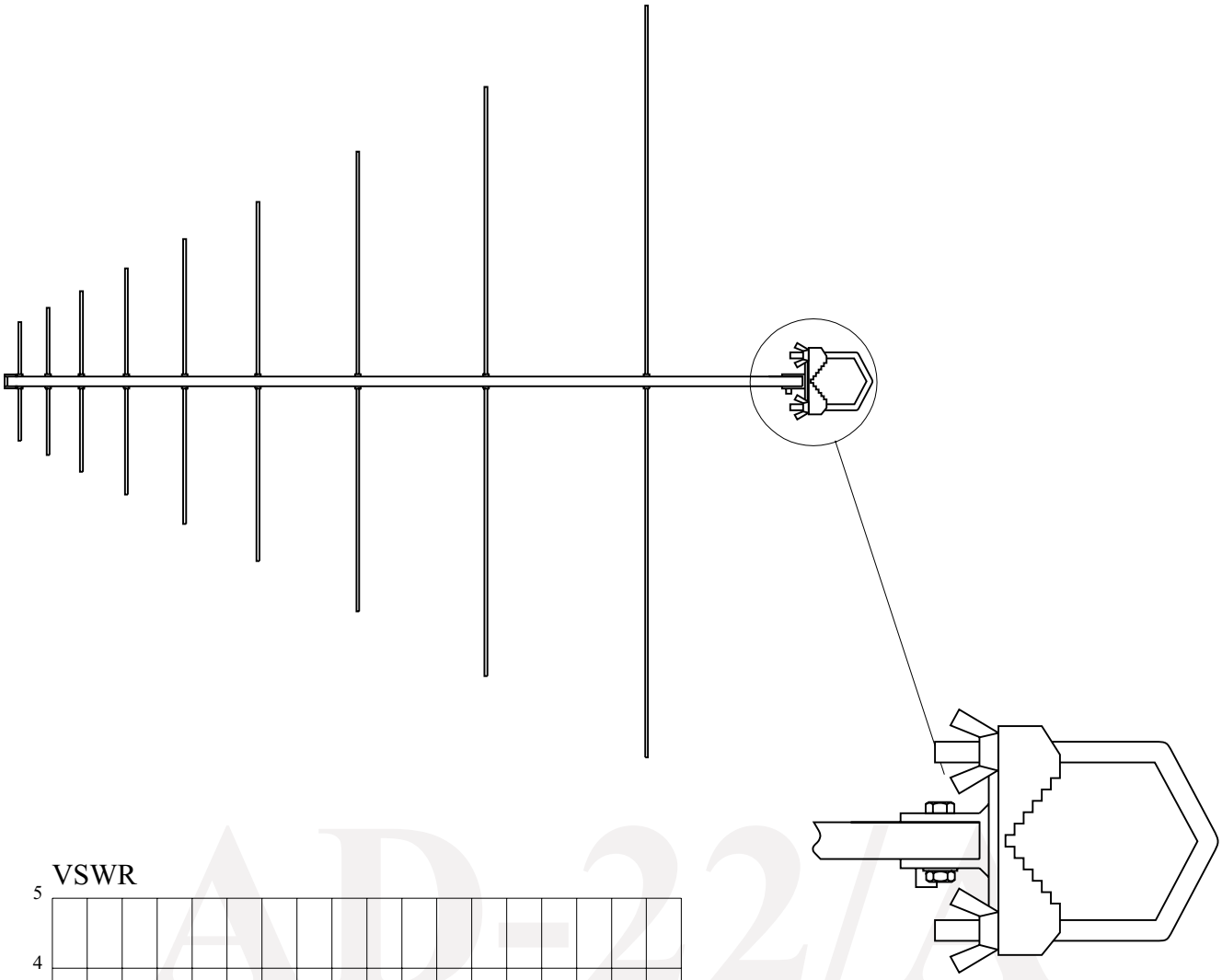
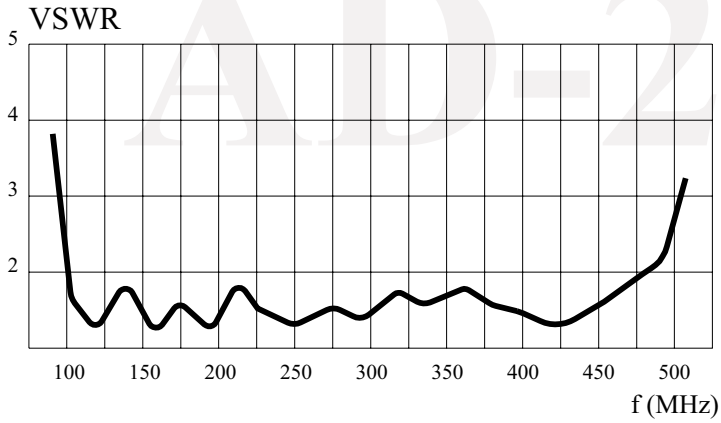
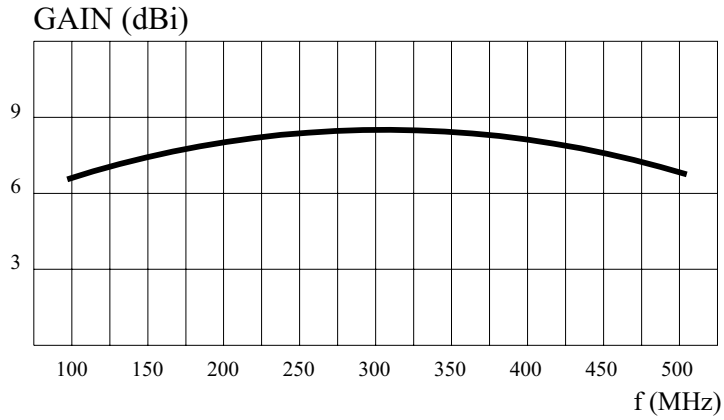



VSWR
5
4
3
2
100
150
200
250
300
350
400
450
500
f (MHz)


GAIN (dBi)
9
6
3
100
150
200
250
300
350
400
450
500
f (MHz)

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AD-22/B

The antenna AD-22/B is a log-periodic dipole antenna covering the frequency range from 200 to 470 MHz. The antenna is composed of a boom element and 7 dipoles connected to the boom by special screw joints and protected of loosing it with nylon ropes. All dipole elements and boom are made of aluminum alloy and joints are made of stainless steel. Beside that there is also an antenna support mounted on the boom element, constructed for easy change of antenna polarization. The antenna support enable mounting the antenna on masts with outer diameter between 20 and 60 mm. The antenna is primarily intended for use as transportable but it can be used also as stationary due to construction of elements and materials enabling long life. All metal parts of the antenna are painted with UV resistant polyurethane paint. The antenna is packed in a handy transportable linen bag.

TECHNICAL DATA	
Frequency range	200 - 470 MHz
Impedance	50 ohm
VSWR	< 2
Gain	7 dBi
Front-to-back ratio	> 20 dB
Polarization	HOR./VER.
Maximum power	200 W CW
Length	1,0 m
Width	0,7 m
Mass	3 kg
Wind velocity	120 km/h
Temperature range	-40...+70 C

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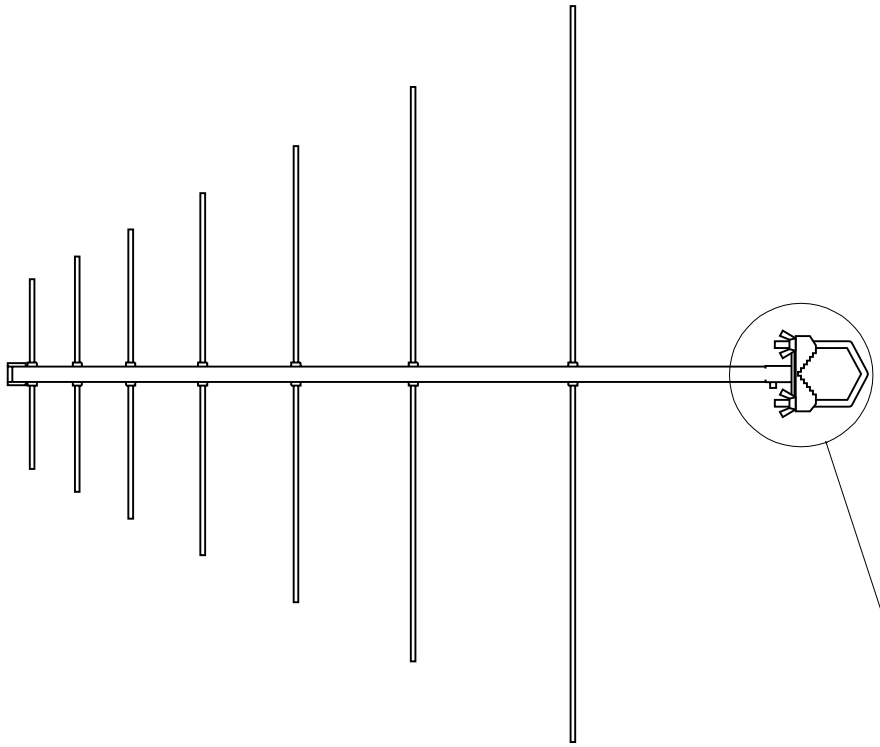
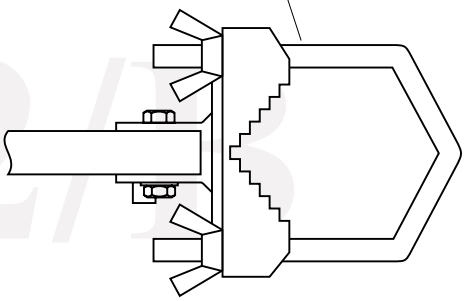
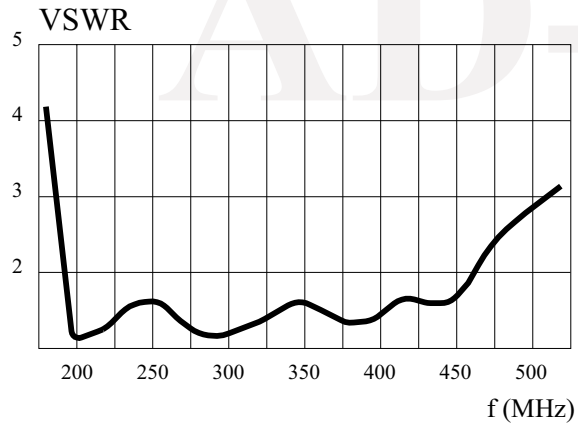
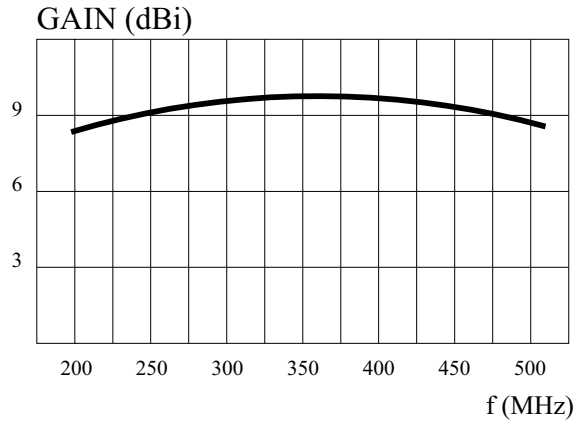





VSWR
5
4
3
2
200
250
300
350
400
450
500
f (MHz)


GAIN (dBi)
9
6
3
200
250
300
350
400
450
500
f (MHz)

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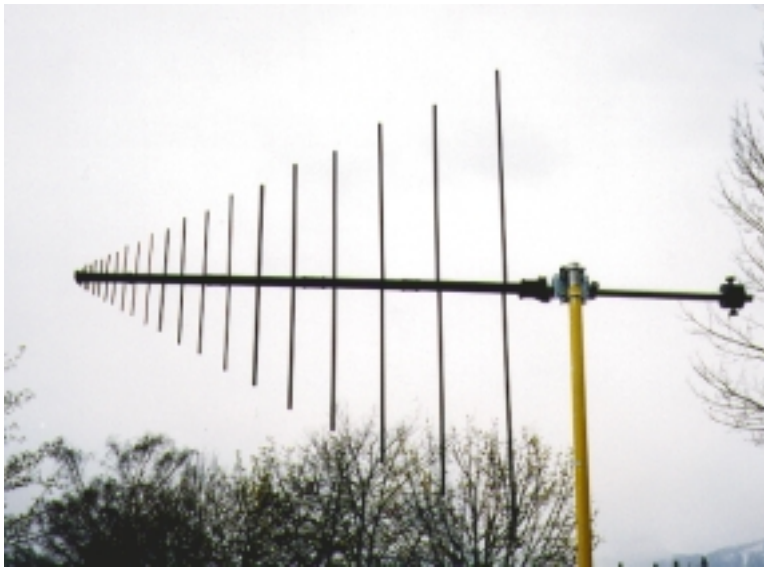
AD-22/C



The antenna AD-22/C is a log-periodic dipole antenna covering the frequency range from 80 to 1300 MHz. The antenna is mainly intended for use in EMC applications, radio monitoring, etc.

The antenna is composed of a boom element and 20 dipoles connected to the boom by special screw joints. All dipole elements and boom are made of aluminum alloy and joints are made of stainless steel. On the end of the antenna boom is joint for mounting the support pipe with mounting console for mounting the antenna on the mast. The mounting console is constructed for easy change of antenna polarization. The antenna support enable mounting the antenna on masts with outer diameter between 26 and 60 mm. The antenna is primarily intended for use as transportable but it can be used also as stationary due to construction of elements and materials enabling long life. All metal parts of the antenna are painted with UV resistant polyurethane paint. The antenna is packed in a special canvas bag suitable for transport.

TECHNICAL DATA	
Frequency range	80 - 1300 MHz
Impedance	50 ohm
VSWR	< 2,5
Gain	6 dBi
Front-to-back ratio	> 15 dB
Polarization	HOR./VER.
Maximum power	100 W CW
Length	1,8 m
Width	2 m
Mass - antenna	4.7 kg
Mass - counterweight	8.5 kg
Wind velocity	120 km/h
Temperature range	-40...+70 C

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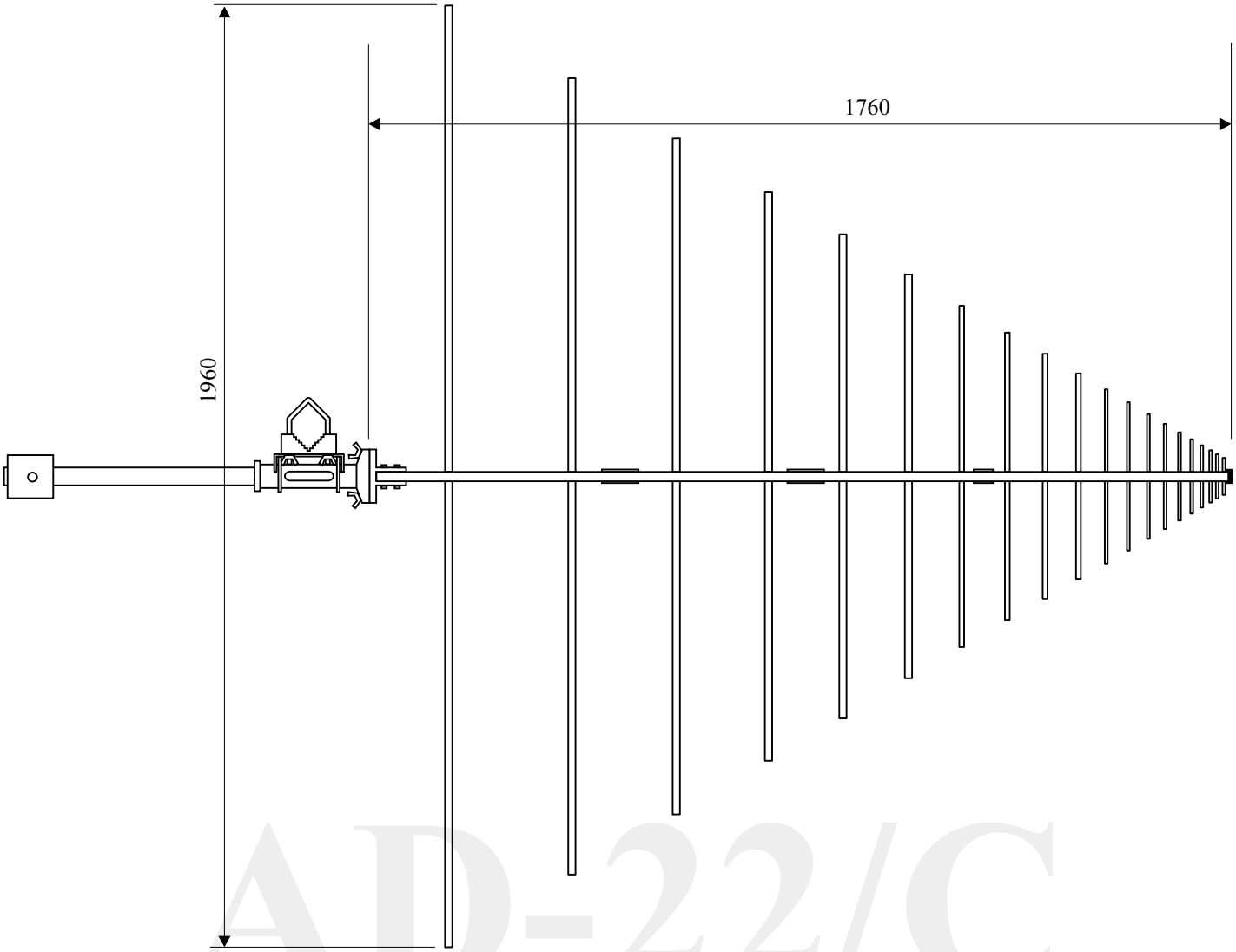
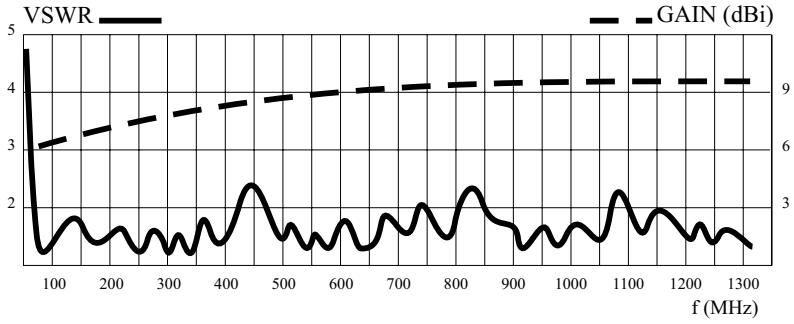
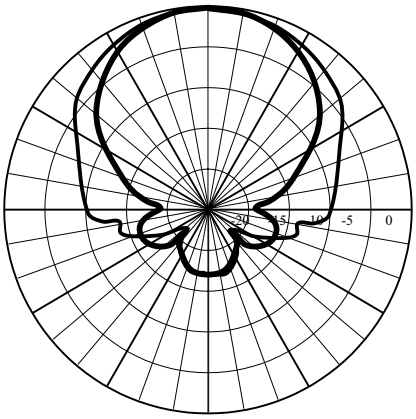
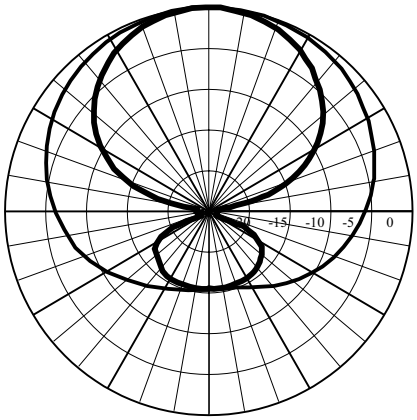




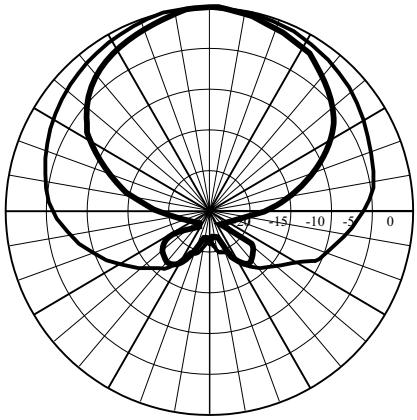


1300 MHz

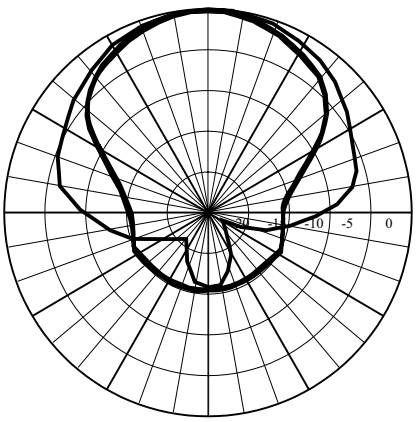
E plane
H plane



100 MHz



500 MHz



900 MHz

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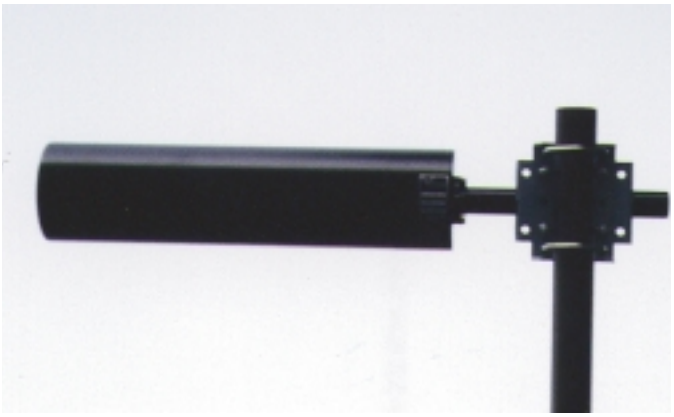
AD-22/D

The antenna AD-22/D is a log-periodic dipole antenna covering the frequency range from 1300 to 2700 MHz. The antenna is mainly intended for use in EMC applications, radio monitoring, etc.
The antenna is composed of a boom element and 15 dipoles. All dipole elements and boom are made of brass and galvanically coated with silver. The antenna is enclosed in a radome made of composite material (epoxy - glass). The antenna support on the end enables mounting on masts with outer diameter between 1” (26 mm) and 2” (60 mm). The antenna could be used as transportable or as stationary.
The special element is available for mounting two different polarized antennas AD-22/D together.



TECHNICAL DATA	
Frequency range	1300 - 2700 MHz
Impedance	50 ohm
VSWR	< 2 (DIAG. 1)
Gain	9 dBi (DIAG. 2)
Front-to-back ratio	> 18 dB
Polarization	HOR./VER.
Maximum power	25 W CW
Length	450 mm
Width	125 mm
Mass	1.8 kg
Wind velocity	150 km/h
Temperature range	-40...+70 C

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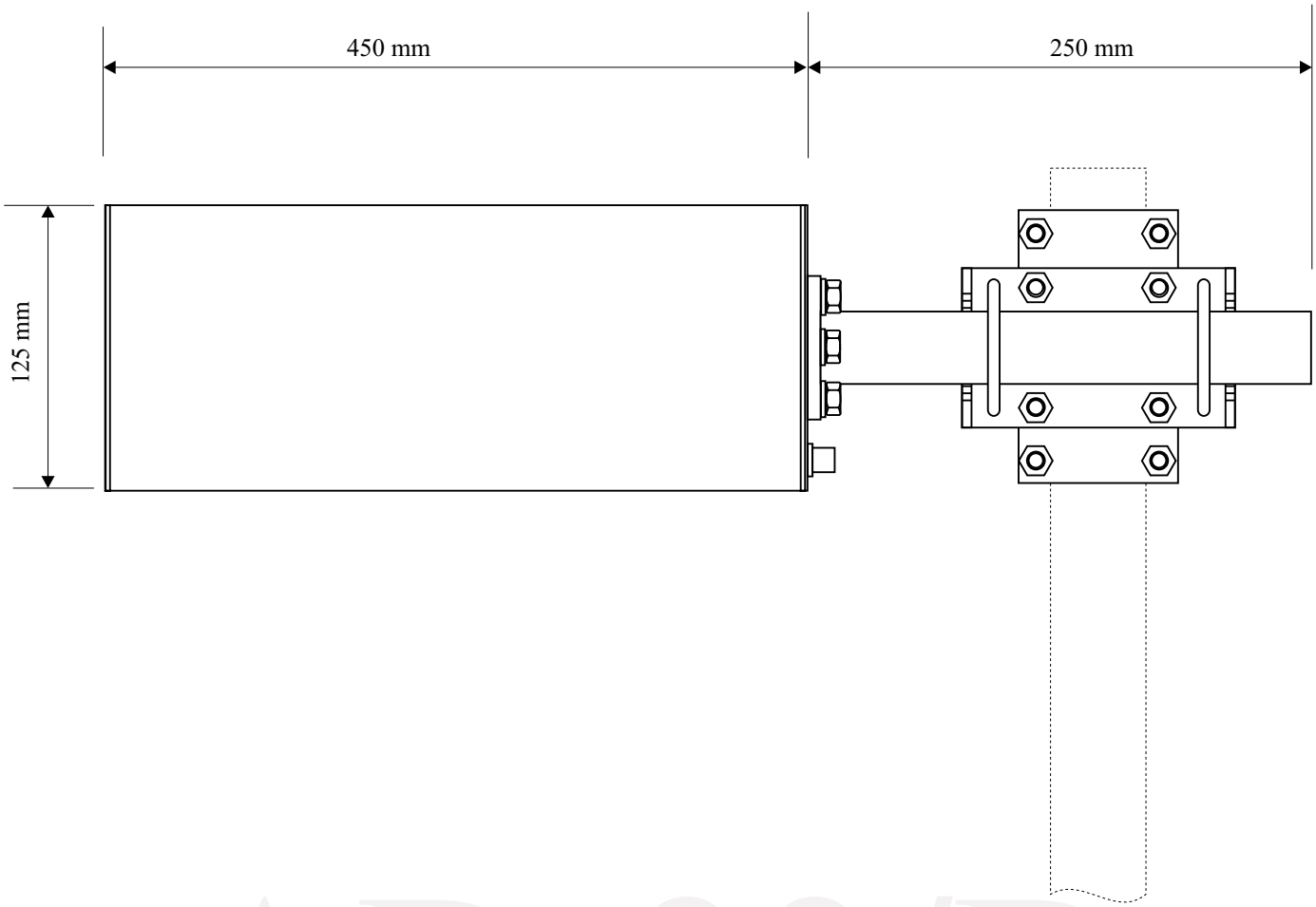
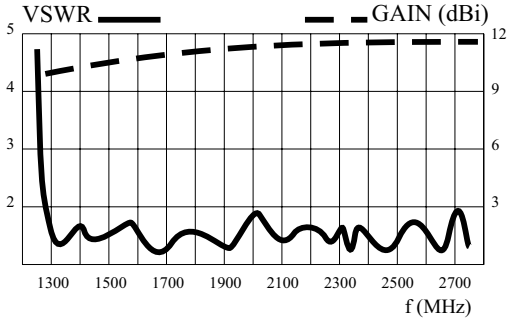
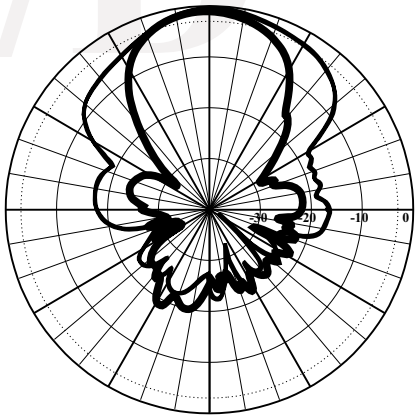
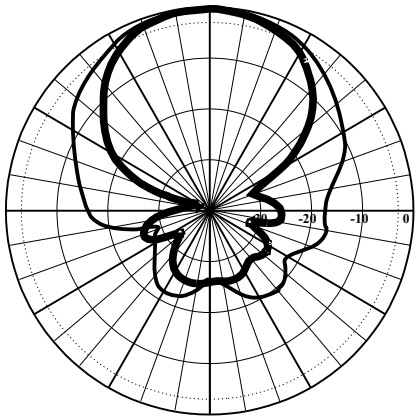




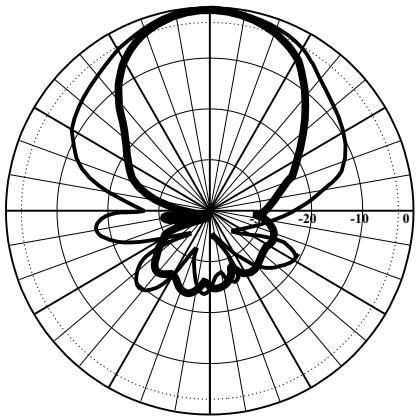


2700 MHz

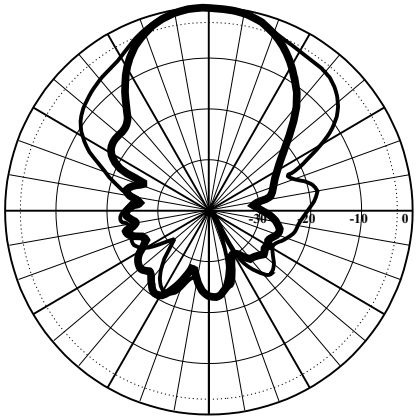
E plane
H plane



1300 MHz



1800 MHz



2300 MHz

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AD-18/E

The antenna AD-18/E is a wideband monopole mobile antenna intended for use in the frequency range from 225 to 512 MHz. The antenna is composed from two main parts: the radiator and the antenna base. The radiator is made of 24 mm diameter fibreglass whip with special radiating elements placed inside. The antenna base has built-in biconical spring enables resistivity against mechanical impacts. Electrically the antenna is designed as center-fed thus the electrical characteristics are independent from the ground or mounting place.
The antenna is painted with two component UV resistant polyurethane military green paint (RAL 6014).

TECHNICAL DATA	
Frequency range	225 - 512 MHz
Impedance	50 ohm
VSWR	< 2.5
Gain	typ. -1 ... +3 dBi
Polarization	VER.
Maximum power	70 W CW
Connector type	N female
Mass of antenna	2.75 kg
Antenna length	100 cm
Wind speed	180 km/h
Temp. range	-45/+55 °C

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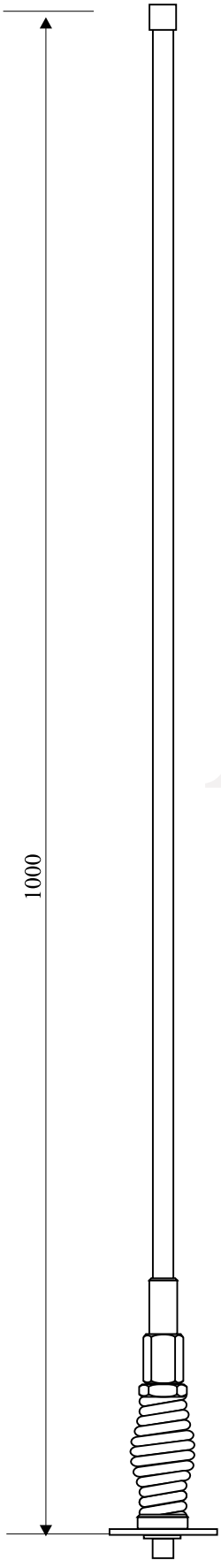
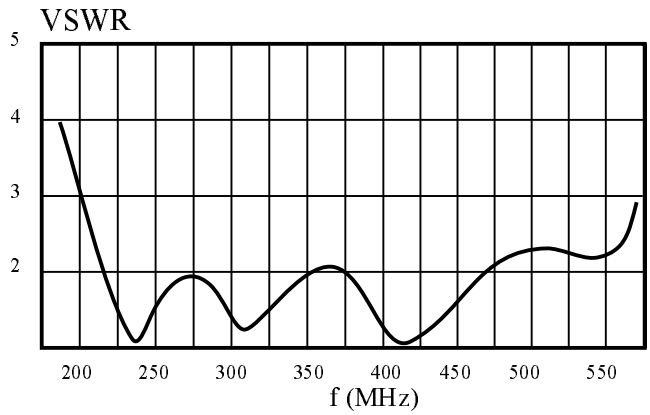
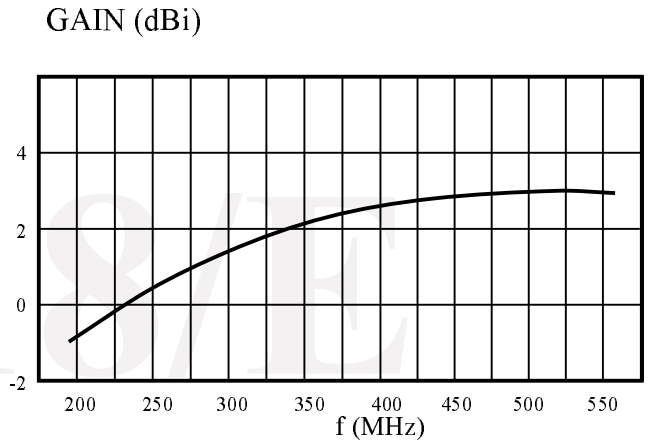
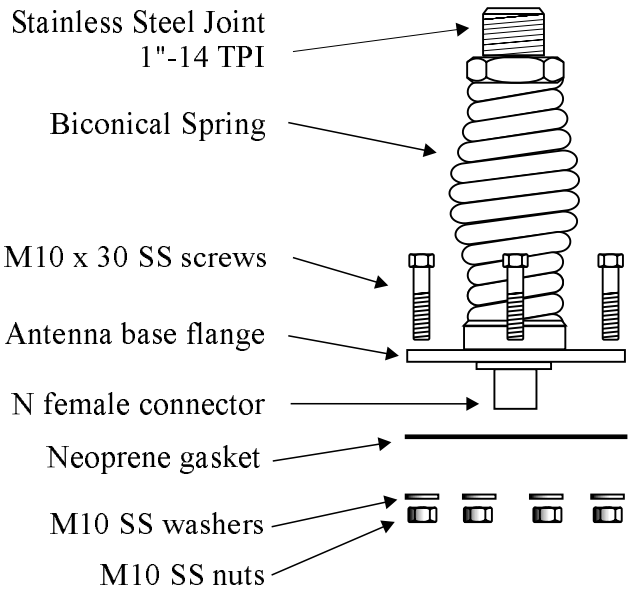
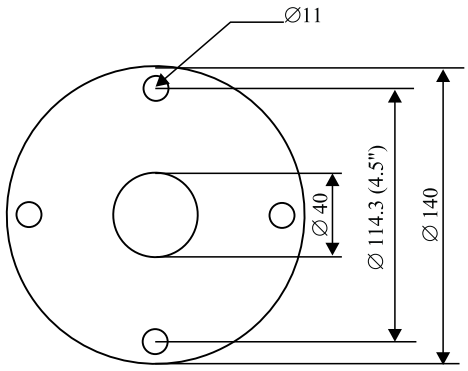

1000


VSWR
5
4
3
2
200
250
300
350
400
450
500
550
f (MHz)


GAIN (dBi)
4
2
0
-2
200
250
300
350
400
450
500
550
f (MHz)


Stainless Steel Joint
1"-14 TPI
Biconical Spring
M10 x 30 SS screws
Antenna base flange
N female connector
Neoprene gasket
M10 SS washers
M10 SS nuts


∅11
Ø 40
Ø 114.3 (4.5")
Ø 140

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AD-44/E

The antenna AD-44/E is a wideband monopole whip, primarily intended for use with portable and handheld radio stations in UHF frequency range from 225 to 400 (450) MHz. Electrically the antenna is optimised for all exploitation conditions (radio in hand, at the side, at the breast etc.) so it is not necessary to additionally tune the antenna. The antenna is composed of radiating part made of special wounded wire and covered with a heatshrinkable tube with silicone layer ensuring high flexibility and roughness. The antenna has built-in a special microstrip transformer matching network enclosed in fiberglass housing above the input coaxial connector. Input connector is built-in TNC male (AD-44/E-HH; /E-HX) or N male (AD-44/E-MP; /E-MX).

TECHNICAL DATA	AD-44/E-HH	AD-44/E-HX
Frequency range	225 - 400 MHz	225 - 450 MHz
Impedance	50 ohm	50 ohm
VSWR	< 2.5	< 3
Polarization	VER.	VER.
Maximum power	10 W CW	10 W CW
Height	280 mm	260 mm
Mass	90 g	85 g
Connector	Nmale - TNCmale	Nmale - TNCmale
Temp. range	-40.....+55°C	-40.....+55°C

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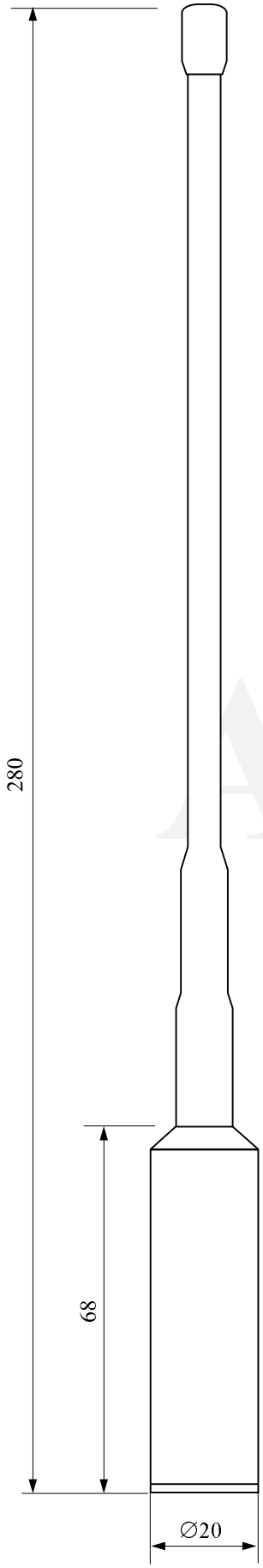
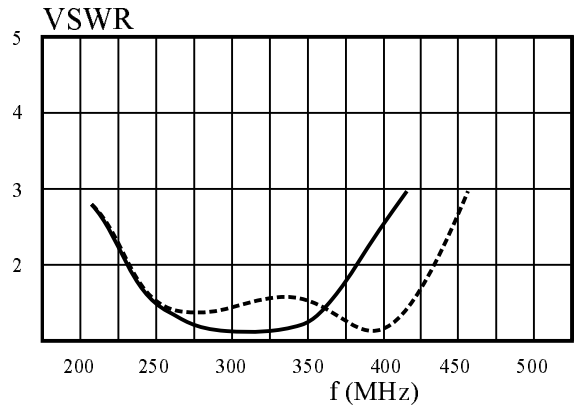
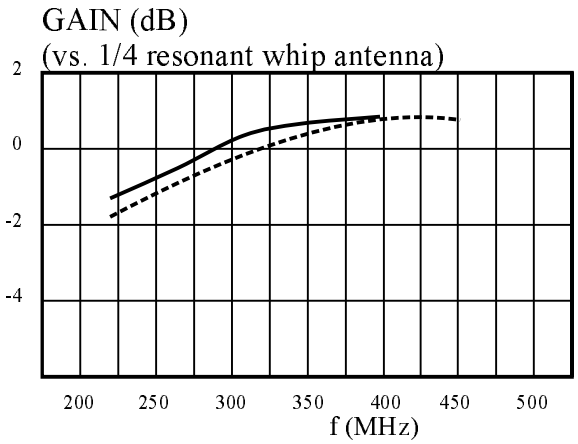

280
68
∅20


VSWR
5
4
3
2
200
250
300
350
400
450
500
f (MHz)


GAIN (dB)
(vs. 1/4 resonant whip antenna)
2
0
-2
-4
200
250
300
350
400
450
500
f (MHz)

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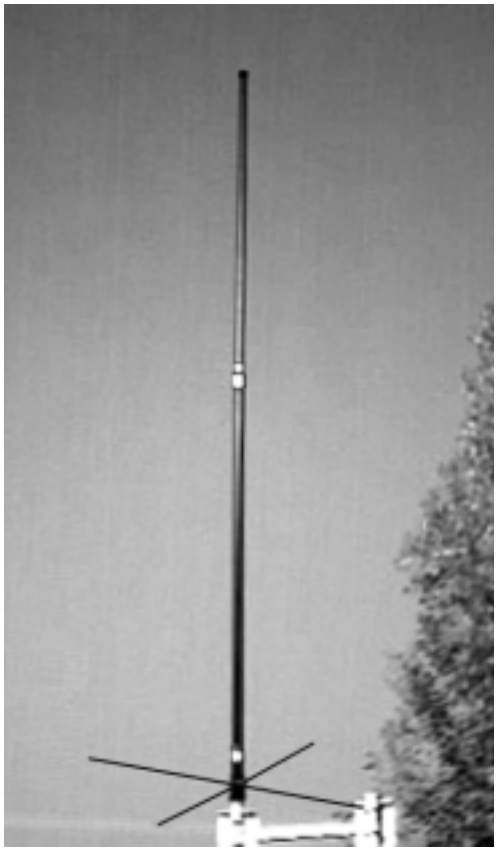
AD-23/207-A

The antenna AD-23/207-A is a collinear dipole antenna intended for use on 144-146 in 430-440 MHz radioamateur bands (DUAL BAND). The antenna is electrically designed as collinear dipole, on 2 m band composed of two elements and on 0,7 m band composed of five elements, electrically 5/8 wave length each. Between the elements are a special phasing coils for proper current phase shift and in the antenna base is a special matching circuit built-in by which all metal parts of the antenna are DC grounded. All radiating elements are enclosed in a tube made of a composite material ensuring good resistance against atmospheric influences. The antenna is composed also of four radial elements, connected on the antenna head, which has a special joint element enables easy and tight fastening on a standard 1" metal tube with outer thread of R1". The antenna could be also mounted by our standard console type ADK.



TECHNICAL DATA	
Frequency range	144-146, 430-440 MHz
Impedance	50 ohm
VSWR	< 1,3
Gain	6 dB (145),9 dB (435)
Polarization	VER.
Maximum power	200 W CW
Height	2,65 m
Mass	1,5 kg
Conector	UHF
Wind velocity	160 km/h

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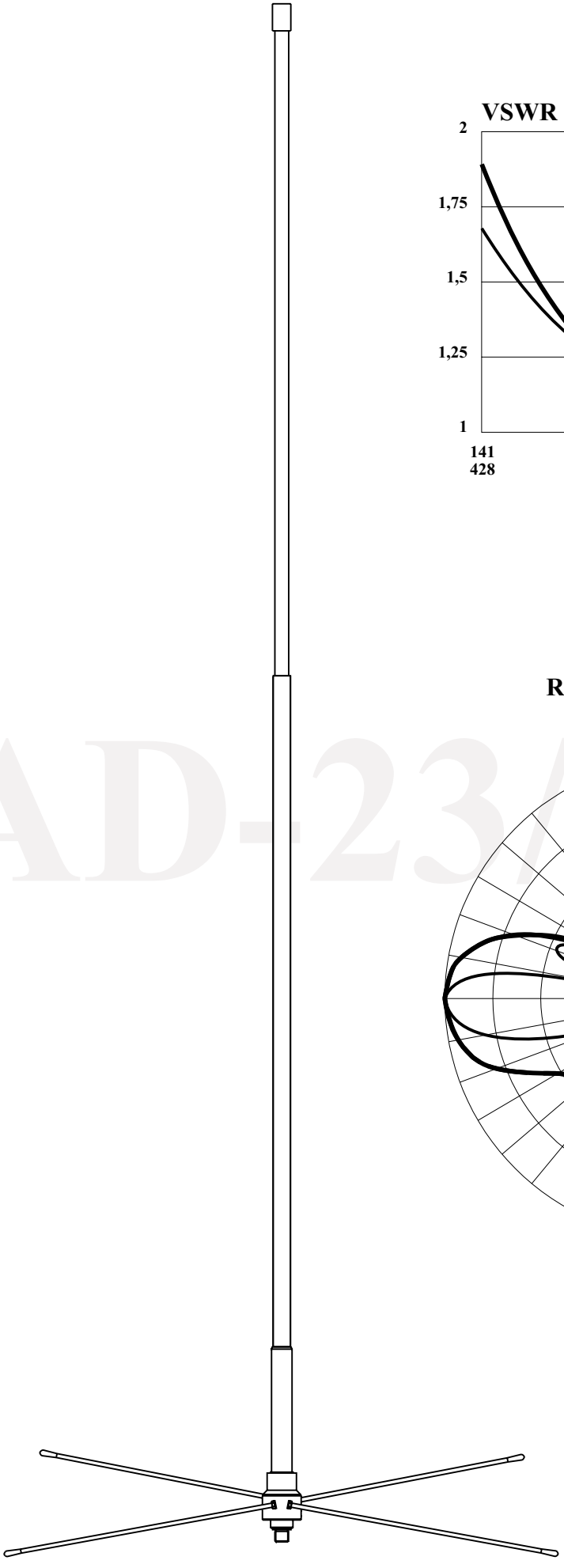
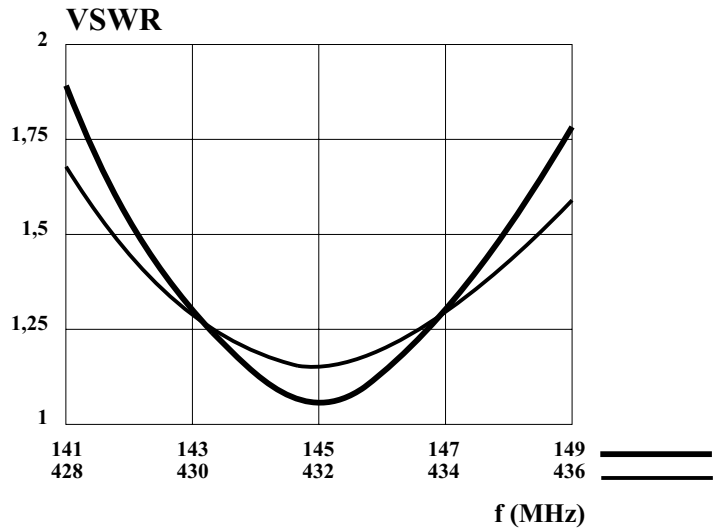
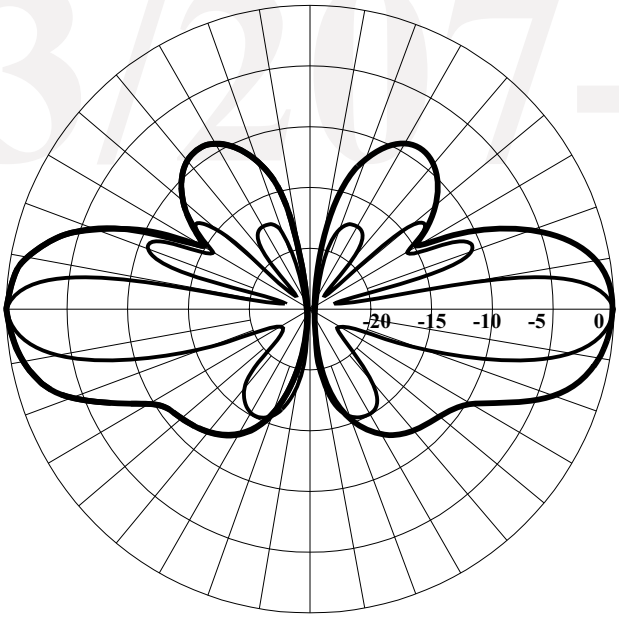




VERTICAL
RADIATION DIAGRAM



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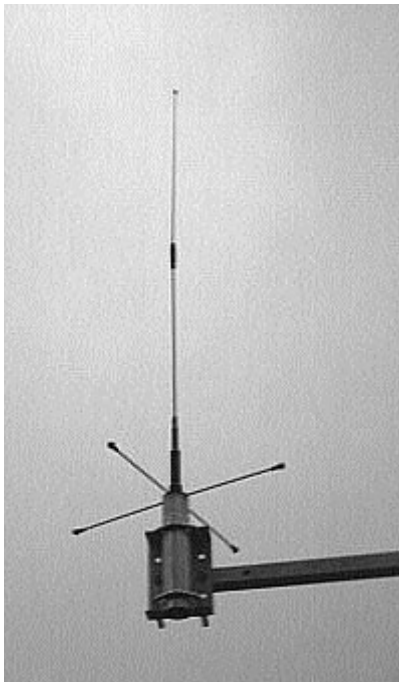
AD-23/207-B



The antenna AD-23/207-B is a collinear dipole antenna intended for use on 144-146 in 430-440 MHz radioamateur bands (DUAL BAND). The antenna is electrically designed as collinear dipole, on 2 m band composed of one element 1/2 wave length and on 0,7 m band composed of two elements, electrically 5/8 wave length each. Between the elements is a special phasing coil for proper current phase shift and in the antenna base is a special matching circuit built-in by which all metal parts of the antenna are DC grounded. The antenna is composed also of four radial elements, connected on the antenna head, which has also connector for radiating element. The antenna head enables easy and tight fastening on a standard 1 1/4" metal tube. Due to small and simple construction the antenna is suitable for mounting on places where the space is limited. The antenna could be also mounted by our standard console elements type ADK.

TECHNICAL DATA	
Frequency range	144-146, 430-440 MHz
Impedance	50 ohm
VSWR	< 1,5 (VHF), 1.3 (UHF)
Gain	2 dB (VHF),5 dB (UHF)
Polarization	VER.
Maximum power	200 W CW
Height	0.9 m
Mass	0.35 kg
Conector	UHF
Wind velocity	160 km/h

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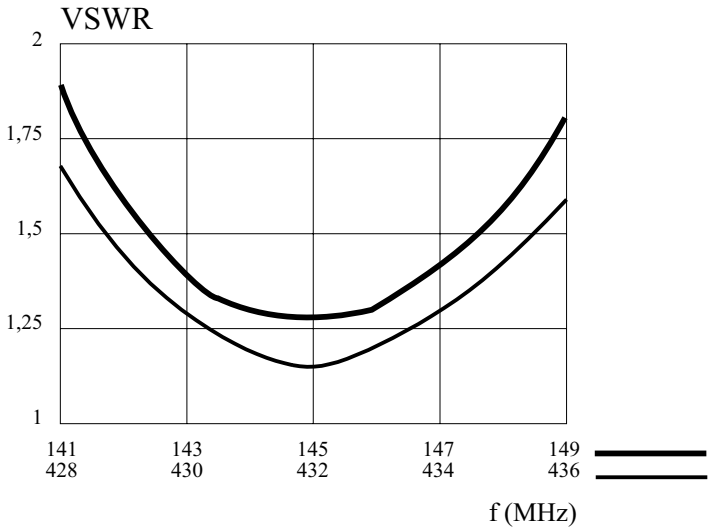
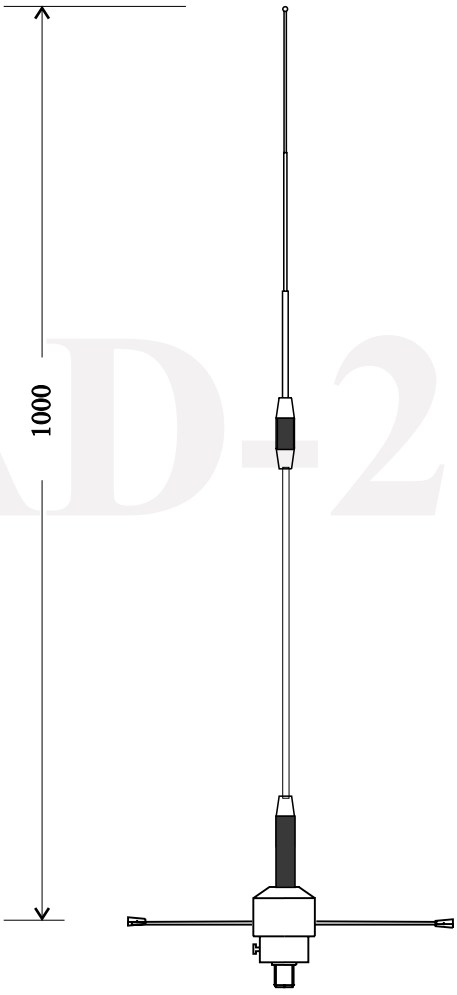
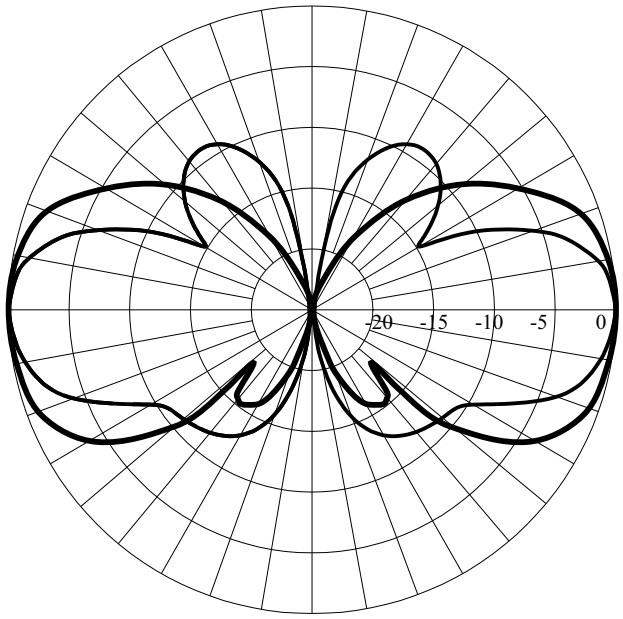




VERTICAL
RADIATION DIAGRAM



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AD-34/2G4-0

The antenna AD-34/2G4-0 is a dipole antenna primarily intended for use in a 2.4 GHz ISM band mainly for wireless LAN or WAN networks or for other applications in this range as well. The antenna is designed as a ground plane antenna with omnidirectional radiation pattern in horizontal plane. All elements are enclosed in UV resistant PE radome which ensures using in hardest climatic conditions. The antenna has N female connector inside the antenna mounting flange. The antenna could be mounted on metal masts with diameter up to 50 mm or with use of appropriate combination of our console elements from ADK family of mounting consoles.

TECHNICAL DATA	
Frequency range	2400 - 2500 MHz
Impedance	50 ohm
VSWR	< 1.5 (DIAG. 1)
Gain	0 dBd
Polarisation	VER.
Maximum power	50 W CW
Height	100 mm
Diameter	75 mm
Mass	0.2 kg
Wind velocity - Lat.Force	150 km/h - 10 N
Wind Area (C x A)	0,01 m^2
Temperature range	-40...+70 ^oC

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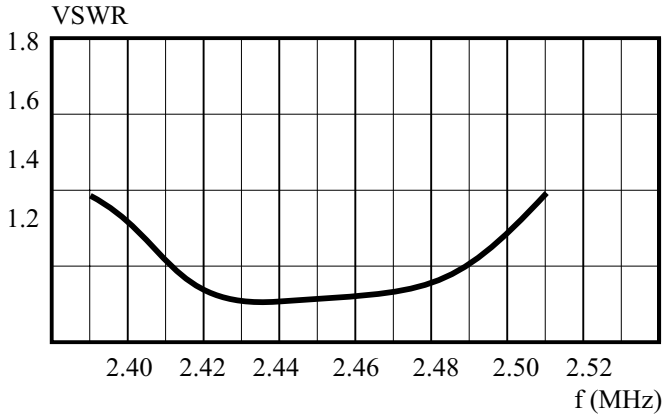

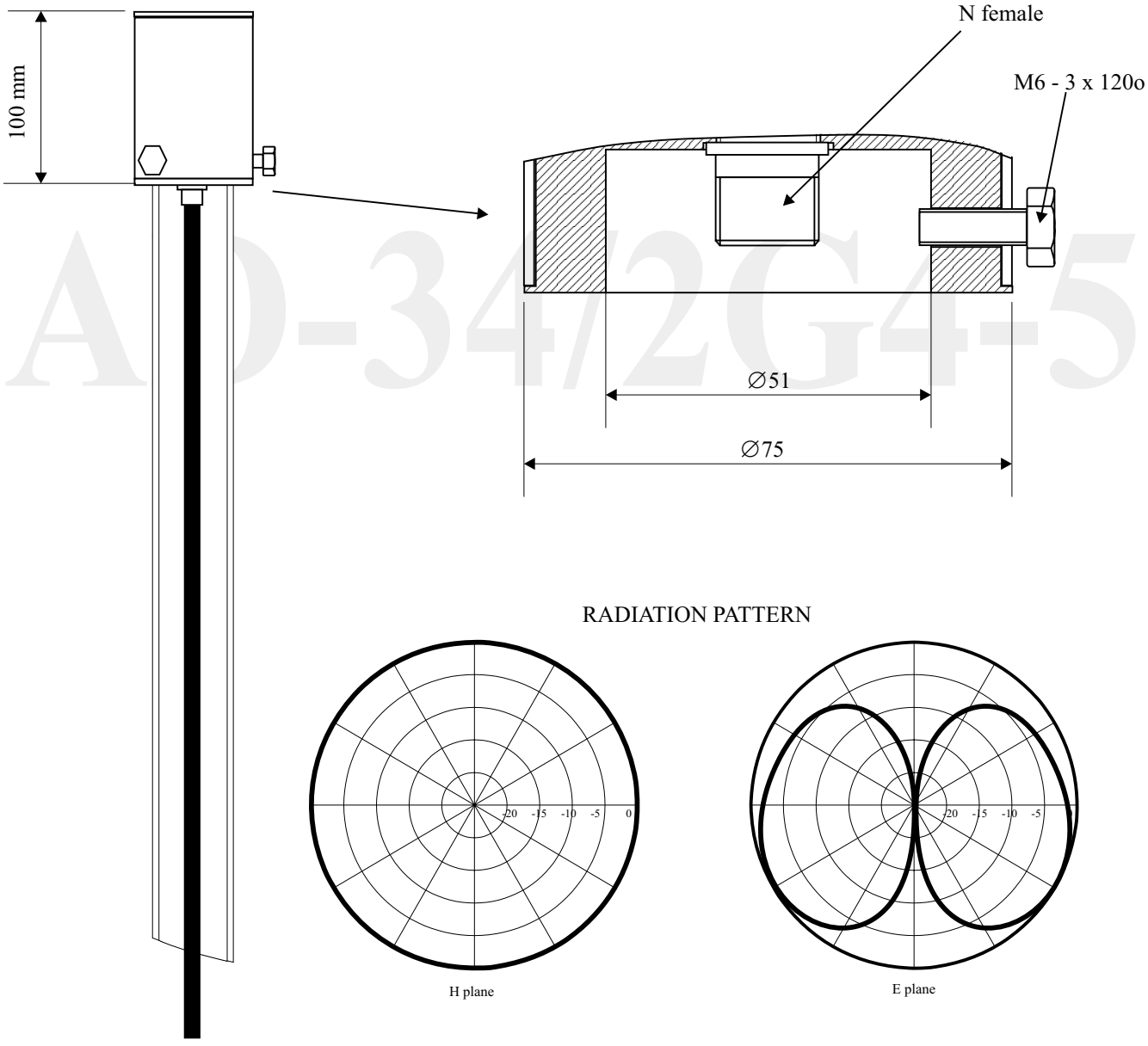

RADIATION PATTERN

H plane

E plane

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AD-34/2G4-5

The antenna AD-34/2G4 is a coaxial collinear antenna primarily intended for use on 2.4 GHz ISM band mainly for wireless LAN or WAN networks or for other applications in this range as well. The antenna is designed as collinear dipole composed of 1/4 and two 5/8 sections enable omnidirectional radiation pattern in horizontal plane. All elements are enclosed in UV resistant PE radome which ensures using in hardest climatic conditions. The antenna has N female connector at the mounting flange. The antenna could be mounted on metal masts with diameter up to 50 mm or with use of appropriate combination of our console elements from the family of mounting consoles type ADK.

TECHNICAL DATA	
Frequency range	2400 - 2500 MHz
Impedance	50 ohm
VSWR	< 1.5 (DIAG. 1)
Gain	5 dBd
Polarisation	VER.
Maximum power	50 W CW
Height	300 mm
Diameter	75 mm
Mass	0.5 kg
Wind velocity - Wind Force	150 km/h - 28 N
Wind Area (C x A)	0.025 m^2
Temperature range	-40...+70 °C

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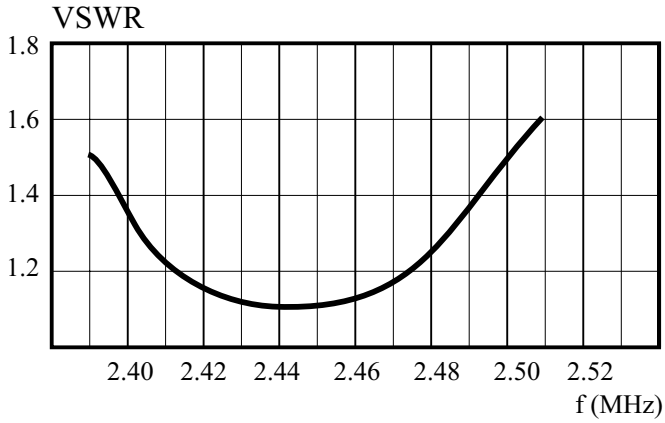
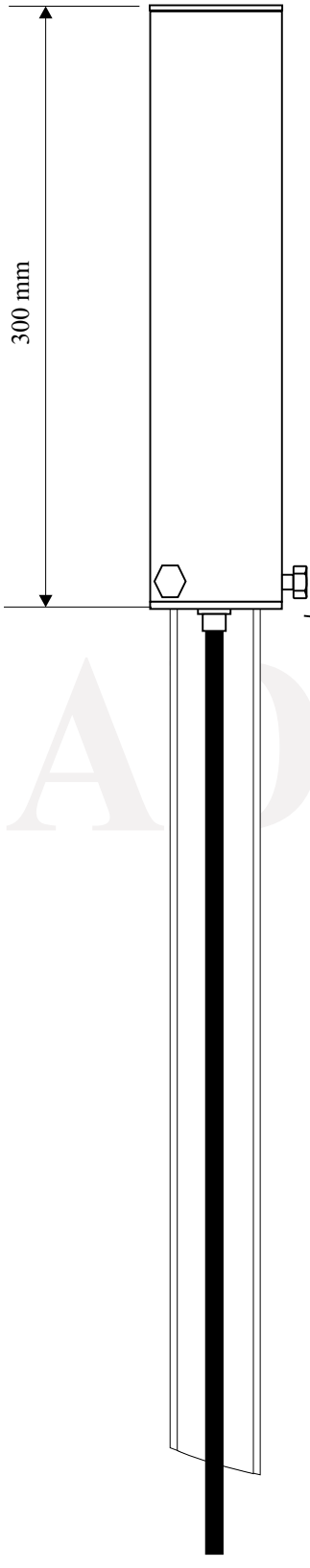
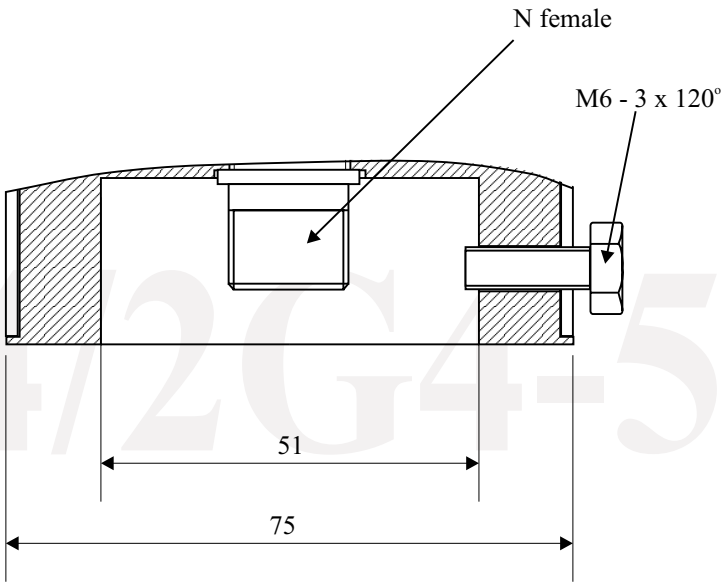
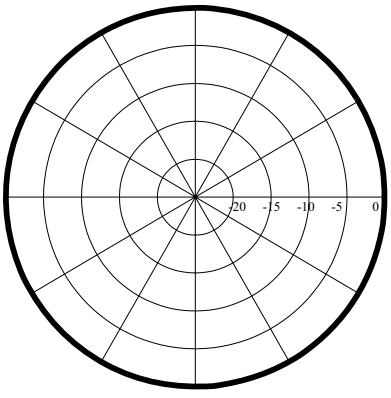


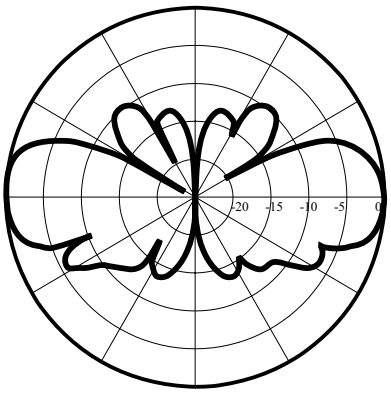




RADIATION PATTERN



H plane



E plane

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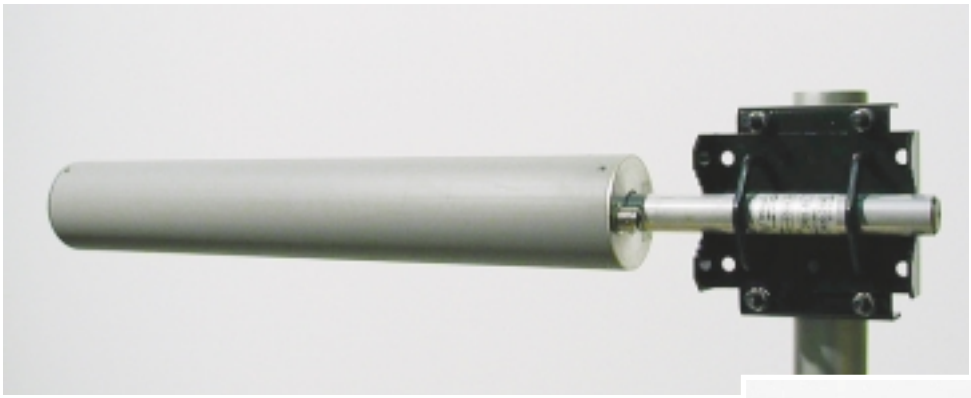
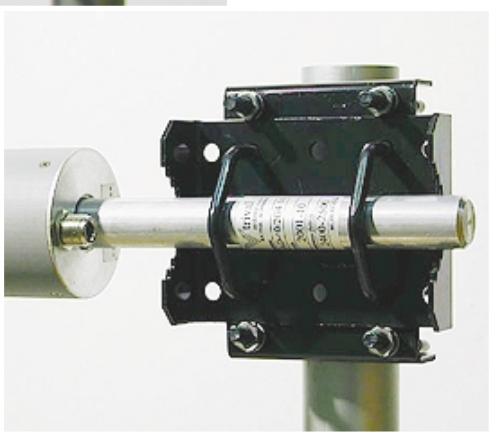
AD-40/2G4-16

The antenna AD-40/2G4-16 is directional antenna intended for use on frequency range 2.4 GHz mainly for wireless LAN or WAN networks or for other applications in this ISM band as well. The antenna with its high gain enables transmission of signal on larger distances. The antenna is designed as yagi antenna with all the elements enclosed in UV resistant PE radome which ensures using in hardest climatic conditions. The antenna has built-in N female input connector on the back flange together with special supporting pipe enables easy polarisation change and mounting on support masts with diameter up to 60 mm.





TECHNICAL DATA	
Frequency range	2400- 2500 MHz
Impedance	50 ohm
VSWR	< 1.3 (DIAG. 1)
Gain	13 dBd
Radiation Pattern - 3 dB	
- E plane	28^{o}
- H plane	30^{o}
Front-to-back ratio	> 20 dB
Polarisation	HOR./VER.
Maximum power	50 W CW
Length	510 mm
Width	75 mm
Mass	2.4 kg
Wind velocity	150 km/h
Temperature range	-40...+70 C

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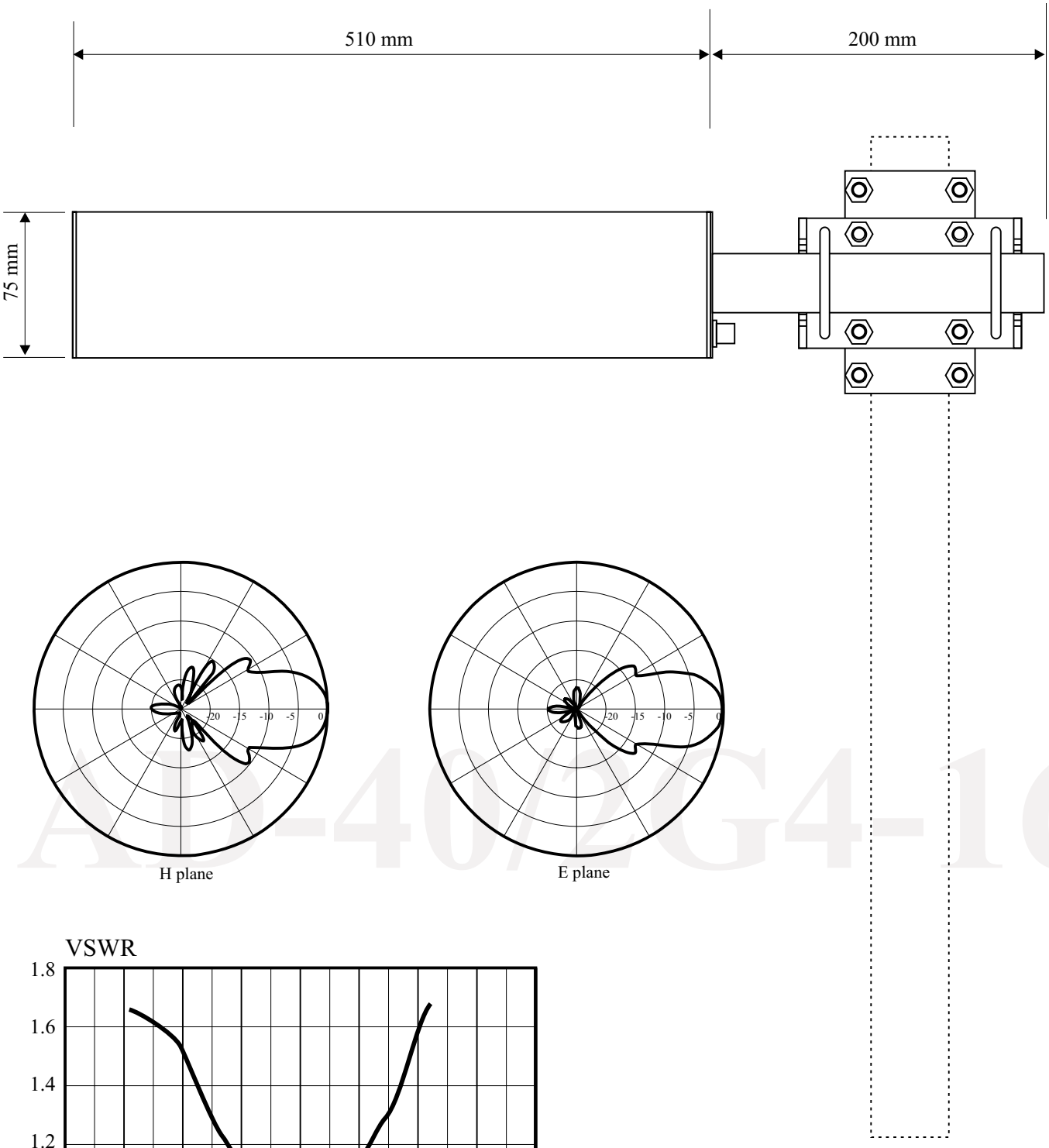
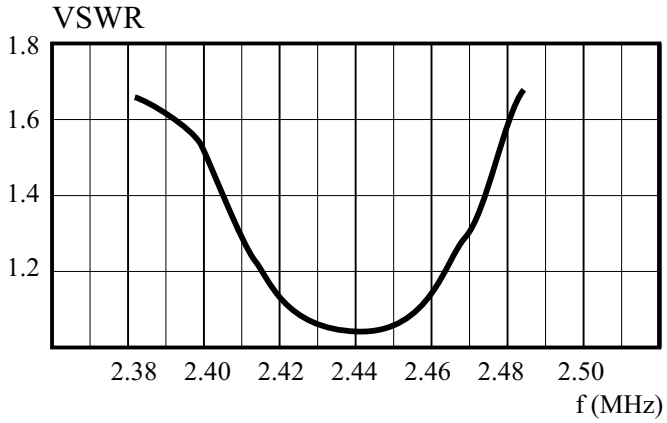
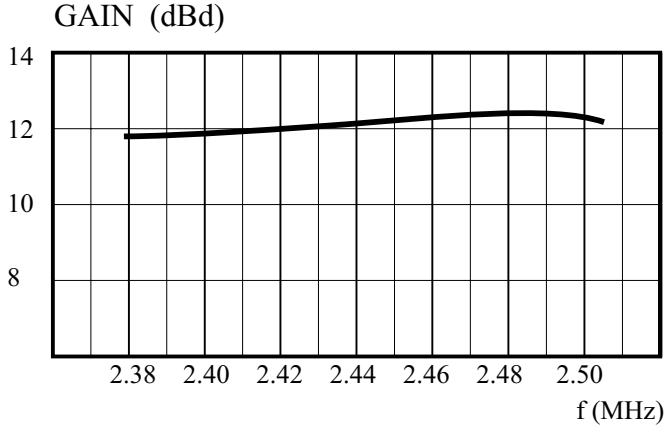


H plane

E plane





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AD-79/18D

The antenna AD-79/18D is a mobile GPS active receiving antenna intended for use with mobile and portable GPS receivers. The active parts with the ceramic patch antenna are enclosed in the ABS radome. Stainless steel mounting adapter has M10 thread with washers and nut for easy mounting. The antenna could be used as stand-alone or in combination with our standard VHF/UHF broadband mobile antennas type AD-18/D, AD-27 or AD-18/E. With these antennas the AD-79/18D could be placed on the existing antenna base instead of one M10 mounting screw - no need to drill additional mounting hole.
The antenna has 25 cm of RG-316 coaxial cable with SMA female connector. Other connector types are available on request.

TECHNICAL DATA	
Frequency range	1575.42 +/- 10 MHz (L1)
Impedance	50 ohms
VSWR	< 2
Polarization	RHC
Gain (LNA)	26 dB
Noise fig.	1.35 dB
Power supply	3.0 - 5.5 V DC (approx. 20 mA)
Connector	SMA female
Dimensions	dia. 47 mm x 83 mm
Weight	200 g
Colour	Black
Materials	ABS; Stainless Steel
Temperature range	- 40....+55 °C

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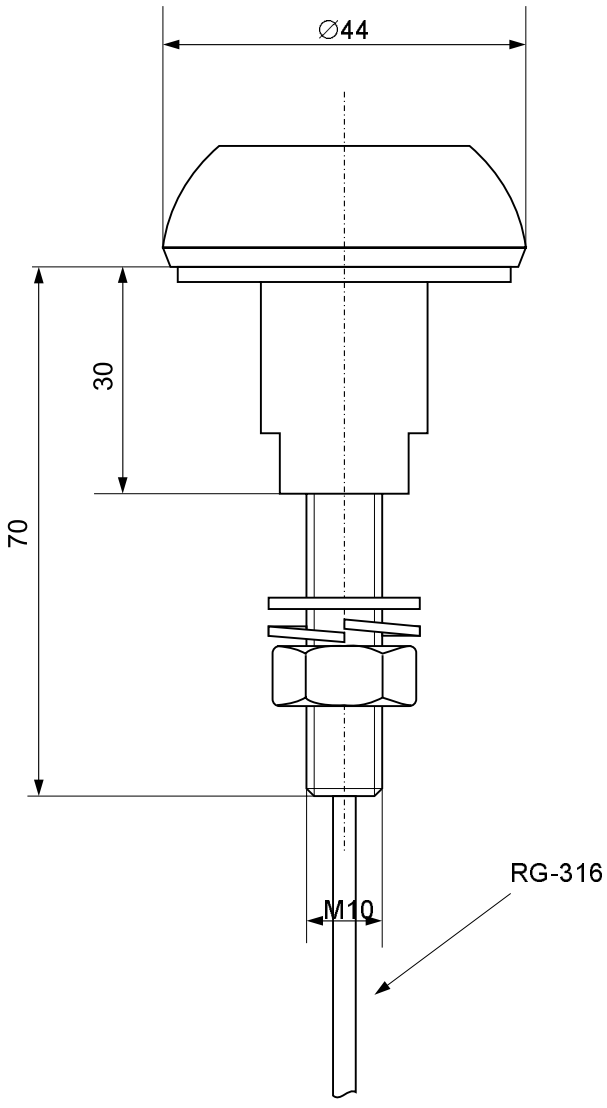
∅44
30
70
RG-316
M10

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MOBILE ANTENNAS

Mobile antennas are composed of the family of antenna radiators type ADS-21, fixed mounts type ADN-21 and magnet mounts type ADM-21. The antenna radiators are made of Stainless Steel or composite material (fiberglass) and painted with black protective paint, all covering the frequency range from 27 MHz (CB) to 900 MHz (GSM). Main advantage of the all family is beside quality materials and simple use also simple combining of different types of the radiators with different types of the mounts through M6 screw joint (male on the mount side and female on the radiator side). In that way user could easily combine the appropriate radiator with different mount according to his requirements. All the mounts are equipped with coaxial cable type RG-58 terminated with connector type FME on which we could easily fit different adapters from FME to PL 259, BNC, TNC, N, MINI UHF or SMA.

TECHNICAL DATA antennas	**ADS-21/ 207-A**	**ADS-21/ 207-B**	**ADS-21/ 207-C**
Antenna type	1/2 - collinear	1/4 + 5/8	1/4 + 5/8
Frequency	145/435 dualband	145/435 dualband	2m/0.7m dualband
Impedance	50	50	50
VSWR	1.2	1.2	1.5
GAIN	2 dB / 5 dB	0 dB / 3 dB	0 dB/3 dB
Bandwith (MHz at SWR<2)	5/15	4/15	4/20
Material	SS	SS	SS
Colour	black	black	black
Height	900 mm	430 mm	450 mm

TECHNICAL DATA mounts	**ADN-21/1**	**ADN-21/2**	**ADN-21/ UHF**	**ADM-21/ MA6**	**ADM-21/ MI6**	**ADM-21/ UHF**
Mount type	fixed bendable	fixed with swivel	fixed	magnet 90 mm-swivel	magnet 60 mm	magnet 120 mm
Colour	black	black	black	black	black	black
Cable	5 m RG-58	5 m RG-58	5 m RG-58	3.5 m RG-58	3 m RG-58	5 m RG-58
Radiator joint	screw M6	screw M6	SO 237	screw M6	screw M6	SO 237
Height	40 mm	42 mm	16 mm	80 mm	58 mm	45 mm
Weight w. cable	250 gr.	250 gr.	200 gr.	750 gr.	350 gr.	800 gr.

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ADN-21/1

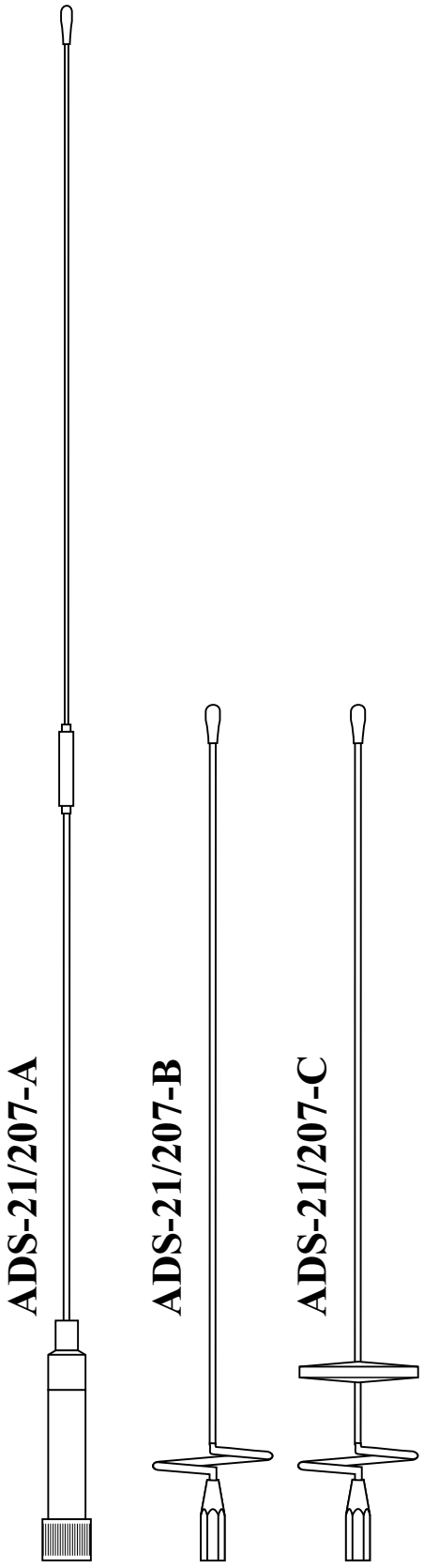
ADN-21/2

ADM-21/MI6

ADM-21/MA6

ADN-21/UHF

ADM-21/UHF



ADK-21/1

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AD-12/G

Antenna AD-12/G is wideband antenna covering frequency range from 440 to 475 MHz and is intended for stationary and portable use. Electrically the antenna is designed as a dipole with capacitive distributed loading on the upper radiating element. All metal parts of the antenna are grounded and enclosed in tube made of composite material epoxy-glass ensuring good resistance against atmospheric influences and long life time. The antenna could be directly mounted on any metal tube with inner diameter greater than 30 mm and outer diameter less than 49 mm (for instance standard tube 1 1/4”). The antenna could also be mounted by our standard mounting console and adapter elements ADK- .

TECHNICAL DATA	
Frequency range	440 - 475 MHz
Impedance	50 ohm
VSWR	< 1,5 (DIAG. 1)
Gain	0 - 1 dBd
Polarization	VER.
Maximum power	100 W CW
Connector	N
Height	0,53 m
Diameter	28 mm
Mass of antenna	1 kg
Wind velocity	180 km/h
Temperature range	-40....+70 °C

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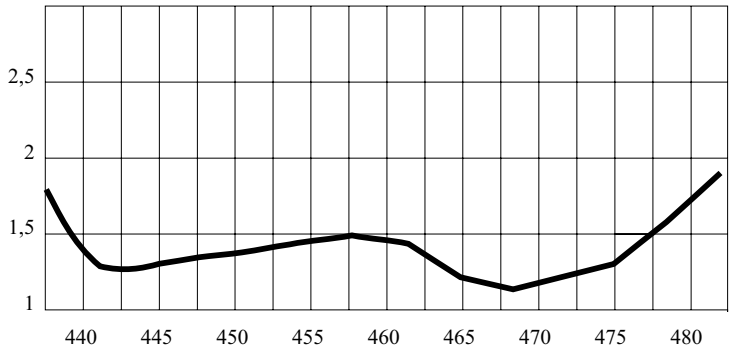
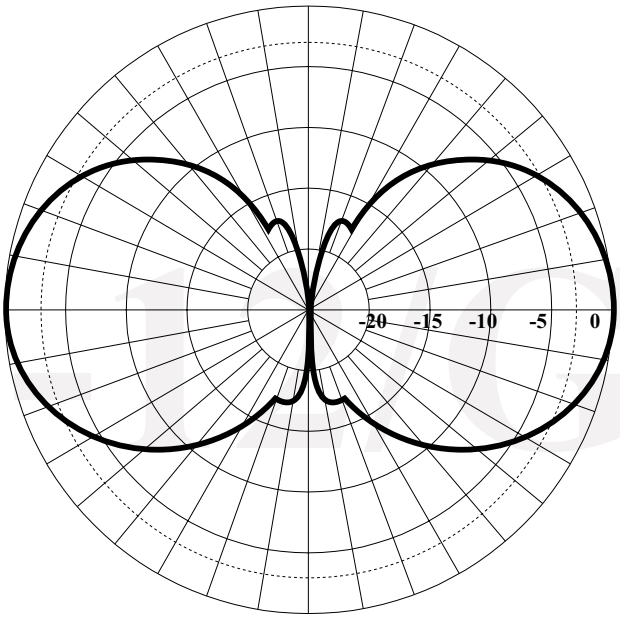
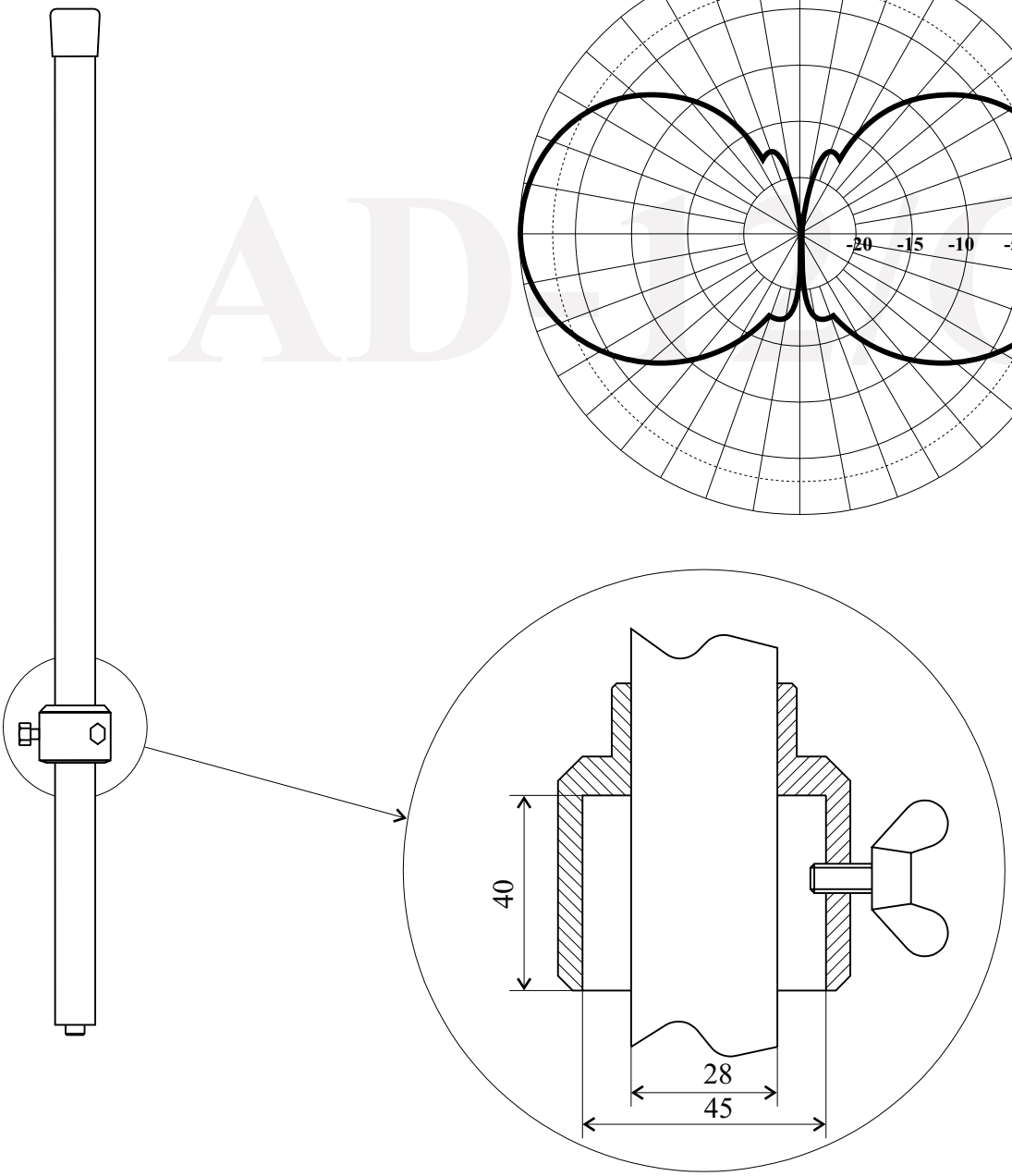
VSWR



VERTICAL
RADIATION DIAGRAM





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AD-12/B

Antenna AD-12/B is wideband UHF antenna covering frequency range from 390 to 480 MHz and is intended for stationary use also in extreme hard climatic environment. Electrically the antenna is designed as a dipole with added current choke enables low coupling between the antenna and the feeder cable. All metal parts of the antenna are grounded and enclosed in radome tube made of composite material (fiberglass) and painted with UV resistant two-component polyurethane paint. The support pipe is made of stainless steel. That construction enables the antenna long life and good resistance against atmospheric influences. The antenna could be mounted on the support tube with our standard console elements series ADK-....

TECHNICAL DATA	
Frequency range	390 - 480 MHz
Impedance	50 ohm
VSWR	< 1,6 (DIAG. 1)
Gain	2 dBi (0 dBd)
Polarization	VER.
Maximum power	500 W CW
Connector	N, 7/16
Height	0,72 m
Diameter of antenna	60 mm
Diam of support pipe	50 mm
Mass of antenna	4.8 kg
Wind velocity	180 km/h
Temperature range	-40....+70 °C

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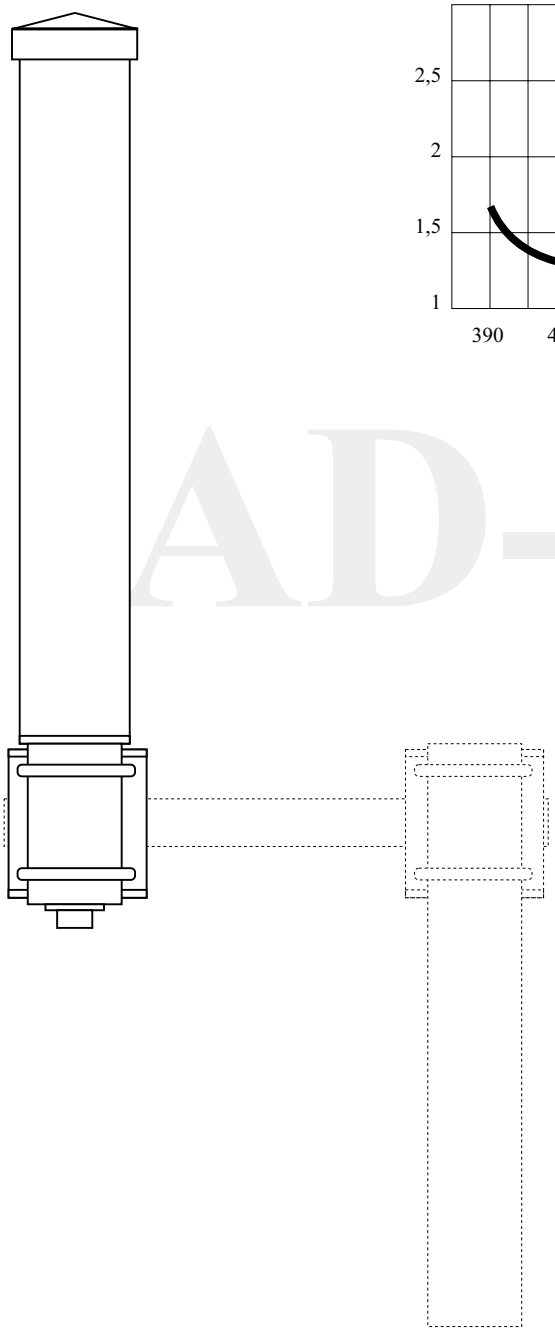

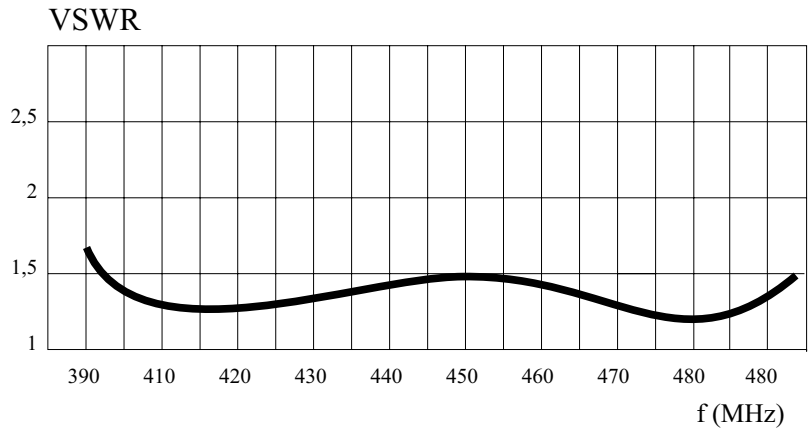

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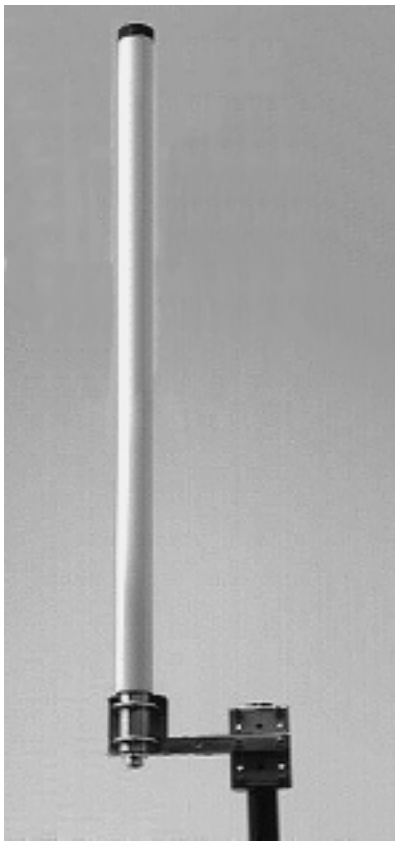
AD-29/07-5

The antenna AD-29/07-5 is a vertically polarized omnidirectional collinear dipole for use on UHF frequency range from 380 to 470 MHz in separate frequency bands. The antenna is electrically designed as collinear dipole, composed of four dipoles half wave length each which enable 5 dBd of gain and constant vertical radiation pattern. All metal elements are DC grounded and enclosed in tube with outer diameter 60 mm, made of a composite material (fiberglass) enables excellent mechanical and atmospheric resistance. The antenna cap is connected with radiating structure and is made of brass and the bottom fixation part is made of anodized aluminum alloy. The antenna is very robust construction and is therefore intended for use in hardest environmental conditions.

The antenna bottom mounting part diameter is 50 mm so the antenna consoles from the ADK-.. series could be used for mounting.



TECHNICAL DATA	
Frequency range	375-410; 400-430; 440-470 MHz
Impedance	50 ohm
VSWR	< 1,5
Gain	7 dBi/5 dBd
Polarization	VER.
Maximum power	200 W CW
Height	max. 2.4 m
Mass	max. 6 kg
Connector	7/16, N
Wind velocity	150 km/h
Wind area	0.145 m^2

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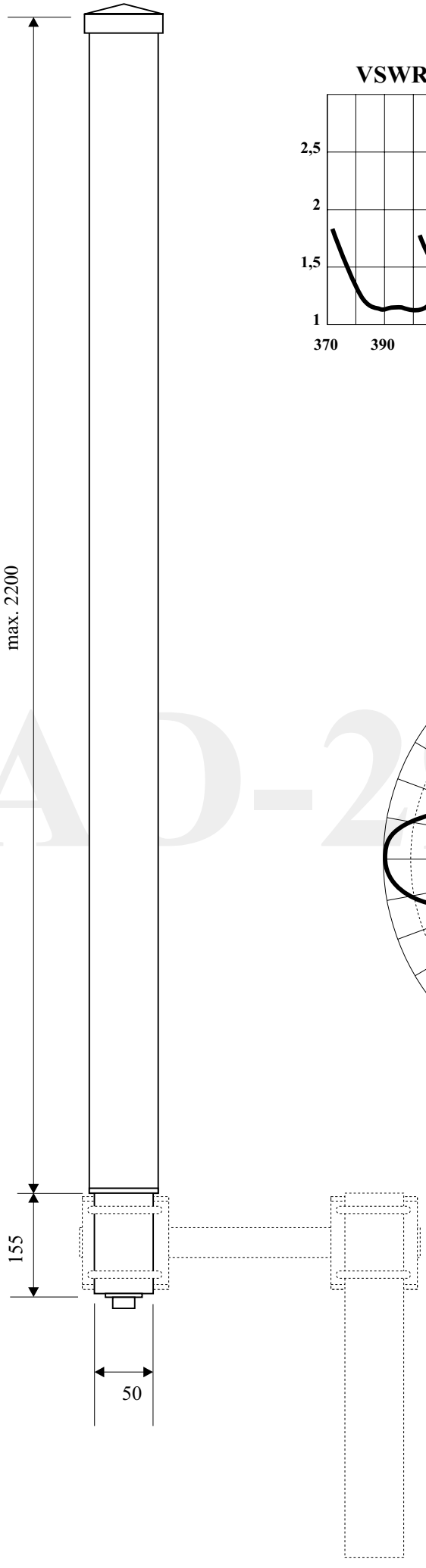
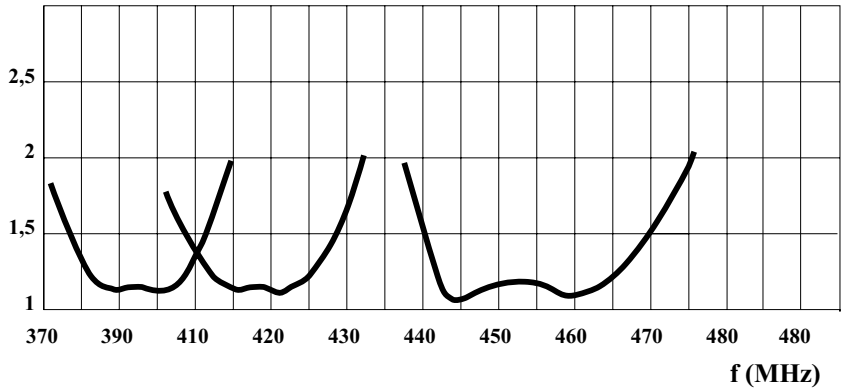
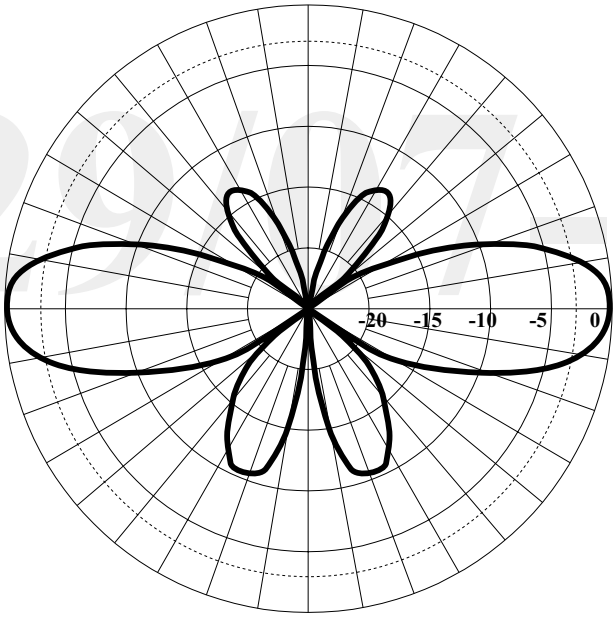


VSWR



VERTICAL
RADIATION DIAGRAM



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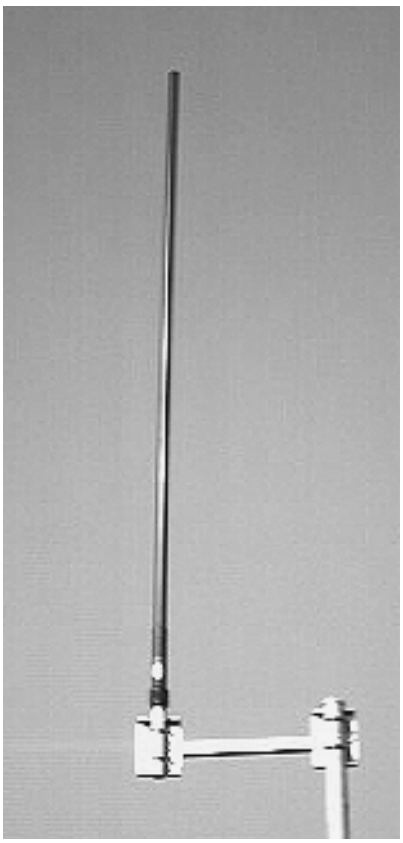
AD-23/07-4

The antenna AD-23/07-4 is collinear dipole for use on UHF frequency range from 400 to 500 MHz in separate frequency bands. The antenna is electrically designed as collinear dipole, composed of four elements half wave length each. The phasing coil between the elements is used for proper current phase shift on the radiating elements. At the antenna base a matching circuit is built-in by which all radiating elements are also DC grounded. All elements are enclosed in tube made of a composite material enabling excellent mechanical and atmospheric resistance. For antenna mounting on mast our standard family of mounting consoles type ADK could be used.



TECHNICAL DATA	
Frequency range	400 - 500 MHz
Impedance	50 ohm
VSWR	< 1,8 (fo +/- 4%fo)
Gain	8 dBi
Polarization	VER.
Maximum power	200 W CW
Height	max. 2 m
Mass	max 1,1 kg
Connector	N
Wind velocity	160 km/h

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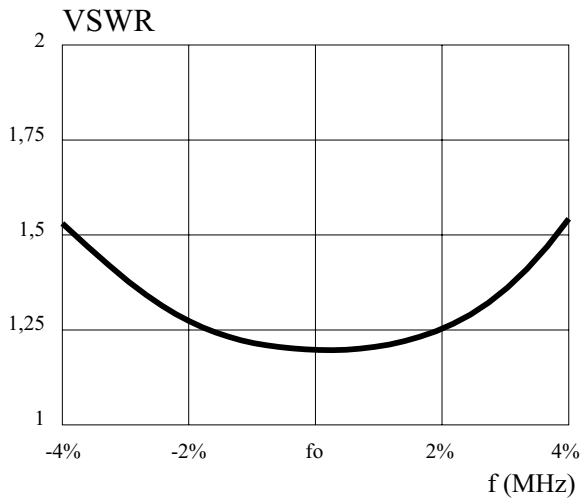
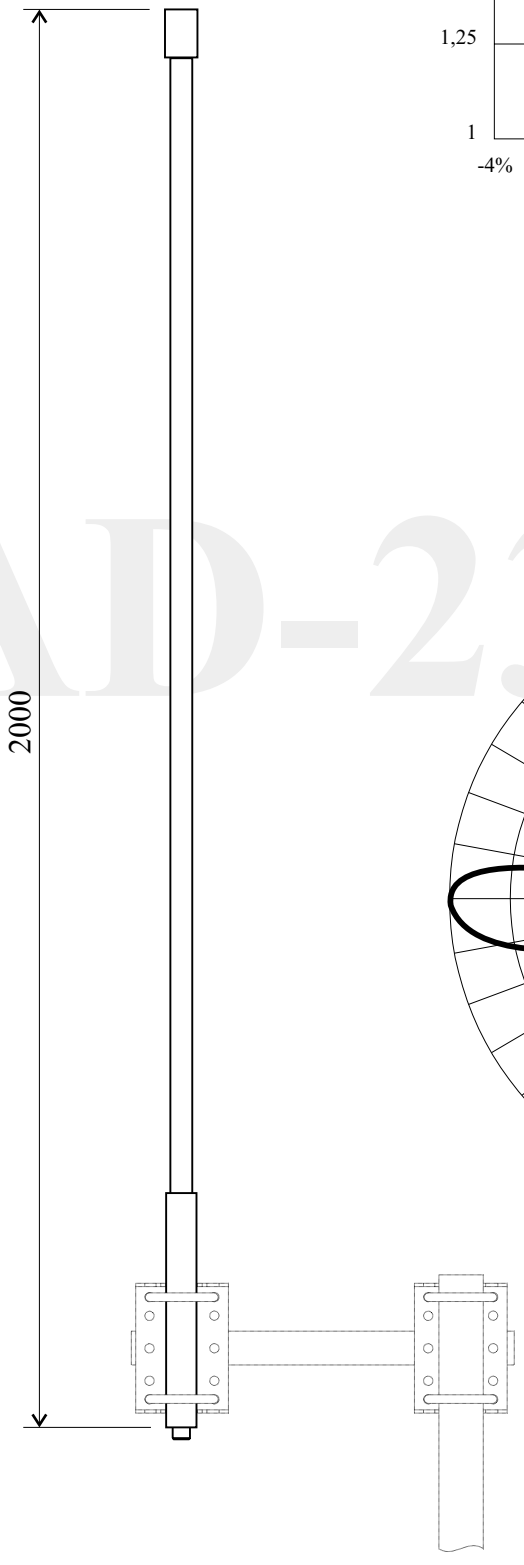
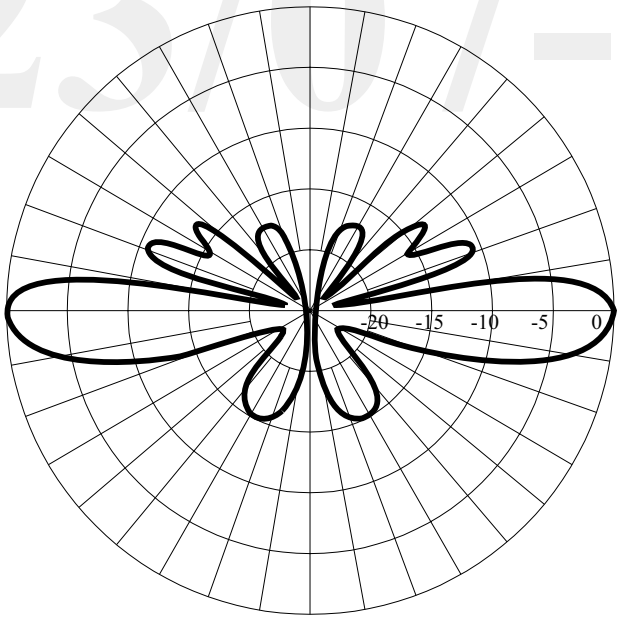




VERTICAL
RADIATION DIAGRAM



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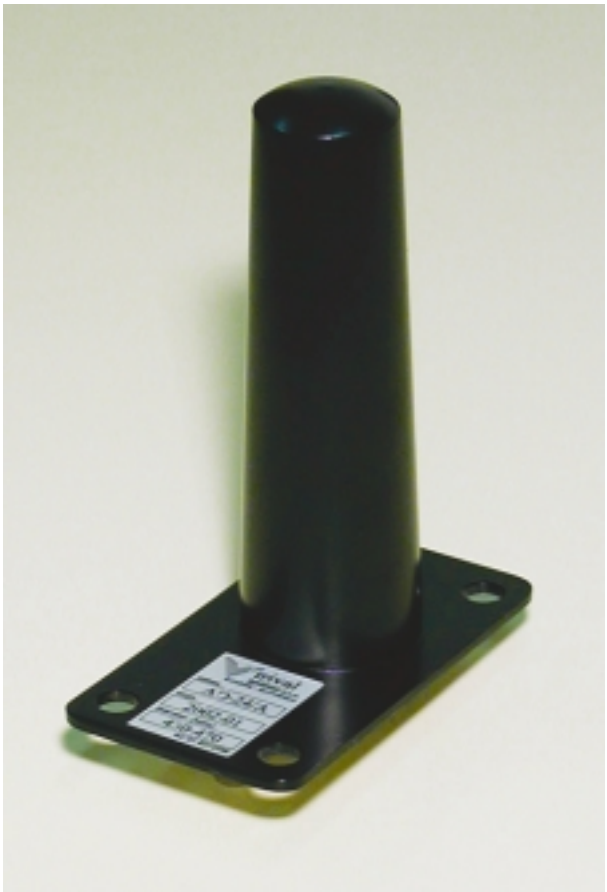
AD-24/A

The antenna AD-24/A is a wideband monopole intended for use in the standard frequency range from 430 to 470 MHz. The antenna is composed of a mounting plate with a coaxial connector and of a conical radome made from epoxy - glass composite material where the radiating elements are waterproof built- in. The coaxial connector is protected with the washer. The antenna can be mount directly on flat metal surface and it is primarily intended for use on locomotive engines and other similar vehicles. Therefore its mechanical construction is optimised regarding high vibrations and shocks arising by the engine.



TECHNICAL DATA	
Frequency range	430 - 470 MHz
Impedance	50 ohm
VSWR	< 1,5 (DIAG. 1)
Gain	2 - 3 dBi
Polarization	VER.
Maximum power	100 W CW
Connector	N
Height	180 mm
Diameter	55/42 mm
Mass of antenna	0,6 kg
Wind velocity	180 km/h
Temperature range	-40....+70 °C

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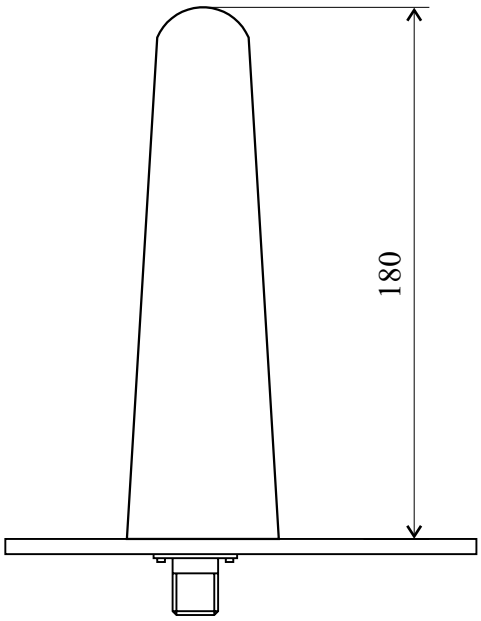
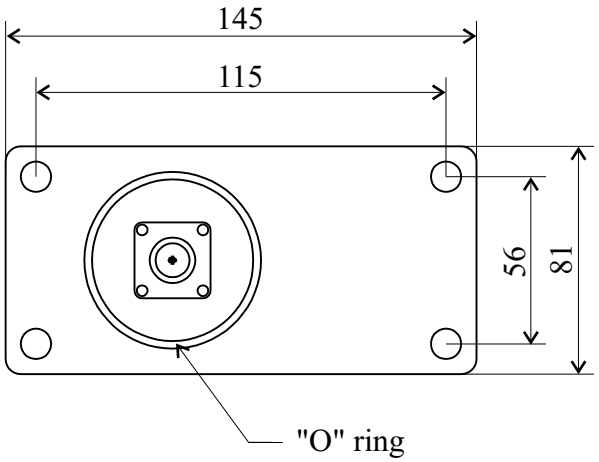
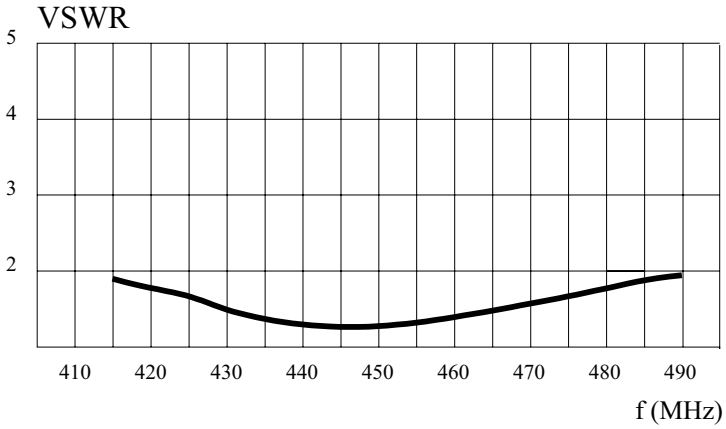

180


145
115
56
81
"O" ring


VSWR
5
4
3
2
410
420
430
440
450
460
470
480
490
f (MHz)

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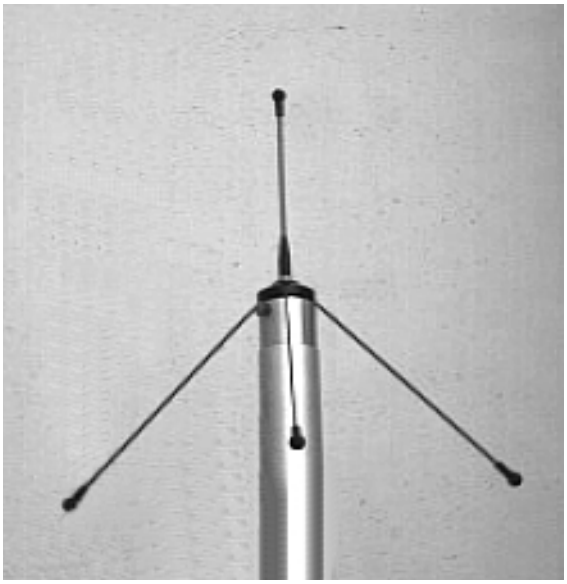
AD-34/07-A

The family of antennas type AD-34 represents antennas type “ground plane” intended for use on VHF and UHF frequency range. The antenna type AD-34/07-A is also GP antenna composed of junction head, three radial elements and radiator, electrically quarter wave long. All antenna types have junction head made of anodized aluminum alloy and radiating elements made of strong stainless steel black coated rods. Instead of simple and lightweight construction the antennas are also usable in hard climatic conditions. The antenna could be mounted on standard metal 1 1/4” water pipe or some appropriate combination of mounting elements from our program could be used.



TECHNICAL DATA	
Frequency range	390 - 475 MHz
Impedance	50 ohm
VSWR	<1,5 (fo+/-3%fo)
Gain	0 dBd
Polarization	VERT.
Maximum power	100 W
Connector	N, UHF
Height	30 cm
Mass of antenna	0.15 kg

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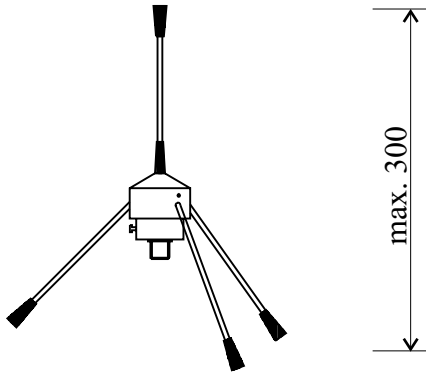

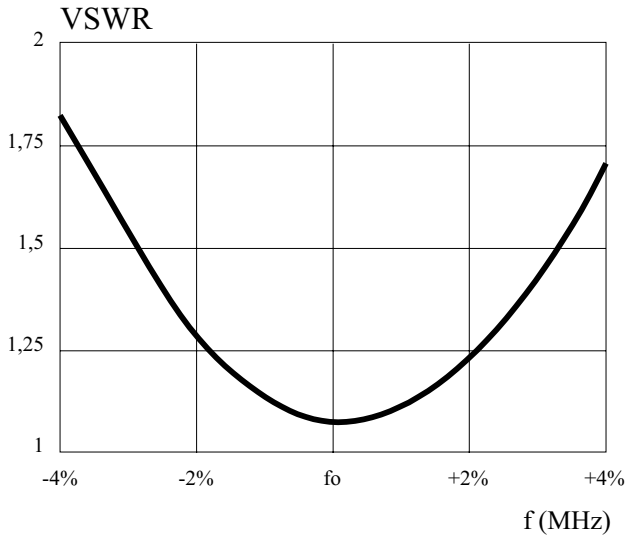

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AD-34/07-G

The family of antennas type AD-34 represents antennas type “ground plane” intended for use on VHF and UHF frequency range. The antenna type AD-34/07-G is also GP antenna composed of junction head, four horizontally placed radial elements and collinear radiator (1/4+1/2 wave long), enables 4 dBd gain. All antenna types have junction head made of anodized aluminum alloy and radiating elements made of strong stainless steel black coated rods. Instead of simple and lightweight construction the antennas are also usable in hard climatic conditions. The antenna could be mounted on standard metal 1 1/4” water pipe or some appropriate combination of mounting elements from our program could be used.

TECHNICAL DATA	
Frequency range	390-475 MHz
Impedance	50 ohm
VSWR	< 1,5 (fo+/-1,5%fo)
Gain	4 dBd
Polarization	VERT.
Maximum power	100 W
Connector	N, UHF
Height	75 cm
Mass of antenna	0.25 kg

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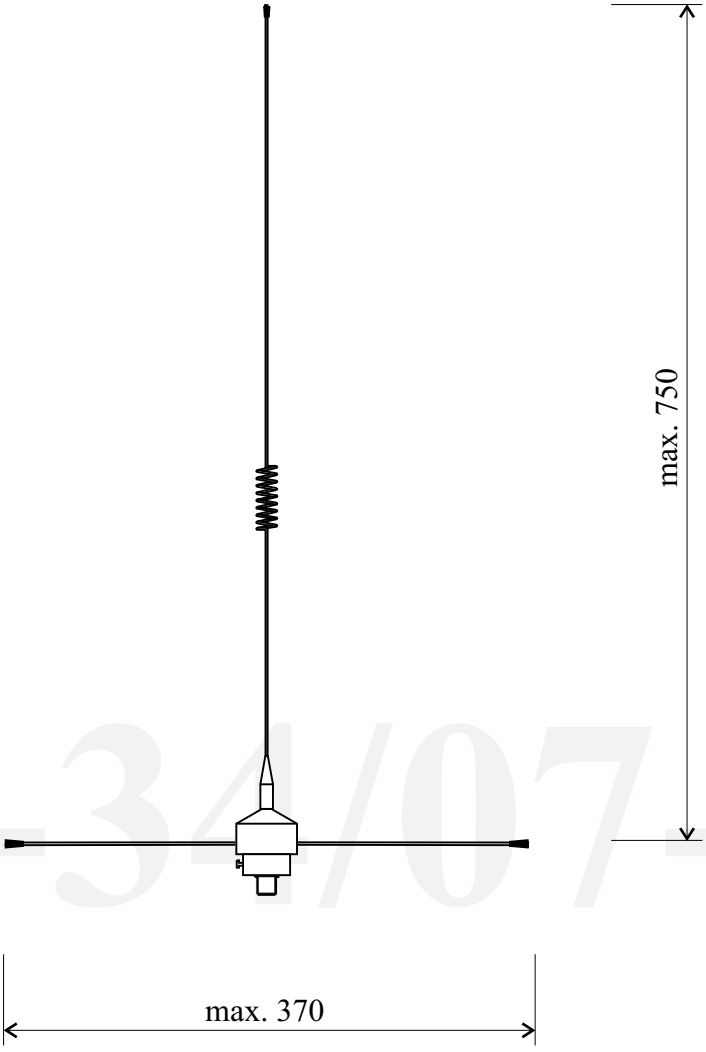

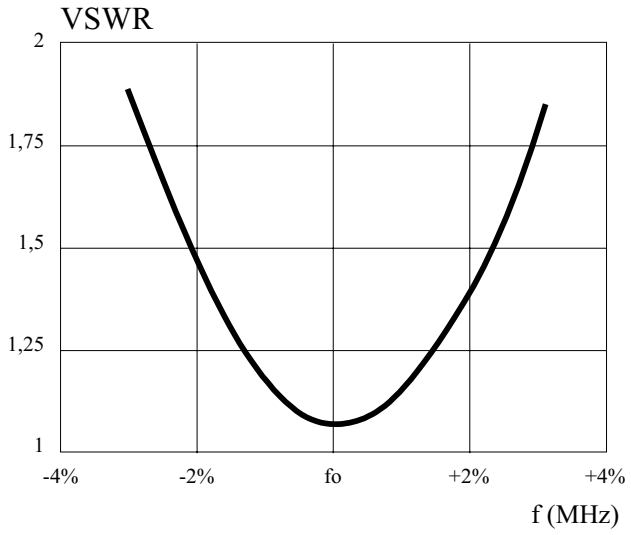

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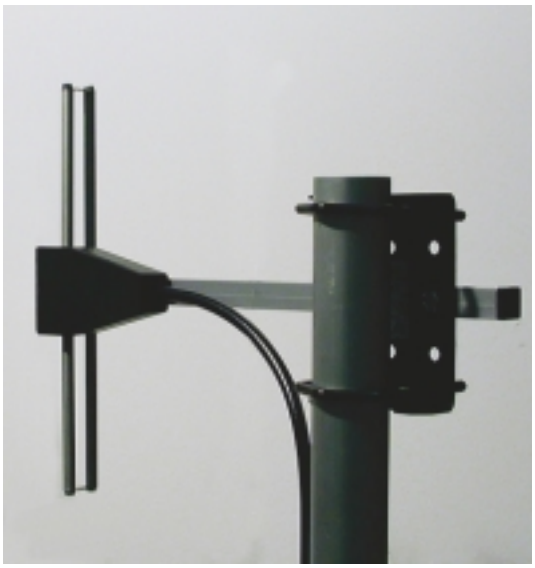
AD-39/07

The family of wideband antennas AD-39 is composed of so called closed dipoles and is primarily intended for use as stationary antennas on VHF and UHF frequency range. The antenna is composed of a closed dipole mounted on supporting boom. The dipole has 1.5 m of coaxial cable type RG-213/U with N type connector. The antenna is appropriate for side mast mounting with 2 dBd gain together with offset radiation pattern. With different combinations of several antennas together with appropriate power dividers type APS-38 a different radiation patterns with different gains could be easily achieved depending on our signal coverage requirement. Dipoles are made of aluminum alloy rod with 10 mm of diameter and mounted on square aluminum boom together with mounting console enables the antenna to be mounted on antenna mast with external diameter up to 60 mm. All aluminium parts are transparent anodized enable long life and reliable work even in hardest climatic conditions.



TECHNICAL DATA	
Frequency range	390 - 480 MHz
Impedance	50 ohm
VSWR	< 1,8
Gain	0 - 2 dBd
Polarization	VERT.
Maximum power	100 W
Connector	1.5 m RG-213/U + Nm
Width	30 cm
Length	31 cm
Mass of antenna	2,0 kg

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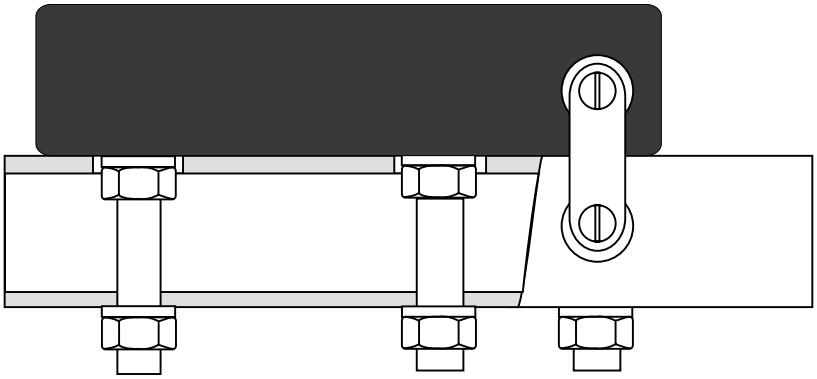
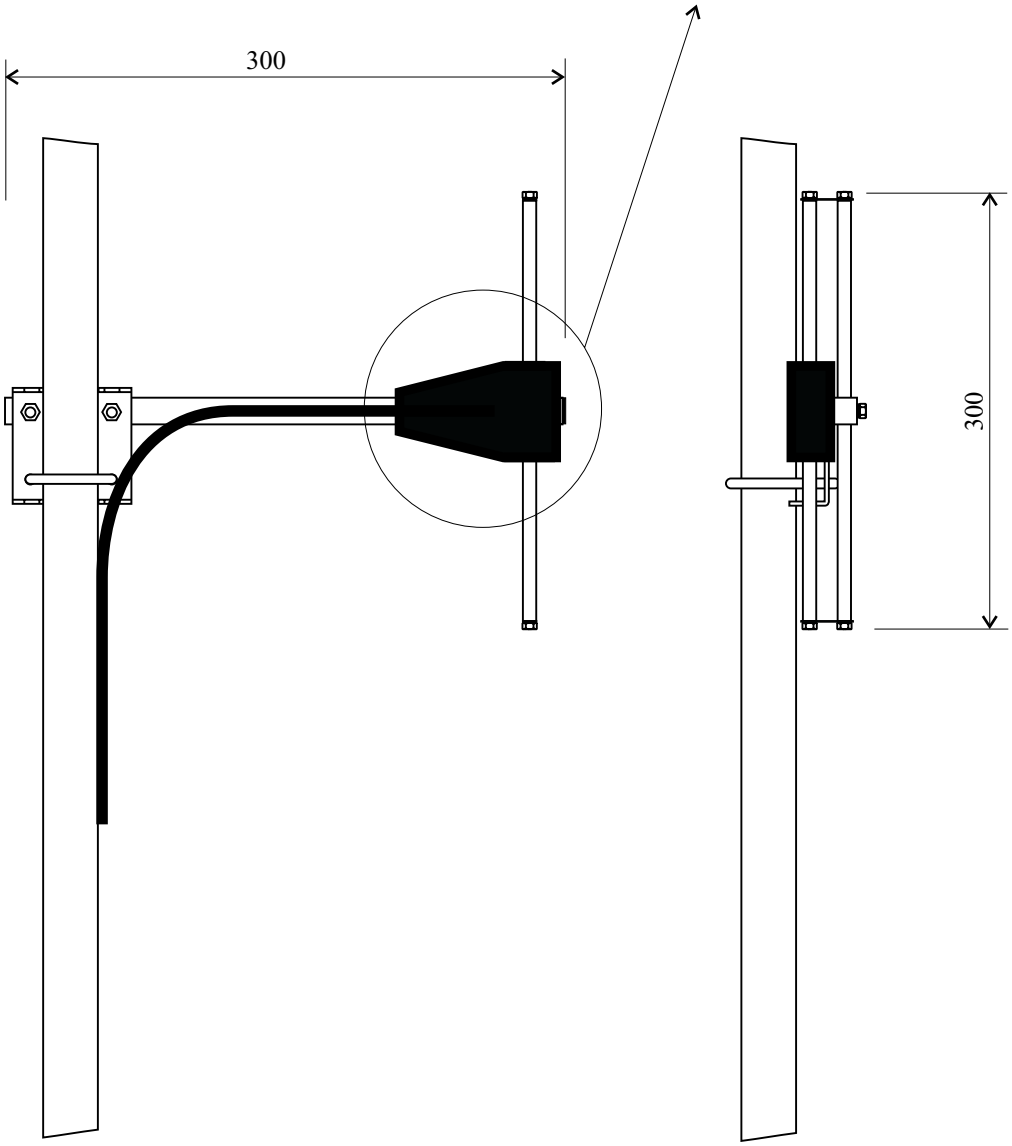
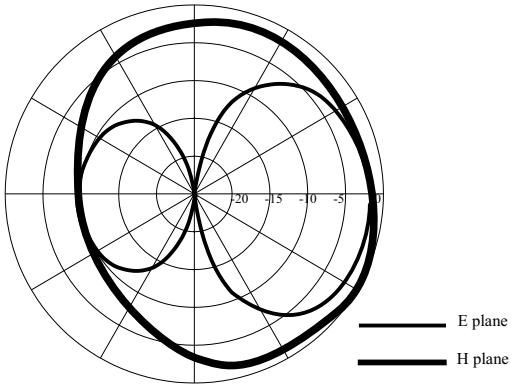
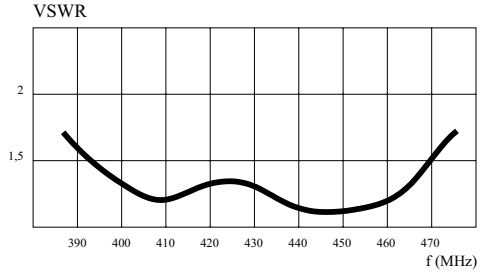



300
300


-20
-15
-10
-5
0
E plane
H plane


VSWR
2
1,5
390
400
410
420
430
440
450
460
470
f (MHz)

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AD-38/07

The family of wideband antennas AD-38 is composed of so called double folded dipoles primarily intended for use as stationary antennas on VHF and UHF frequency range. The antenna is composed of two folded dipoles mounted on common supporting boom. Each dipole has 1.5 m of coaxial cable type RG-213/U with N male type connector which must be connected on two-way power divider type APS-38/07-2. Such antenna system has elliptical horizontal radiation pattern with 3 dBd gain. With different combinations of several antennas a different radiation patterns with different gains could be easily achieved depending on our signal coverage requirement. Dipoles are made of aluminum alloy rod with 10 mm of diameter and mounted on square aluminum boom 20 x 20 mm together with mounting console enables the antenna to be mounted on antenna mast with external diameter up to 60 mm. All aluminium parts are transparent anodized enable long life and reliable work even in hardest climatic conditions.

TECHNICAL DATA	
Frequency range	390 - 475 MHz
Impedance	50 ohm
VSWR	< 1,8
Gain	3 dBd
Polarization	VERT.
Maximum power	200 W
Connector	N
Height	320 cm
Lenght	350 cm
Mass of antenna	2 kg

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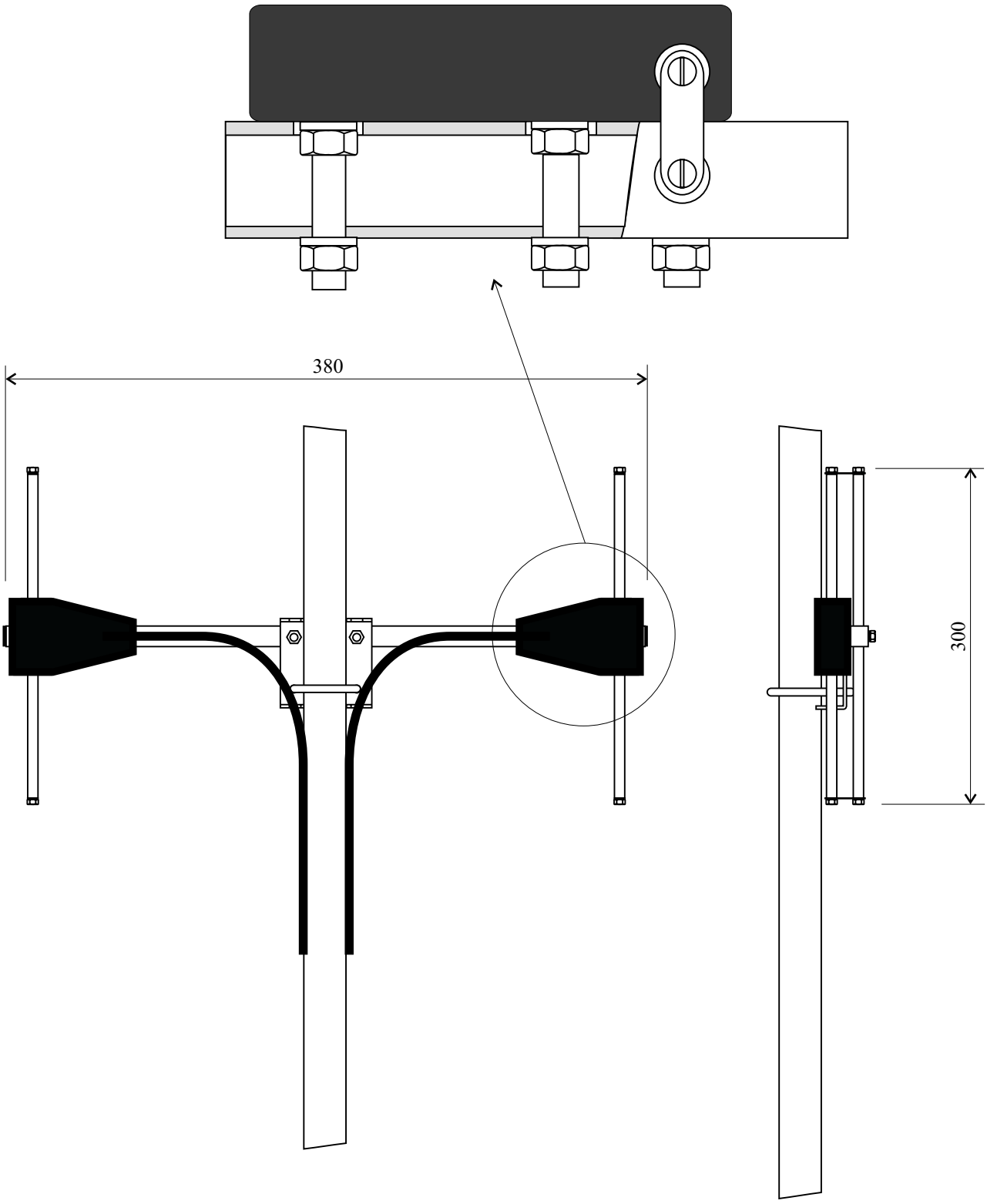
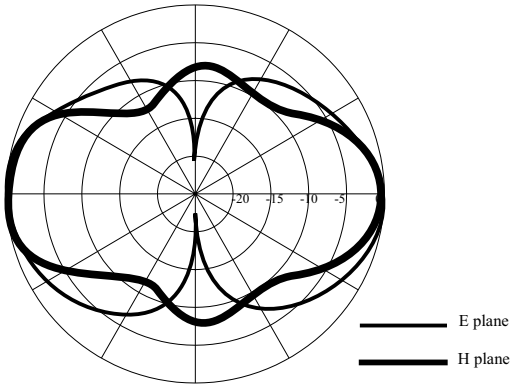
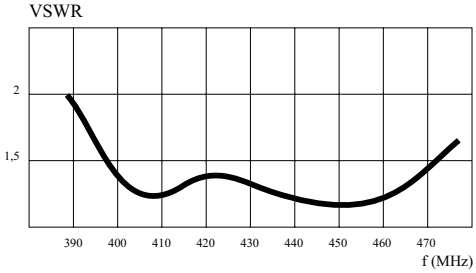

380
300


-20
-15
-10
-5
E plane
H plane


VSWR
2
1,5
390
400
410
420
430
440
450
460
470
f (MHz)

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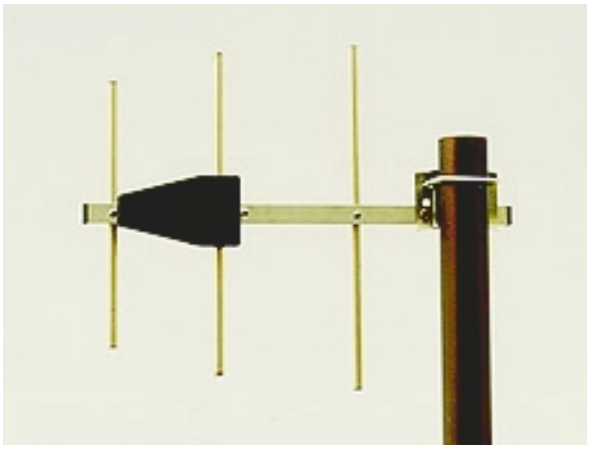
AD-40/07-3

The antenna AD-40/07-3 is 3-element yagi antenna, primarily intended for use on standard UHF frequency range from 390 to 475 MHz. The antenna is directional with 5 dBd gain. The radiator is made of folded dipole enables constant characteristics on whole frequency band. The elements are made of aluminum alloy rod with 10 mm diameter and inserted into aluminum square tube boom 20 x 20 mm. The mounting adapter is on back side of the boom enables using vertical or horizontal polarization as well. All joint elements are made of stainless steel and matching unit is built in plastic protective housing enable reliable work even in hardest climatic conditions. All metal parts are DC grounded.



TECHNICAL DATA	
Frequency range	390 - 475 MHz
Impedance	50 ohm
VSWR	< 1,8
Gain	5 dBd
Front to Back ratio	> 15 dB
Polarization	VERT./HOR.
Maximum power	100 W
Connector	FME, Nf
Width	35 cm
Length	42.5 cm
Mass of antenna	0.6 kg

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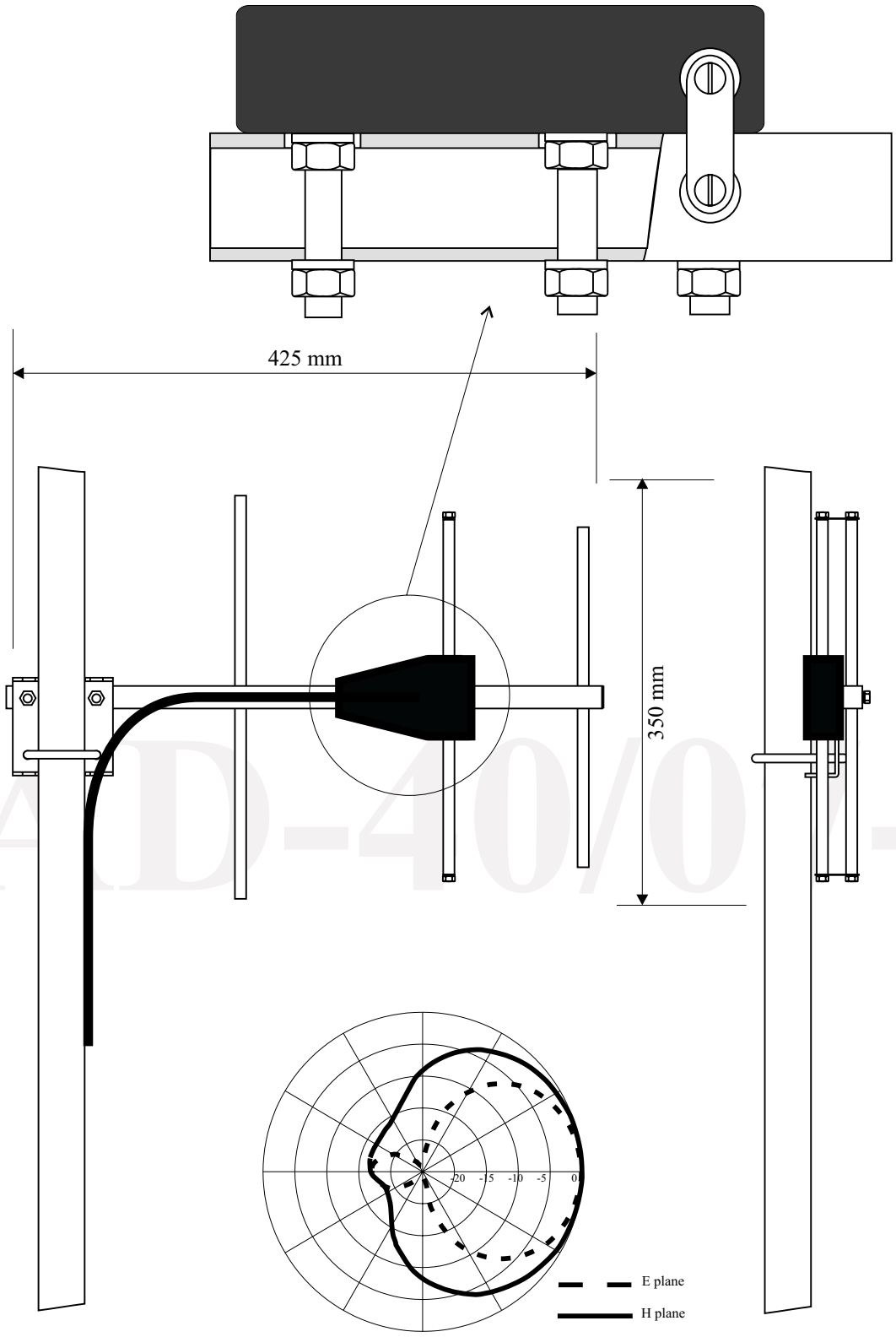
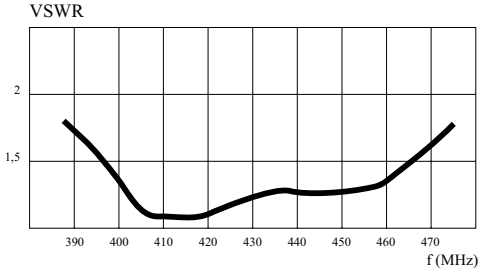

425 mm
350 mm

-20
-15
-10
-5
0
E plane
H plane


VSWR
2
1,5
390
400
410
420
430
440
450
460
470
f (MHz)

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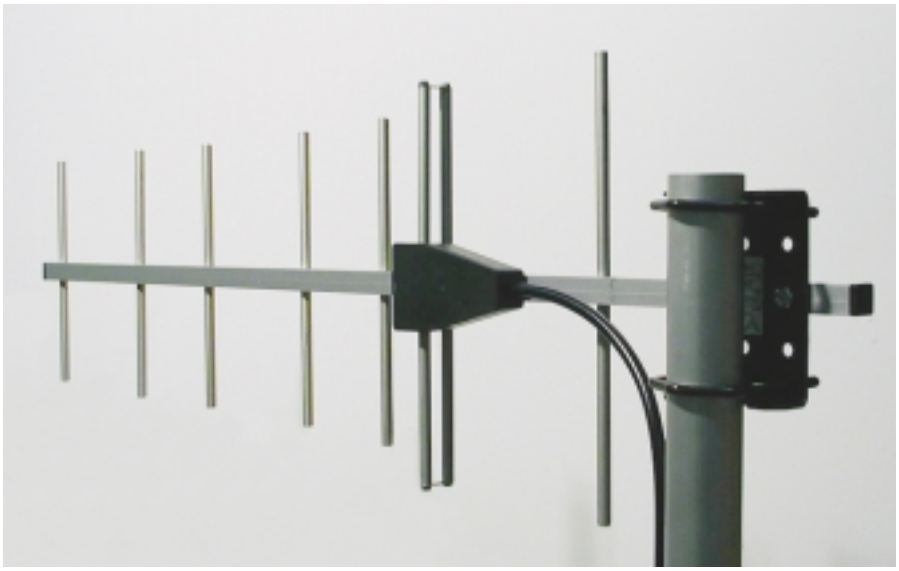
AD-40/07-7

The antenna AD-40/07-7 is 7-element yagi antenna, primarily intended for use on standard UHF frequency range from 390 to 475 MHz. The antenna is directional with 8.5 dBd gain. The radiator is made of folded dipole enables constant characteristics on whole frequency band. The elements are made of aluminum alloy with 10 mm diameter and inserted into aluminum square tube boom 20 x 20 mm. The mounting adapter is on back side of the boom enables using vertical or horizontal polarization as well. All joint elements are made of stainless steel and matching unit is built in a plastic protective housing enable reliable work even in hardest climatic conditions. All metal parts are DC grounded.



TECHNICAL DATA	
Frequency range	390 - 475 MHz
Impedance	50 ohm
VSWR	< 1,6
Gain	8,5 dBd
Front to Back ratio	> 20dB
Polarization	VERT./HOR.
Maximum power	100 W
Connector	1.5 m RG-213 + N
Width	35 cm
Length	105 cm
Mass of antenna	2,5 kg

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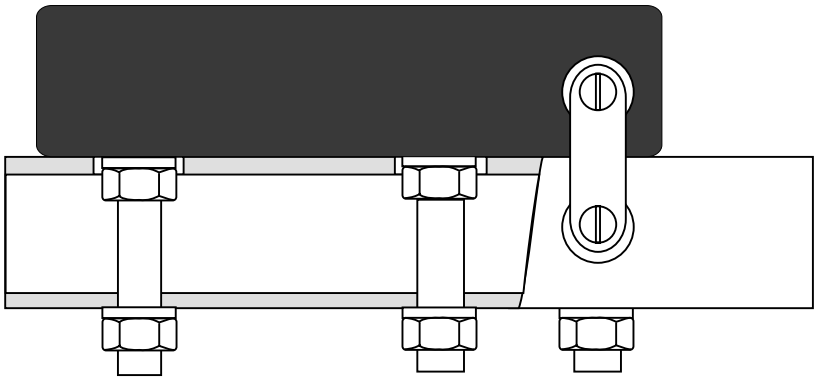
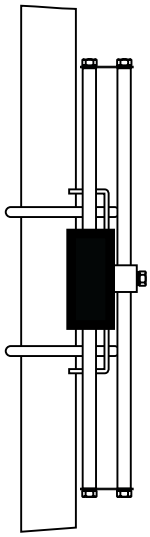
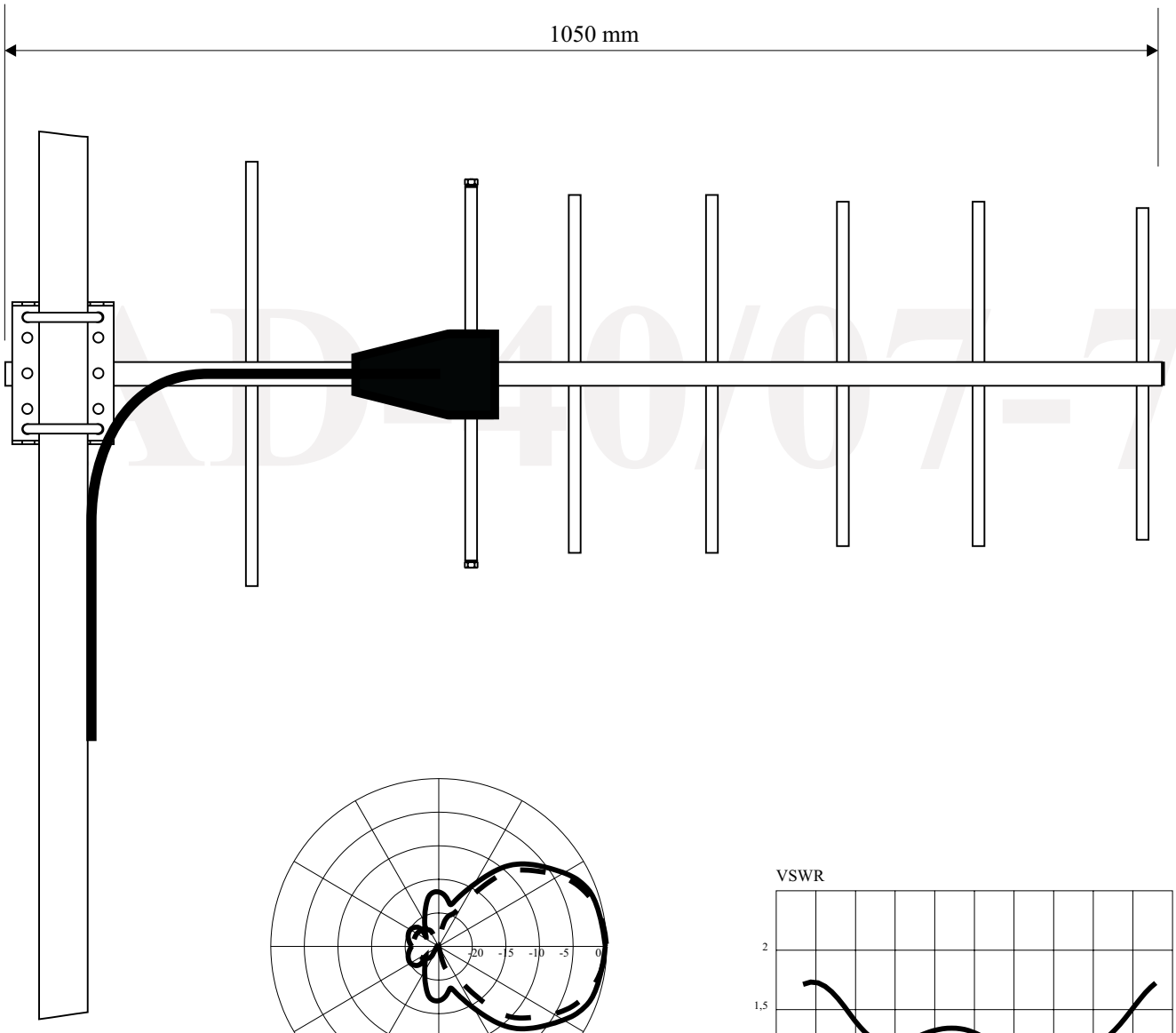
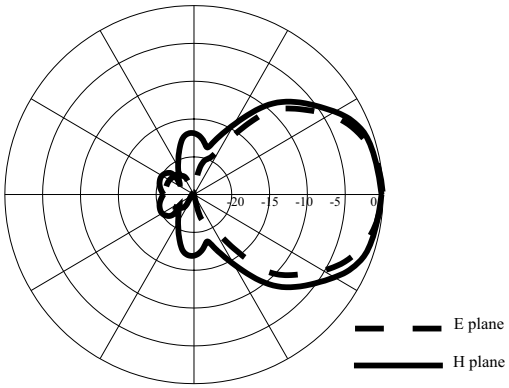
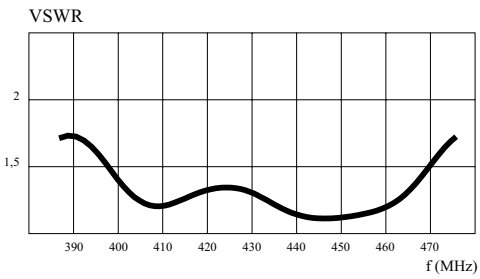





1050 mm


-20
-15
-10
-5
0
E plane
H plane


VSWR
2
1,5
390
400
410
420
430
440
450
460
470
f (MHz)

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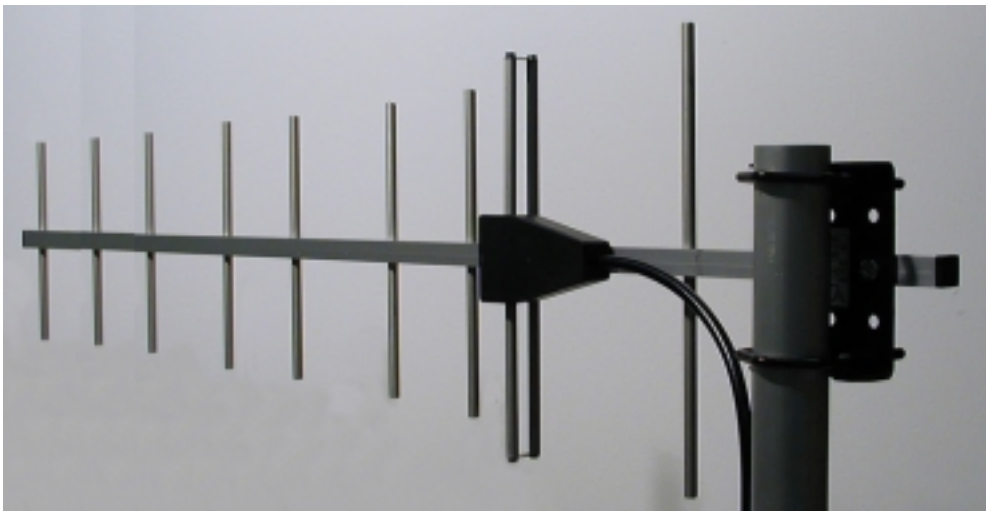
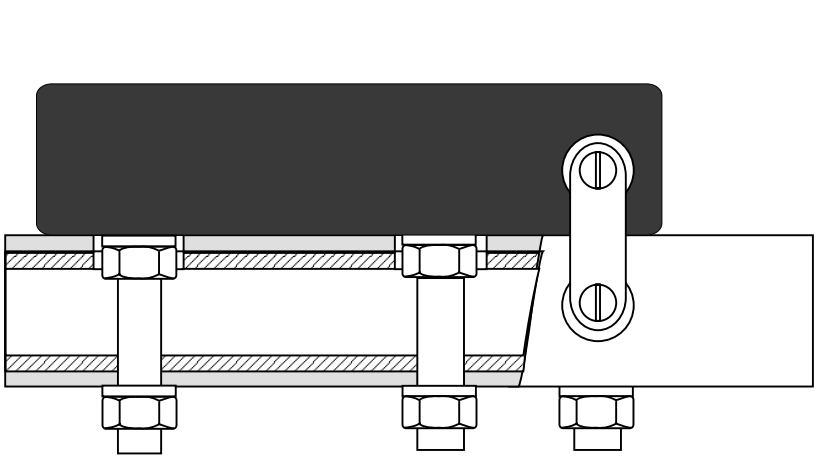
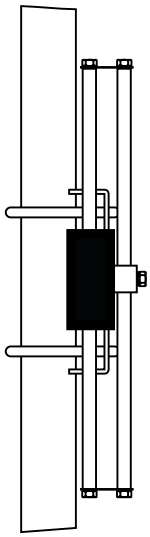
AD-40/07-9

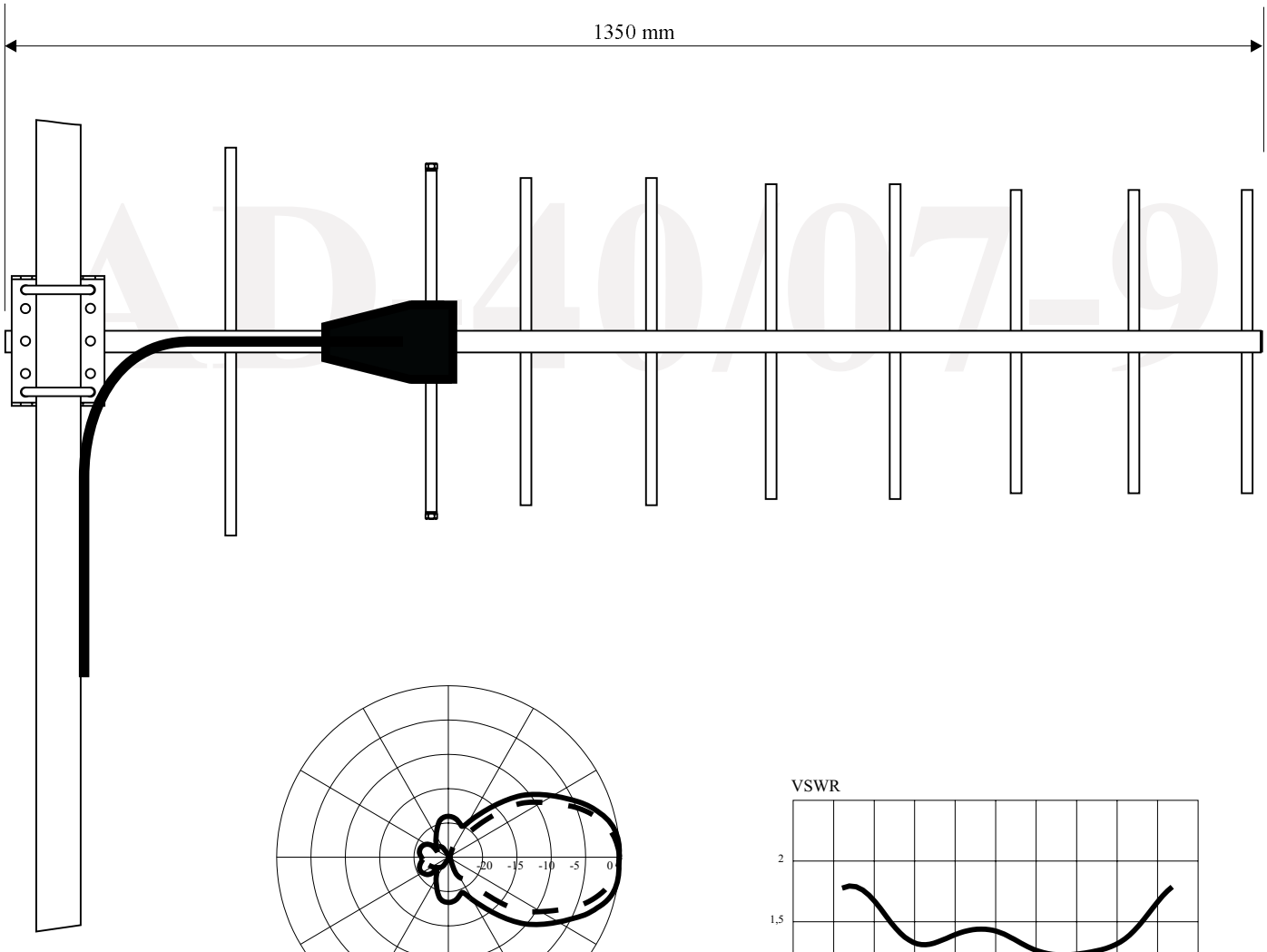
The antenna AD-40/07-9 is 9-element yagi antenna, primarily intended for use on standard UHF frequency range from 390 to 475 MHz. The antenna is directional with 10 dBd gain. The radiator is made of folded dipole enables constant characteristics on whole frequency band. The elements are made of aluminum alloy with 10 mm diameter and inserted into aluminum square tube boom 20 x 20 mm. The mounting adapter is on back side of the boom enables using vertical or horizontal polarization as well. All joint element are made of stainless steel and matching unit is built in plastic protective housing enable reliable work even in hardest climatic conditions. All metal parts are DC grounded.

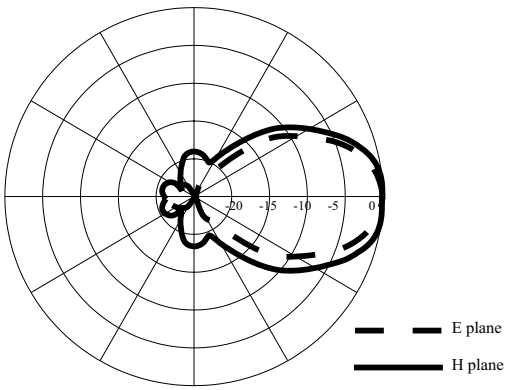


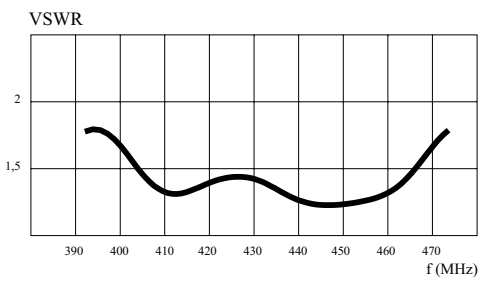
TECHNICAL DATA	
Frequency range	390 - 475 MHz
Impedance	50 ohm
VSWR	< 1.6
Gain	10 dBd
Front to Back ratio	> 20dB
Polarization	VERT./HOR.
Maximum power	200 W
Connector	1.5 m RG-213 + N
Width	35 cm
Length	135 cm
Mass of antenna	2.8 kg






1350 mm


-20
-15
-10
-5
0
E plane
H plane


VSWR
2
1,5
390
400
410
420
430
440
450
460
470
f (MHz)

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AD-72/D

The antenna AD-72/D is a collinear dipole for use with NMT phones on frequency range from 410 to 430 MHz for use on yachts and motor boats, where the antenna gain enhances quality of communication. The antenna is electrically designed as half-wave collinear "J" type dipole allowing mounting on nonmetallic surfaces and by two-way swivel mount we could mount the antenna on inclined surfaces. The radiating elements are enclosed in a tube made of composite material. The antenna comprises also 6 m of low-loss coaxial cable H-155 and the coaxial connector TNC male.

TECHNICAL DATA	
Frequency range	410 - 430 MHz
Impedance	50 ohm
VSWR	<1,6
Gain	3 dBd
Polarization	VER.
Maximum power	50 W
Connector	TNC
Height	1,4 m
Mass	360 g
Wind velocity	180 km/h

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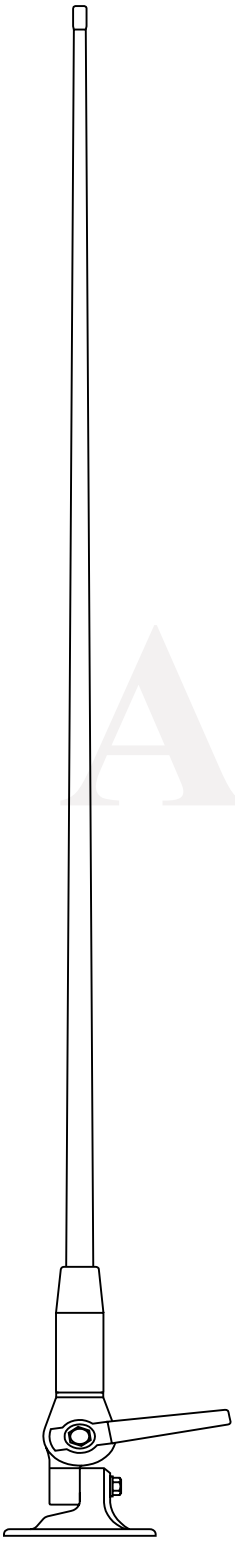
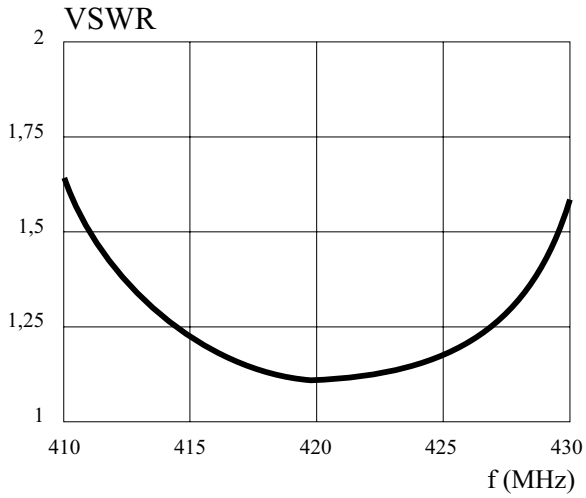
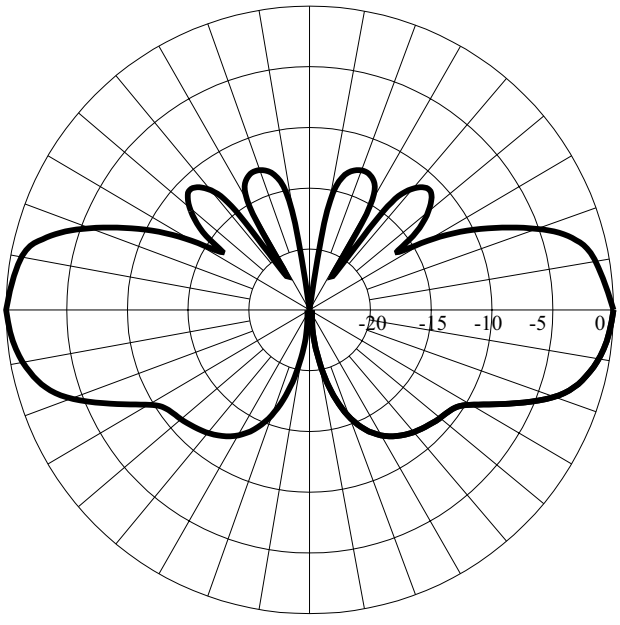




VERTICAL
RADIATION DIAGRAM



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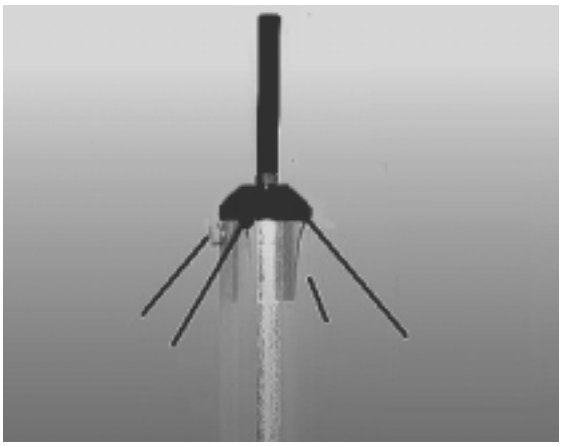
AD-34/35-A

The family of antennas type AD-34 represents antennas type “ground plane” intended for use on VHF and UHF frequency range. The antenna type AD-34/35-A is also GP antenna composed of junction head, four radial elements and radiator, electrically quarter wave long. All antenna types have junction head made of aluminum alloy and radiating elements made of strong stainless steel black coated rods. Instead of simple and lightweight construction the antennas are also usable in hard climatic conditions. The antenna could be mounted on standard metal 1 1/4” water pipe or some appropriate combination of mounting elements from our program could be used.



TECHNICAL DATA	
Frequency range	810-960 MHz
Impedance	50 ohm
VSWR	<2 (fo +/- 5%fo)
Gain	0 dBd
Polarization	VERT.
Maximum power	100 W
Connector	N
Height	130 mm
Mass of antenna	0.3 kg

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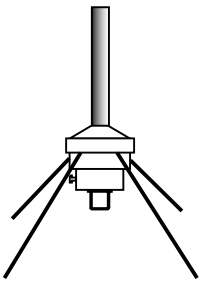
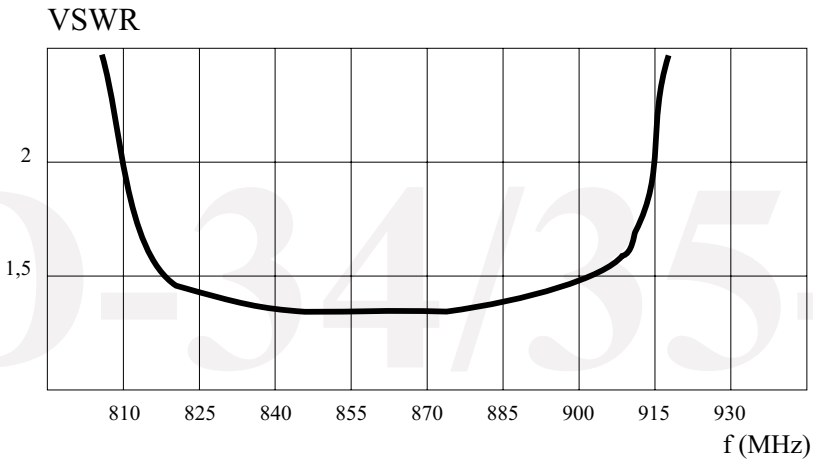
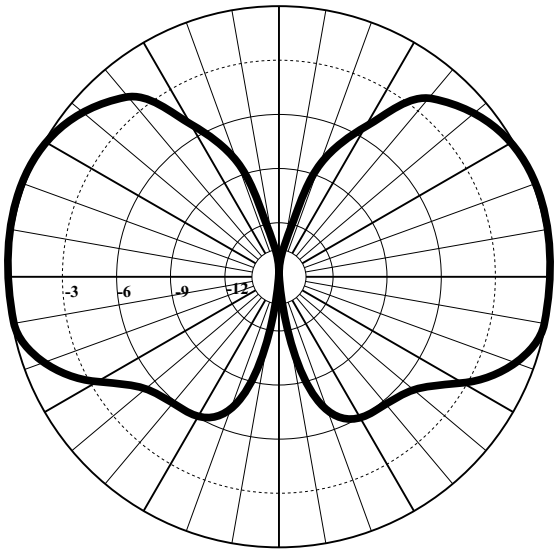




VERTICAL RADIATION PATTERN



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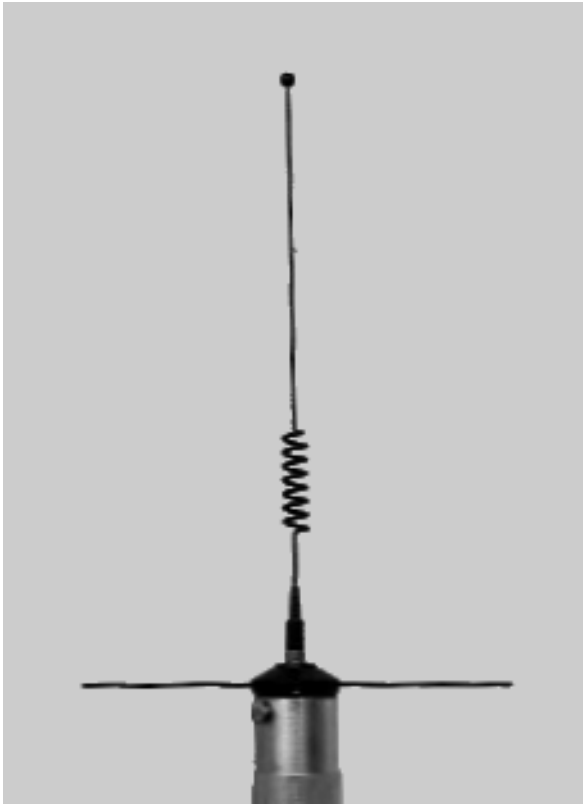
AD-34/35-G

The family of antennas type AD-34 represents antennas type “ground plane” intended for use on VHF and UHF frequency range. The antenna type AD-34/35-G is also GP antenna composed of junction head, four horizontally placed radial elements and collinear radiator (1/4+1/2 wave long), enables 4 dBd gain. All antenna types have junction head made of anodized aluminum alloy and radiating elements made of strong stainless steel black coated rods. Instead of simple and lightweight construction the antennas are also usable in hard climatic conditions. The antenna could be mounted on standard metal 1 1/4” water pipe or some appropriate combination of mounting elements from our program could be used.



TECHNICAL DATA	
Frequency range	890 - 960 MHz
Impedance	50 ohm
VSWR	< 1,8
Gain	4 dBd
Polarization	VERT.
Maximum power	100 W
Connector	N
Height	29 cm
Mass of antenna	0.15 kg

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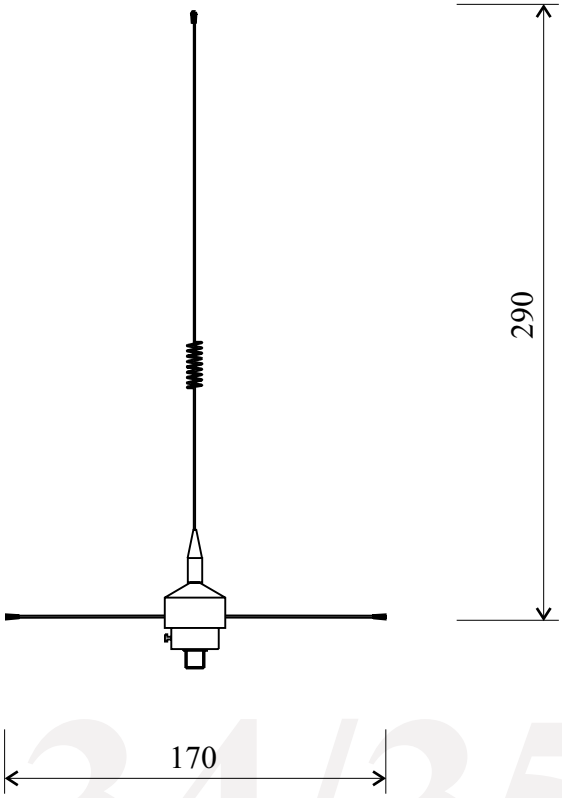

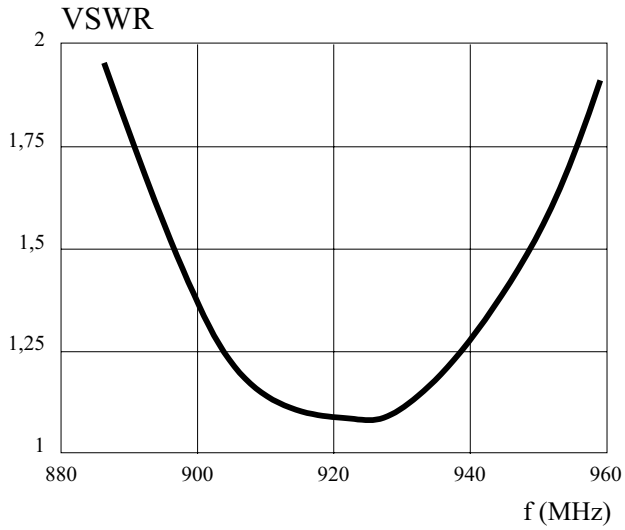

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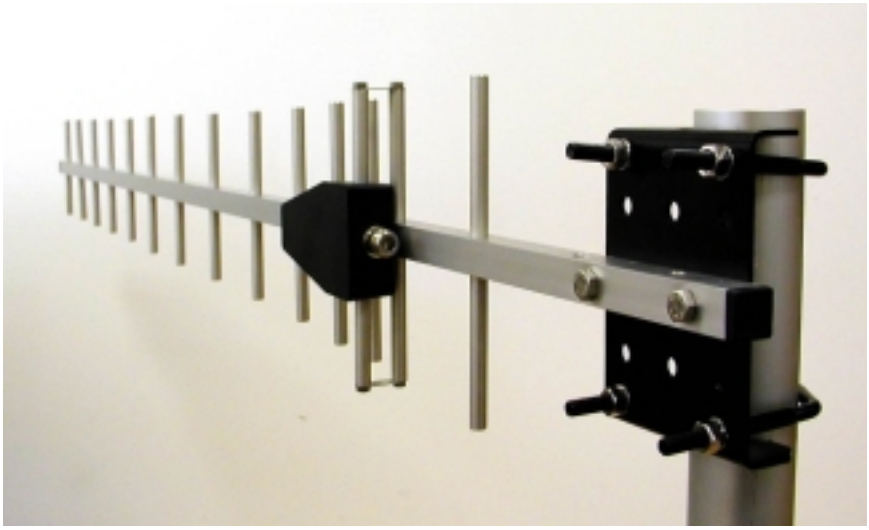
AD-40/722-14

The antenna AD-40/722-14 is 14-element yagi antenna, intended for use on UHF frequency range from 698 to 746 MHz. The antenna is directional with 13 dBd gain. The radiator is made of folded dipole enables constant characteristics on whole frequency band. The elements are made of transparent anodized aluminum alloy rods with 10 mm diameter and inserted into aluminum square tube boom 20 x 20 mm. The mounting adapter is on the back side of the boom enables using vertical or horizontal polarization as well. All joint elements and mounting adapter are made of stainless steel and matching unit is built in a plastic protective housing enable reliable work even in hardest climatic conditions. All metal parts are DC grounded.



TECHNICAL DATA	
Frequency range	698 - 746 MHz
Impedance	50 ohm
VSWR	< 1.8
Gain	13 dBd
Front to Back ratio	> 15 dB
Polarization	VERT./HOR.
Maximum power	100 W
Connector	N female
Width	21 cm
Length	160 cm
Mounting Pipe Diam.	25 - 60 mm
Mass of antenna	1.8 kg

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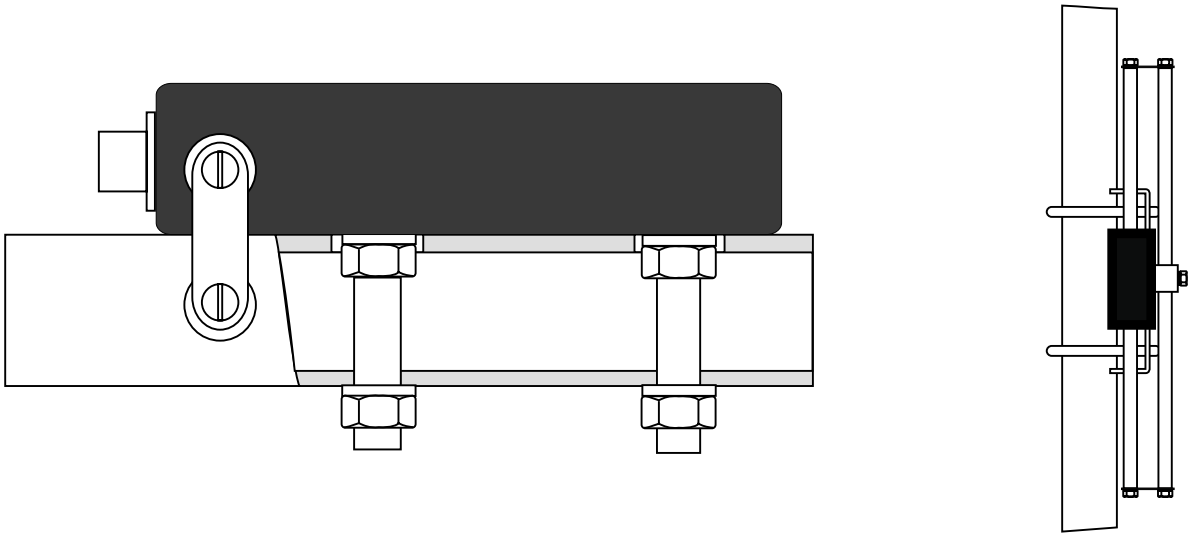
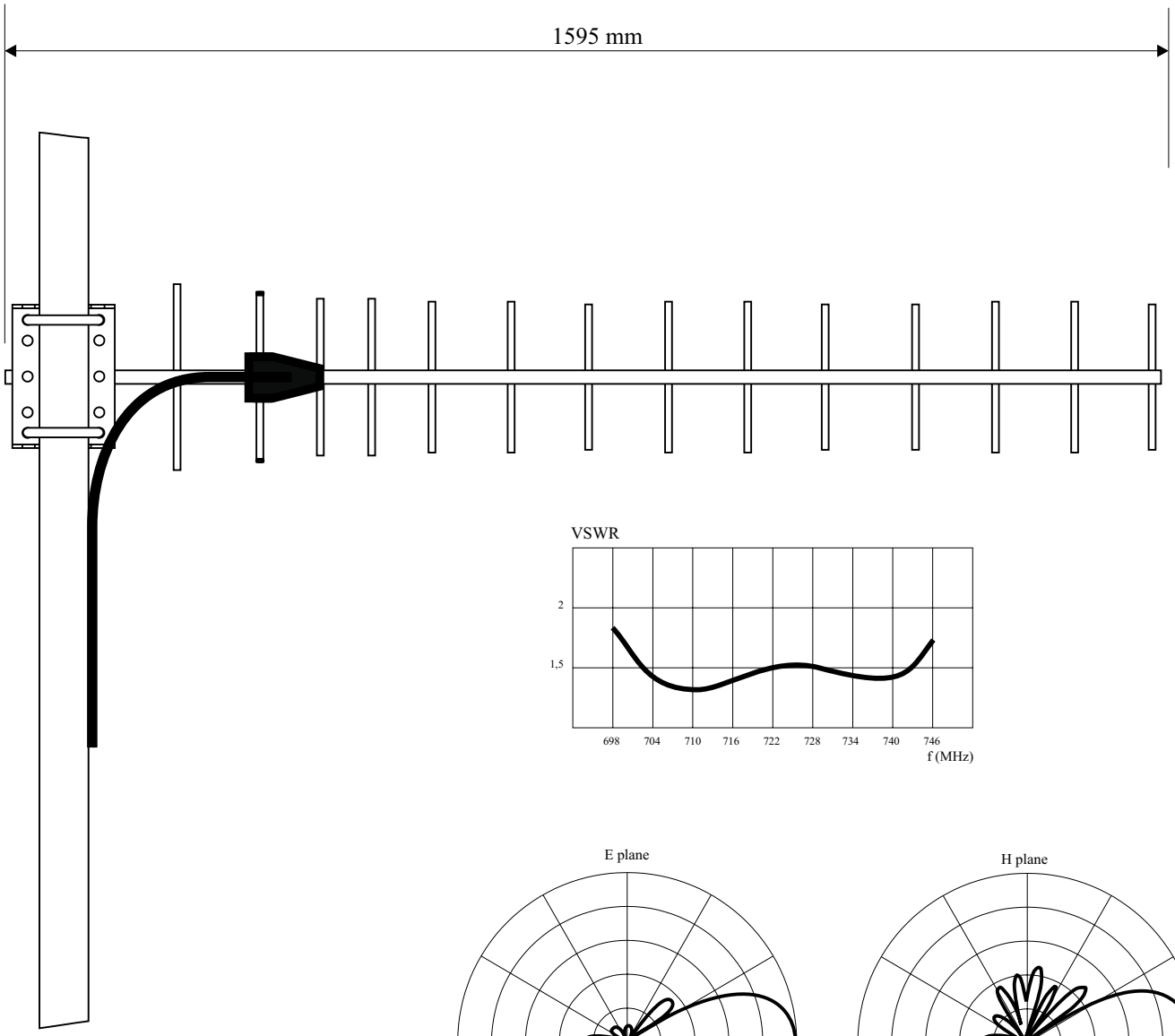
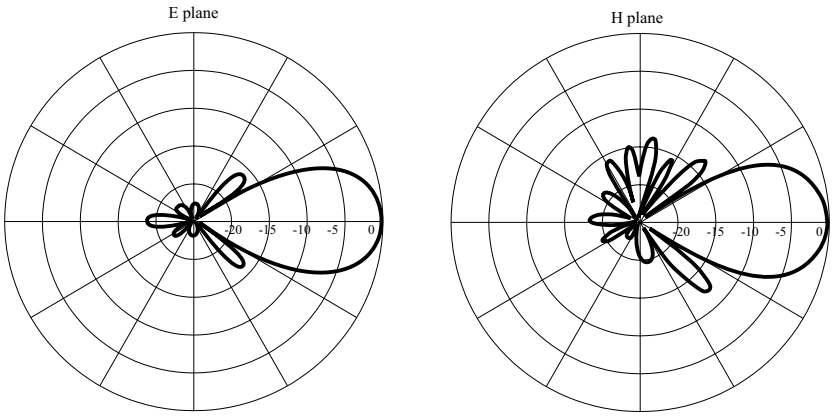



1595 mm

VSWR
2
1,5
698
704
710
716
722
728
734
740
746
f (MHz)


E plane
H plane
-20
-15
-10
-5
0

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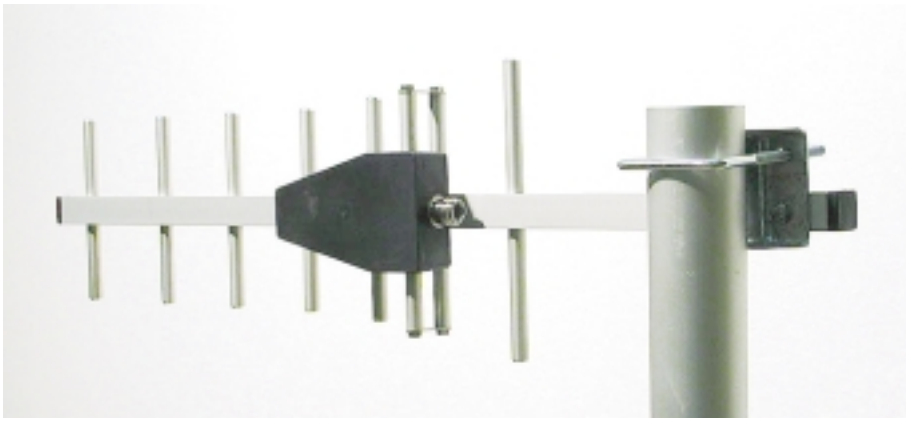
AD-40/35-7

The antenna AD-40/35-7 is 7-element yagi antenna, primarily intended for use on UHF frequency range from 810 to 960 MHz. The antenna is directional with 8,5 dBd gain. The radiator is made of folded dipole enables constant characteristics on whole frequency band. The elements are made of aluminum alloy with 10 mm diameter and inserted into aluminum square tube boom 20 x 20 mm. The mounting adapter is on back side of the boom enables using vertical or horizontal polarization as well. All joint elements are made of stainless steel and matching unit is built in plastic protective housing enable reliable work even in hardest climatic conditions. All metal parts are DC grounded.



TECHNICAL DATA	
Frequency range	810 - 960 MHz
Impedance	50 ohm
VSWR	< 1,6
Gain	8,5 dBd
Front to Back ratio	> 20dB
Polarization	VERT./HOR.
Maximum power	100 W
Connector	N female
Width	18 cm
Length	64 cm
Mass of antenna	1 kg

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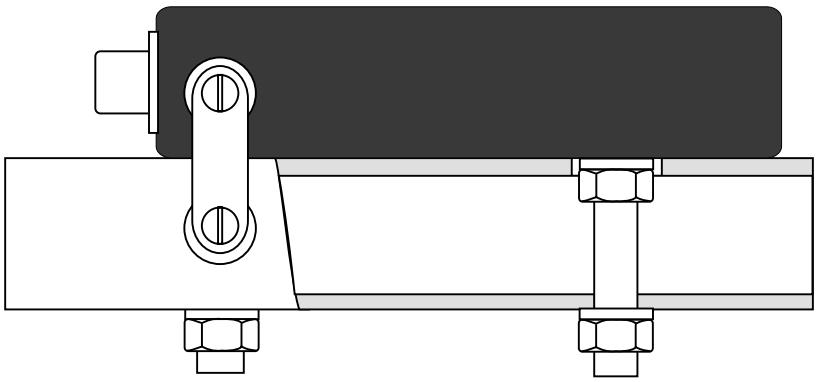
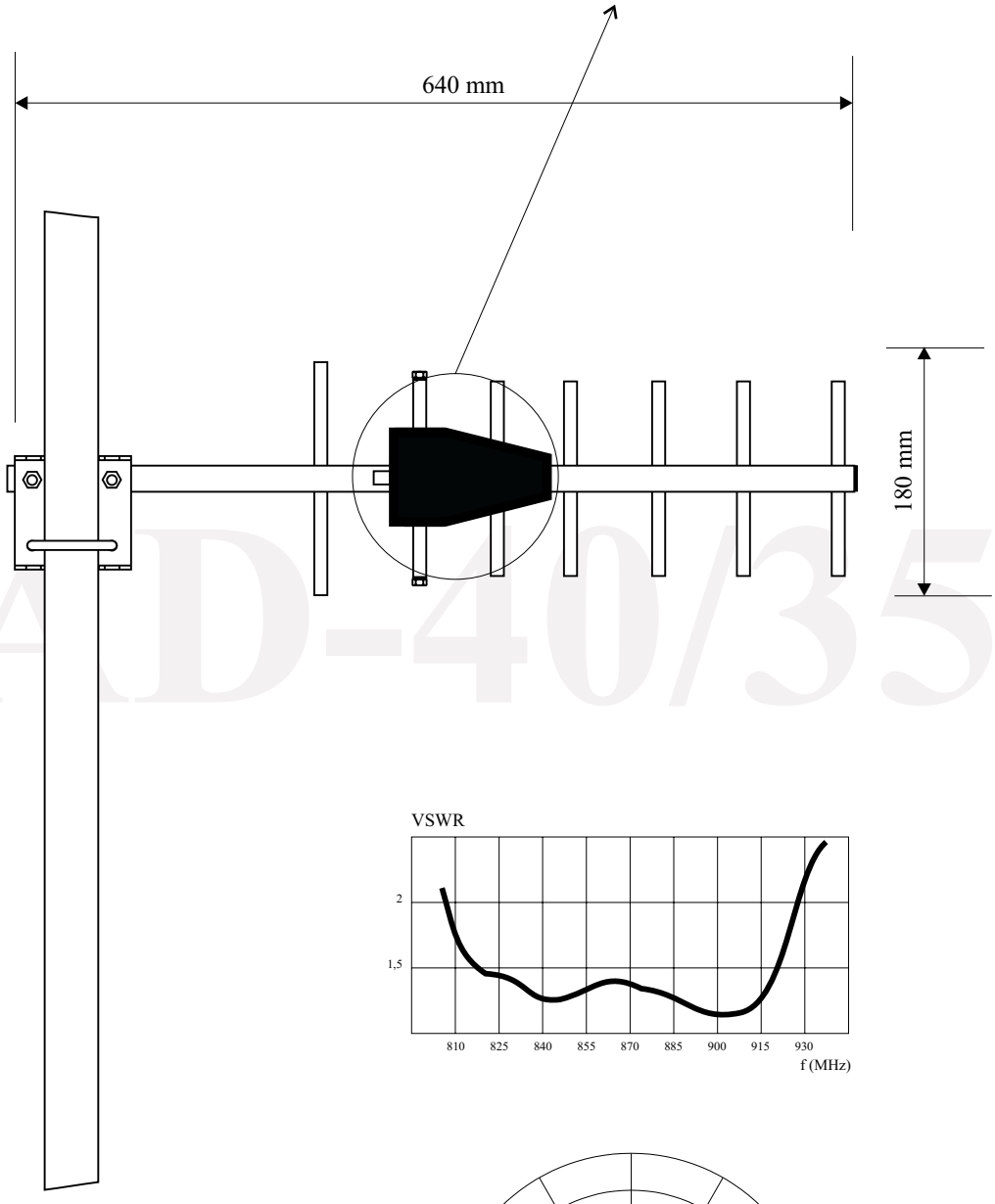
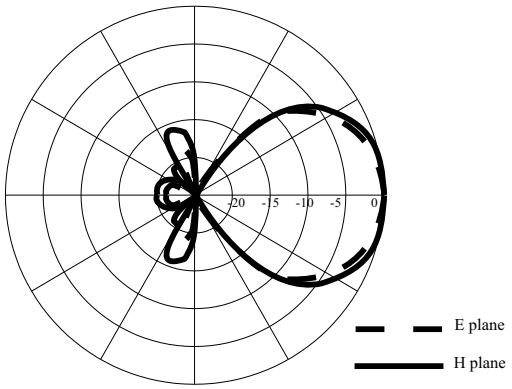



640 mm
180 mm

VSWR
2
1,5
810
825
840
855
870
885
900
915
930
f (MHz)


-20
-15
-10
-5
0
E plane
H plane

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AD-72/E

The antenna AD-72/E is a collinear dipole for use on frequency range from 890 to 960 MHz and it is primarily intended for marine use with GSM phones. The antenna is electrically designed as two-element collinear dipole enables 4-5 dBi gain over the frequency range. All antenna elements are enclosed in a tube, made of composite material (fiberglass), ensuring excellent resistance against atmospheric influences. The antenna could be mounted on the top of the mast through the stainless steel console. The antenna also comprises 6 m of H-155 low loss coaxial cable and terminating coaxial connector type FME female. All metal parts of the antenna are DC grounded.

TECHNICAL DATA	
Frequency range	890 - 960 MHz
Impedance	50 ohm
VSWR	< 1,8
Gain	3 dBd
Polarization	vertical
Maximum power	50 W
Cable	6 m H-155
Connector	FME female
Height	500 mm
Mass	0,2 kg
Materials used	
- Radome material	Fiberglass
- Radiating elements	Brass
- Mounting console	Stainless Steel
Wind velocity	180 km/h

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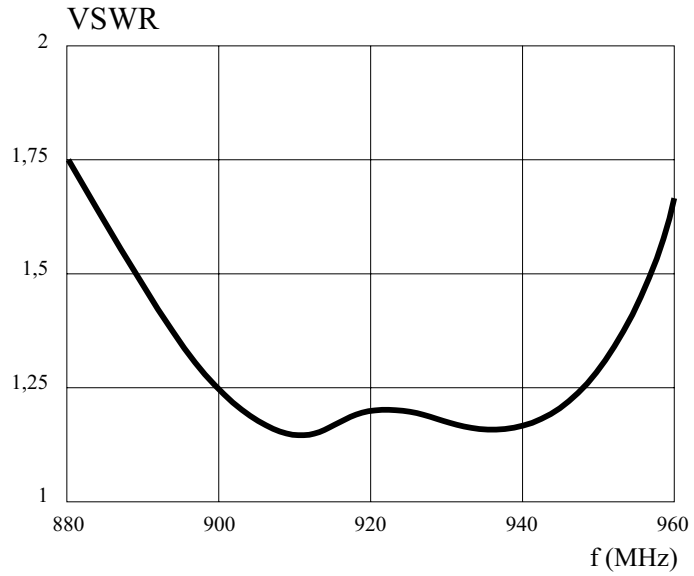
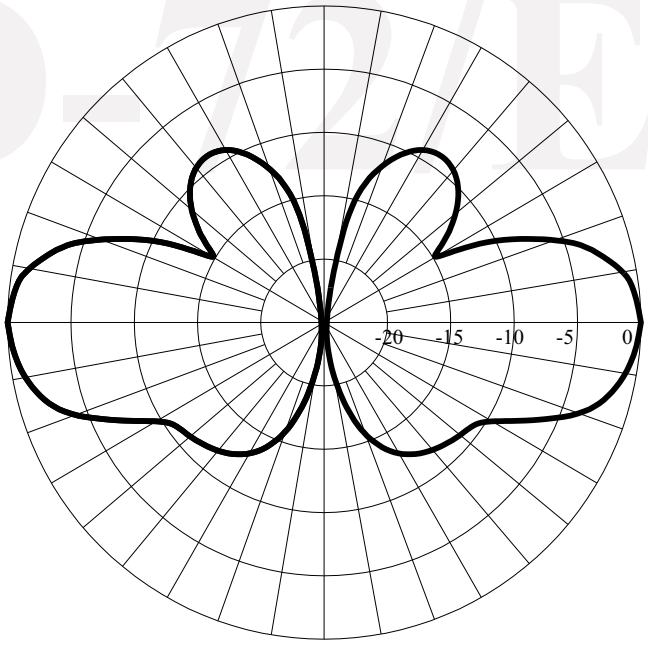
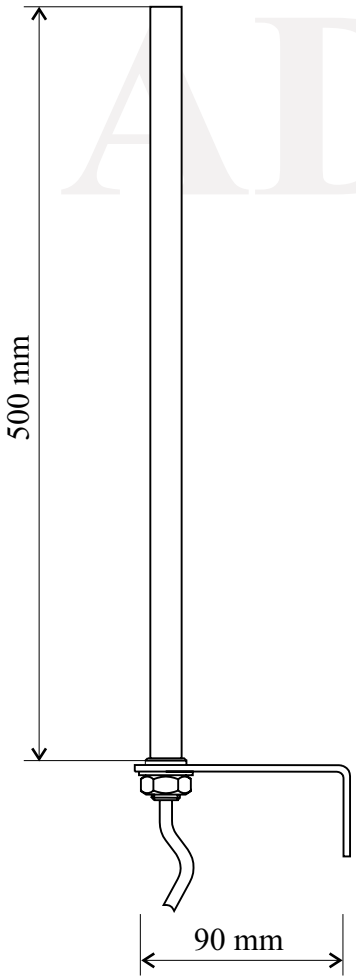


VERTICAL
RADIATION DIAGRAM





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MOBILE ANTENNAS

Mobile antennas are composed of the family of antenna radiators type ADS-21, fixed mounts type ADN-21 and magnet mounts type ADM-21. The antenna radiators are made of Stainless Steel or composite material (fiberglass) and painted with black protective paint, all covering the frequency range from 27 MHz (CB) to 900 MHz (GSM). Main advantage of the all family is beside quality materials and simple use also simple combining of different types of the radiators with different types of the mounts through M6 screw joint (male on the mount side and female on the radiator side). In that way user could easily combine the appropriate radiator with different mount according to his requirements. All the mounts are equipped with coaxial cable type RG-58 terminated with connector type FME on which we could easily fit different adapters from FME to PL 259, BNC, TNC, N, MINI UHF or SMA.

TECHNICAL DATA antennas	**ADS-21/ 07-A**	**ADS-21/ 07-B**	**ADS-21/ 07-D**	**ADS-21/ 35-A**
Antenna type	collinear	5/8	1/4	collinear
Frequency	380 - 480	380 - 480	410 - 480	890-960
Impedance	50	50	50	50
VSWR	1.2	1.2	1.2	1.2
GAIN	4 dB	3 dB	0 dB	4 dB
Bandwith (MHz at SWR<2)	15	15	55	80
Material	SS	SS	SS	SS
Colour	black	black	black	black
Height	560 mm	450 mm	140 mm	275 mm

TECHNICAL DATA mounts	**ADN-21/1**	**ADN-21/2**	**ADM-21/ MA6**	**ADM-21/ MI6**
Mount type	fixed bendable	fixed with swivel	magnet 90 mm-swivel	magnet 60 mm
Colour	black	black	black	black
Cable	5 m RG-58	5 m RG-58	3.5 m RG-58	3 m RG-58
Radiator joint	screw M6	screw M6	screw M6	screw M6
Height	40 mm	42 mm	80 mm	58 mm
Weight w. cable	250 gr.	250 gr.	750 gr.	350 gr.

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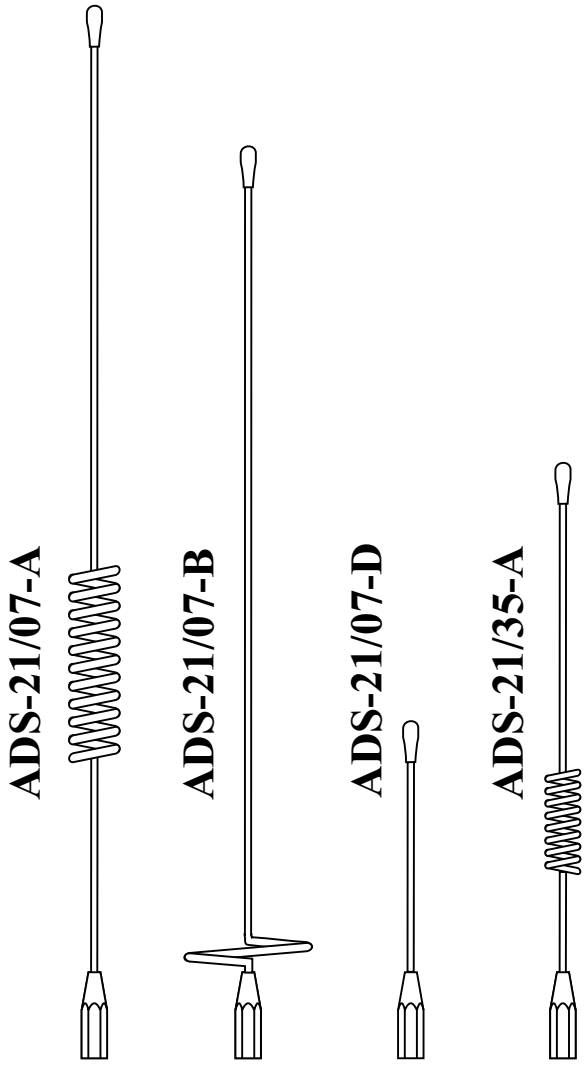
ADN-21/1

ADN-21/2

ADM-21/MI6

ADM-21/MA6

ADK-21/1



TELESCOPIC MASTS STV

winch driven

trival antene d.o.o.

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TELESCOPIC WINCH OPERATED MASTS SERIES STV
DESIGNED FOR HARSHEST MILITARY ENVIRONMENT OPERATIONS

Telescopic winch operated masts series **STV** are designed on a basis of many years of experience in development and production of antennas and antenna masts and on a basis of knowing and considering the needs and demands of the end users in the era of modern wireless telecommunications.

The family of telescopic masts STV consists carefully selected modern materials and technologies and considerate design, functionality and simplicity of use. With all that features the family of the masts STV are suitable for use on the field as well as on the vehicles also in hardest environmental conditions.

The mast is basically composed of telescopic sections made of **composite material ("fiberglass")** by use the process of "pultrusion". By use of that technology all the fibres are placed longitudinally along the section enable excellent stability with high degree of elasticity. Certain fiberglass layer is also wounded radially during the pultrusion process enables high degree of radial hardness. The masts STV meet environmental requirements in accordance with **MIL-STD-810**.

The sections have four special **longitudinal guidways** placed equally outside and made during the process of pultrusion enable excellent guidance when raising and lowering of the masts as well as additionally longitudinal stability. The guidways ensure that the mast is **axially joined together** prevent the various sections from turning which allows us to easily turn the whole mast in the case of using directional antennas. On the end of the sections are special slide-joints made of durable polyacetal with low weight and excellent mechanical characteristics.

Erection of the mast is enabled with **removable hand operated winch** with cogwheel transmission and with system of strong polyester-aramide reinforced belts guided between the sections. During the erection we put the belt into the winch wheel and wind it with crank arm, which lifts the sections up. For lowering the mast we simply turn the crank arm in the opposite direction without any need of hand switching which is done by built-in **automatic switch mechanism**. The winch has built-in **automatic safety brake** to protect the operator in the case of heavier loads.

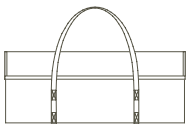
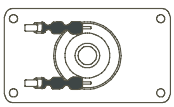
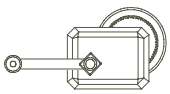
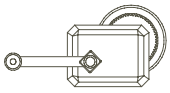
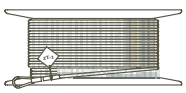
The telescopic mast STV has all accessories need for field erection: anchors, guying ropes (made of DYNEEMA material), hammer, etc., together with special cross-bar with eye-anchor intended to fix the mast in specific direction, the base plate with safety chain attachments and extension aluminium tube with grounding screw for antenna attachment. All the accessories are stored in separate linen bags. The mast alone has also linen cap for top sections protection.

The telescopic masts series **STV are applicable also for mobile use** mounted on vehicles. For this purpose a special mounting kit is available, composed of base plate element and side bracket.

TECHNICAL SPECIFICATIONS

STV-	8/105	10/105	12/105	15/105	8/128	10/128	12/128	15/128	18/128
System height (m)	8	10	12	15	8	10	12	15	18
Mast height (m)	7.5	9.5	11.5	14.5	7.5	9.5	11.5	14.5	17.5
Retracted length (m)	2.0	2.3	2.7	3.2	2.0	2.3	2.7	3.2	3.7
Bottom section diam. (mm)	105	105	105	105	128	128	128	128	128
Top section diam. (mm)	50	50	50	50	71.5	71.5	71.5	71.5	71.5
Extension tube length (mm)	500	500	500	500	500	500	500	500	500
Max. vertical top load (kg)	25	25	25	25	35	35	35	30	30
Max. wind area CxA (m^2)	0.5	0.35	0.4	0.35	0.8	0.7	0.8	0.8	0.6
Max. horizontal top load (N)	360	250	287	250	570	500	570	570	430
Max. operational wind speed (km/h)	120	120	120	120	120	120	120	120	120
Max. survival wind speed (km/h)	160	160	160	160	160	160	160	160	160
Guy radius (m)	7	7	8-10	10-12	7	7	8-10	10-12	10-12
No. of quys x levels	4 x 2	4 x 2	4 x 3	4 x 3	4 x 2	4 x 2	4 x 3	4 x 3	4 x 3
No. of sections	6	6	6	6	6	6	6	6	6
Mast weight (kg)	20.5	21.5	23	25	24.5	26.5	29	35	41.5
Accessories weight (kg)	24	24	33	35	27.5	27.5	36.5	38	38

ACCESSORIES - SPECIFICATION

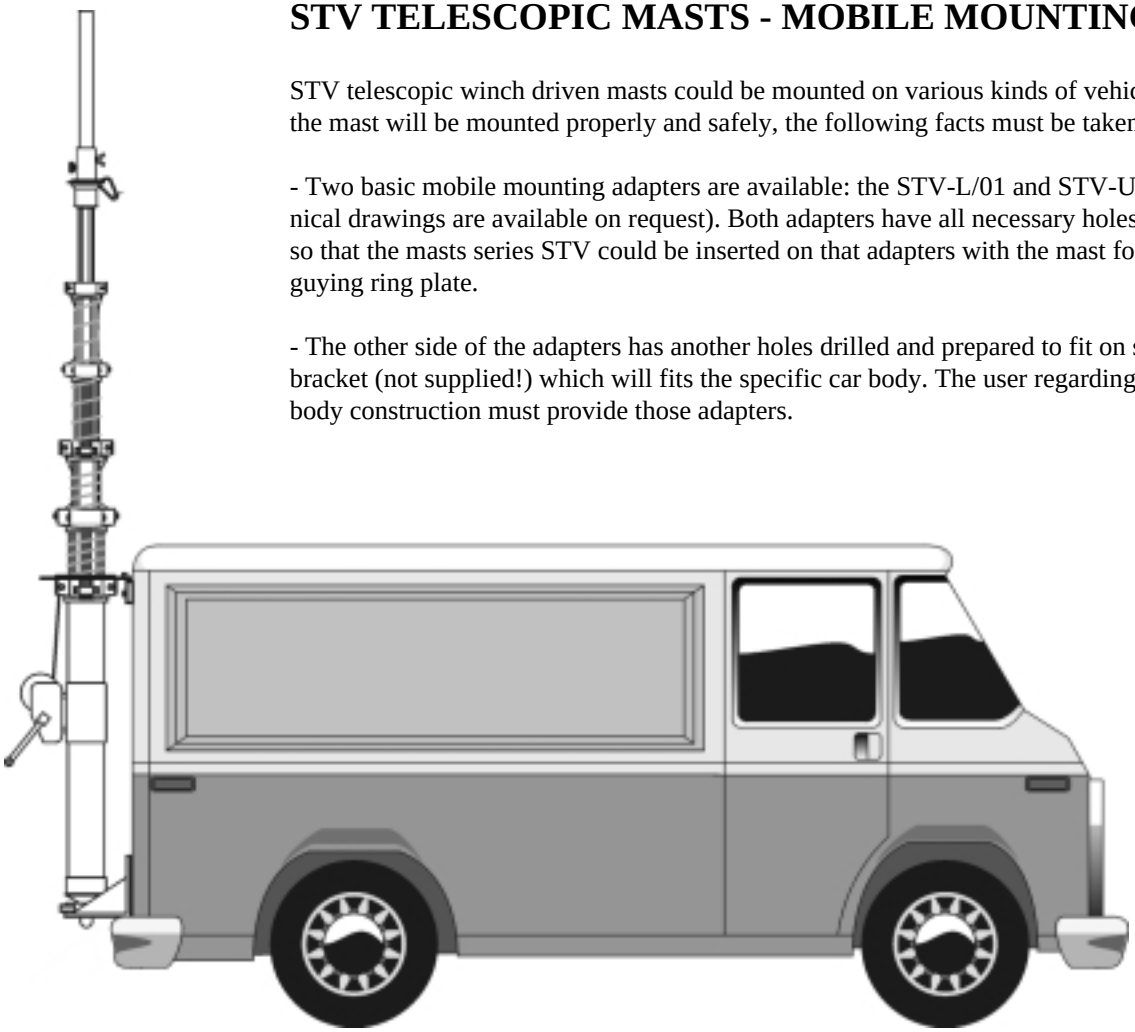
	8/105	10/105	12/105	15/105	8/128	10/128	12/128	15/128	18/128
 **BAG**	1	1	2	2	1	1	2	2	2
 **GUY ANCHOR 650**	4	4	8	8	4	4	8	8	8
 **EYEBAR**	1	1	1	1	1	1	1	1	1
 **BASE PLATE ANCHOR**	3	3	3	3	3	3	3	3	3
 **HAMMER**	1	1	1	1	1	1	1	1	1
 **BASE PLATE**	1	1	1	1	1	1	1	1	1
 **WINCH 501**	1	1	1	1	-	-	-	-	-
 **WINCH 651**	-	-	-	-	1	1	1	1	1
GUYING ROPE									
 **ZT-1**	4	4	4	-	4	4	4	-	-
ZT-2	4	4	4	4	4	4	4	4	4
ZT-3	-	-	4	4	-	-	4	4	4
ZT-4	-	-	-	4	-	-	-	4	4
MEAS. ROPE									
 **MR-7**	1	1	-	-	1	1	-	-	-
MR-8-10	-	-	1	-	-	-	1	-	-
MR-10-12	-	-	-	1	-	-	-	1	1
 **EXTENSION TUBE 50/50**	1	1	1	1	1	1	1	1	1

STV TELESCOPIC MASTS - MOBILE MOUNTING

STV telescopic winch driven masts could be mounted on various kinds of vehicles. To ensure that the mast will be mounted properly and safely, the following facts must be taken into account:

- Two basic mobile mounting adapters are available: the STV-L/01 and STV-U/01(detailed technical drawings are available on request). Both adapters have all necessary holes and fittings made so that the masts series STV could be inserted on that adapters with the mast foot and the first guying ring plate.

- The other side of the adapters has another holes drilled and prepared to fit on special mounting bracket (not supplied!) which will fits the specific car body. The user regarding the specific car body construction must provide those adapters.

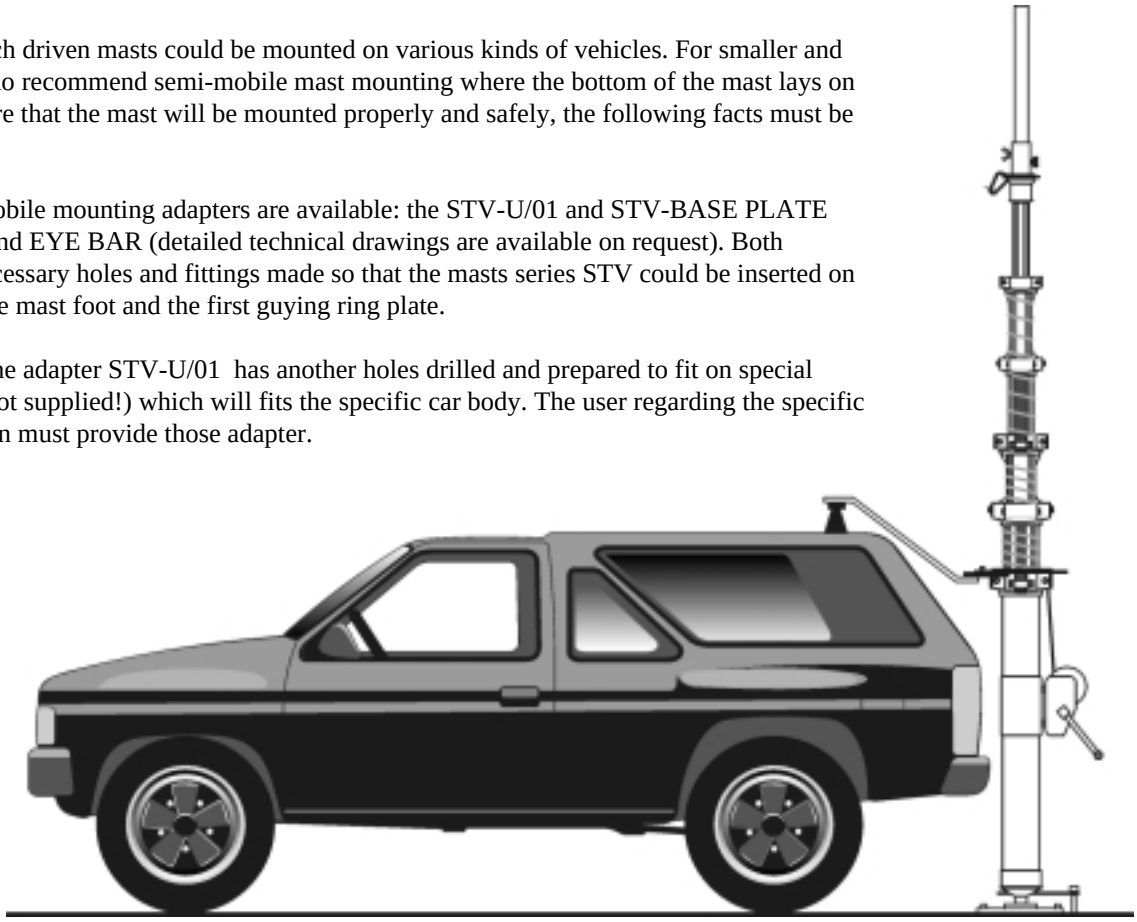


STV TELESCOPIC MASTS - SEMI-MOBILE MOUNTING

STV telescopic winch driven masts could be mounted on various kinds of vehicles. For smaller and lighter vehicles we do recommend semi-mobile mast mounting where the bottom of the mast lays on the ground. To ensure that the mast will be mounted properly and safely, the following facts must be taken into account:

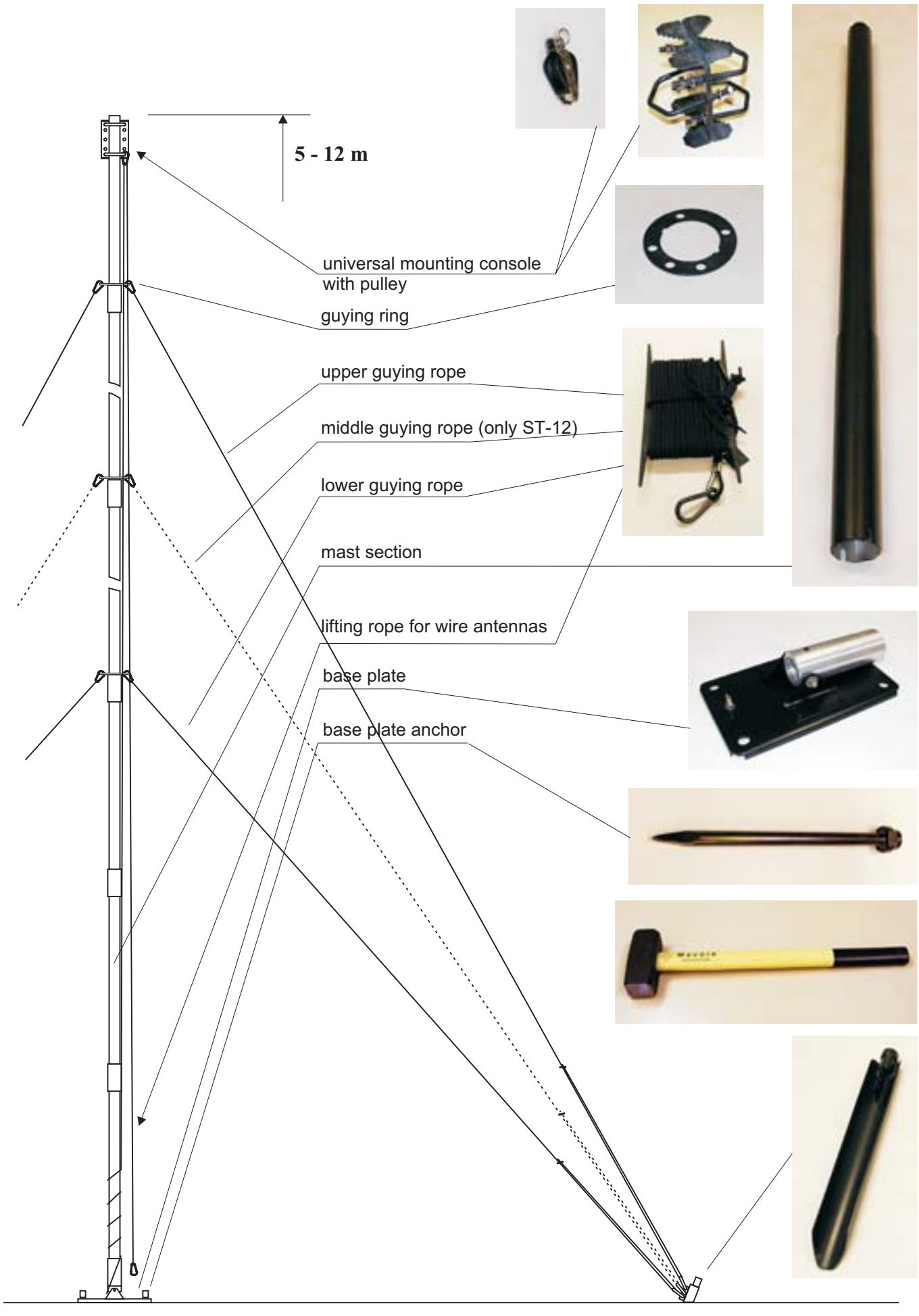
- Two basic semi-mobile mounting adapters are available: the STV-U/01 and STV-BASE PLATE with three anchors and EYE BAR (detailed technical drawings are available on request). Both adapters have all necessary holes and fittings made so that the masts series STV could be inserted on that adapters with the mast foot and the first guying ring plate.

- The other side of the adapter STV-U/01 has another holes drilled and prepared to fit on special mounting bracket (not supplied!) which will fits the specific car body. The user regarding the specific car body construction must provide those adapter.



Antenna masts ST-5, ST-8, ST-10 and ST-12 represent the family of light antenna masts, composed of tubular sections with joints, made of polyester - glass composite material (fiberglass). The mast stands on the tilting base fixed on a ground with iron pegs, comprising terminals for the possibility of connecting radial ground wires. The mast is guyed on several levels with high quality polyester ropes. The top section is intended for the antenna attachment. A special adapter is added for the possibility of mounting a greater part of our antennas. The masts are also suitable for different kinds of wire antennas erecting up with the erecting rope. The major advantages of the masts are: short erection time, easy handling, low weight, low icing, robust construction and good isolation characteristics. The mast is packed in two transportable linen bags.

TECHNICAL DATA	ST-5	ST-8	ST-10	ST-12
Height (m)	5	8	10	12
Mass (kg)	10	13,5	16,5	20
No. of sectoins	3x1,4 + 1 m	5x1,4 m + 1 m	7x1,4 m	8x1,4 m + 1 m
Section diameter (mm)	60	60	60	60
No. of guying levels	1	2	2	3
Mounting area	5x5 m	7x7 m	10x10 m	10x10 m
Mounting time	1 pers./5 min.	2 pers./10 min.	2 pers./10 min.	2 pers./10 min.


5 - 12 m
universal mounting console
with pulley
guying ring
upper guying rope
middle guying rope (only ST-12)
lower guying rope
mast section
lifting rope for wire antennas
base plate
base plate anchor

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ST-R

The antenna mast ST-R is primarily intended for use for elevating and mounting of a light directional and omnidirectional or wire antennas for mobile work in stay. The base mast unit is special three-leg stay made of aluminum alloy square tubes with telescopic support legs made of composite material (glass reinforced polyester tubes). In normal conditions the mast do not need additional ropes and anchors. The three-leg stay is designed for very quick elevating of the mast also on inclined ground. The mast is packed in handy linen bag. Standard mast height is 6 m (4 sections of 1,5 m), but different dimensions are also available on special request.

TECHNICAL DATA	
Height	6 m
Mass of three-leg stay	6 kg
Mass of one mast sect.	1,5 kg
No. of sections	4
Length of sections	1400 mm
Diameter of sections	60 mm
Mounting area	D = 2,8 m
Mounting time	1 per./5 min.

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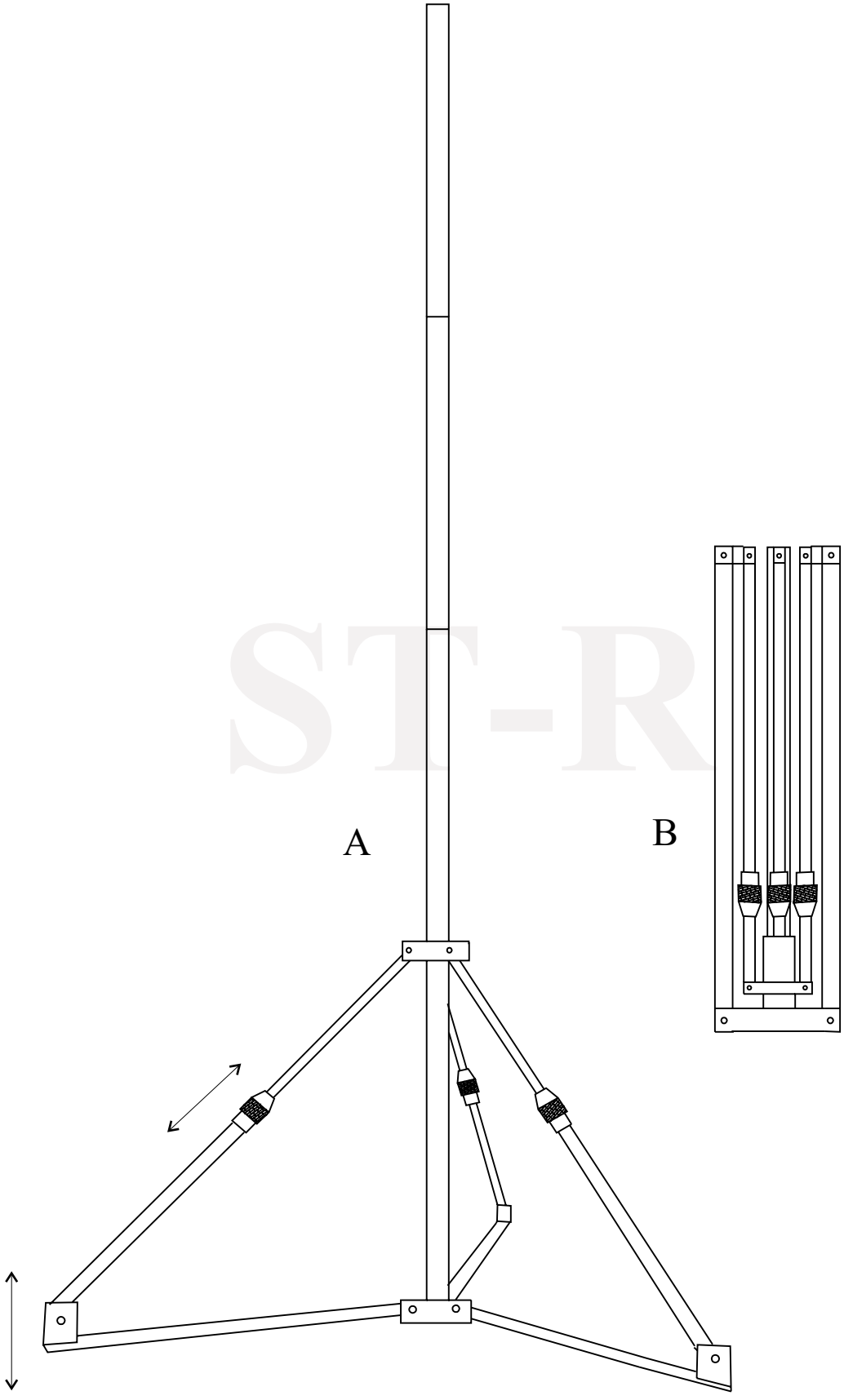
A
B

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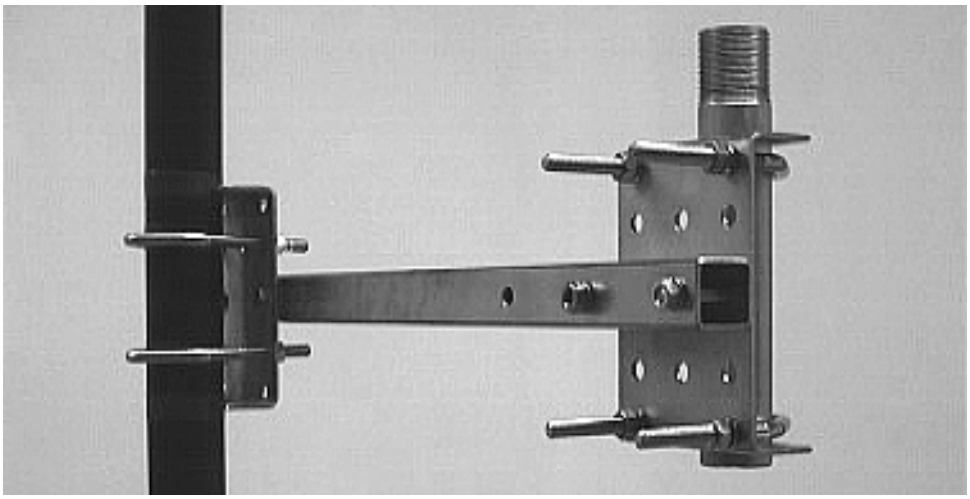
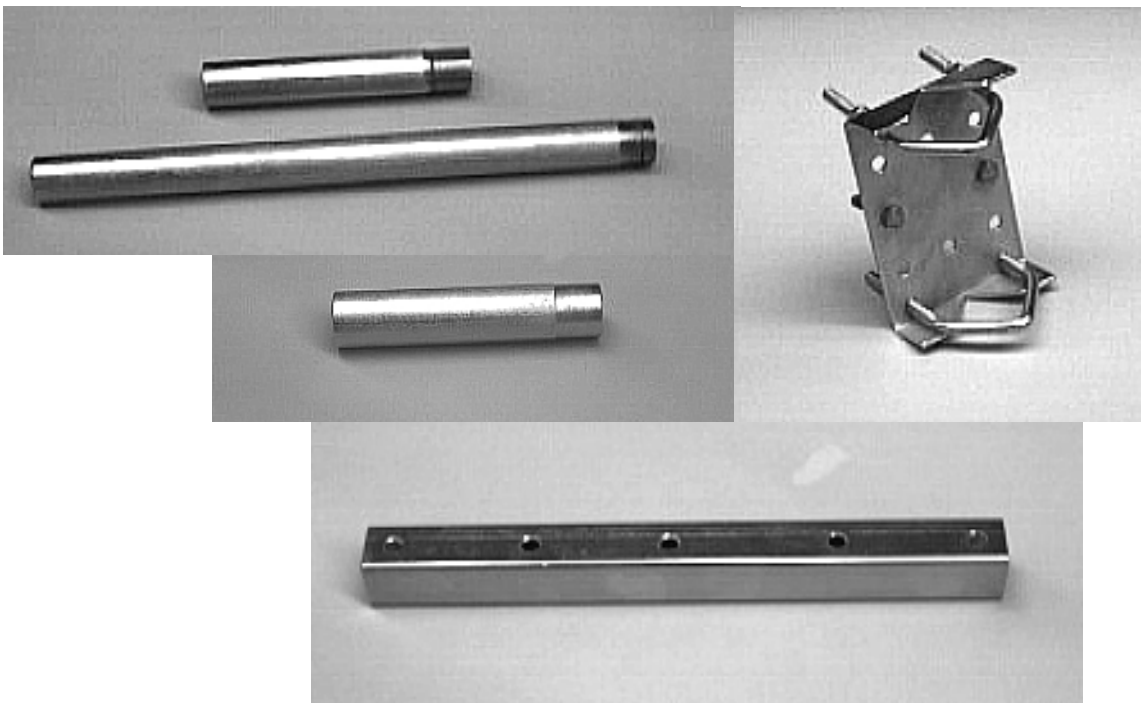
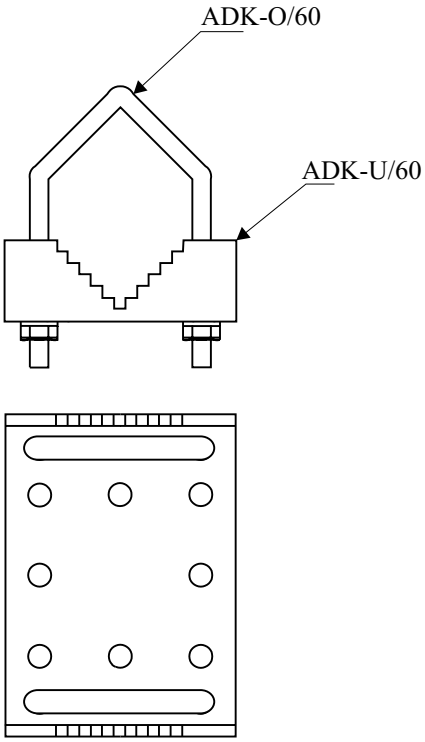
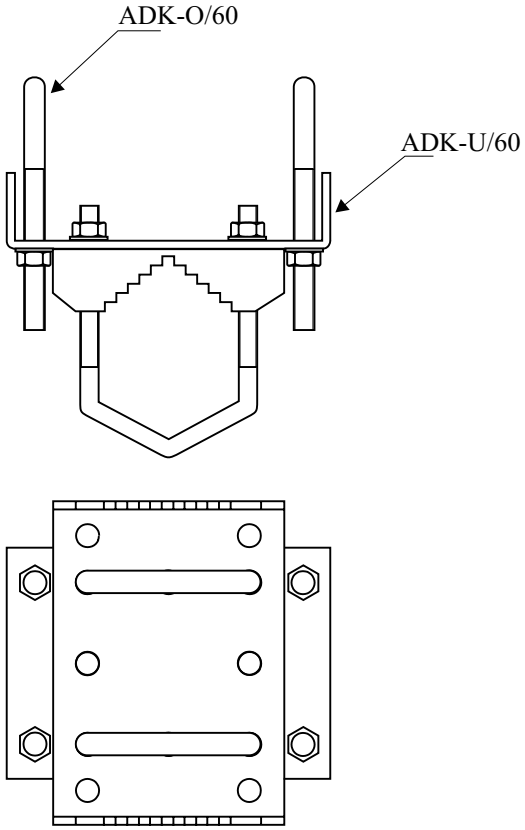
ADAPTERS

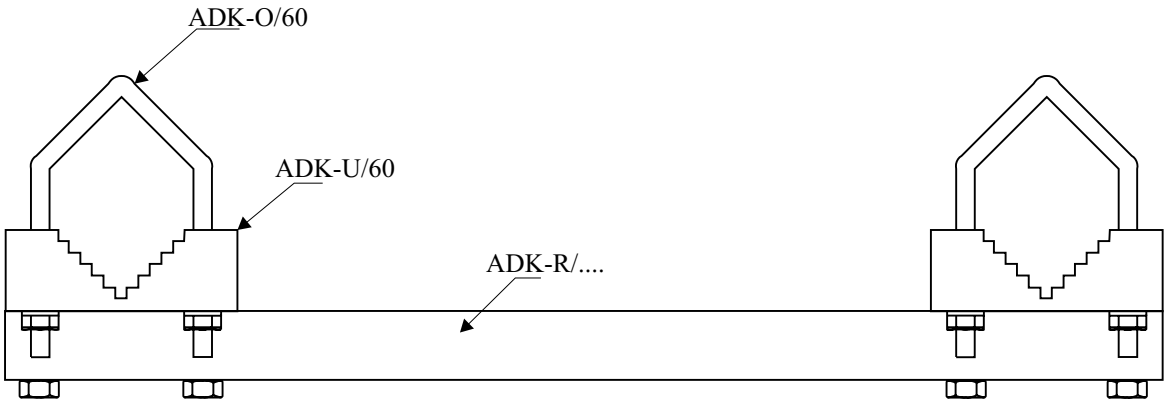
For mounting a major part of our antennas our mounting adapters could be used. They are composed of five basic elements: universal mounting adapter type ADK-U, lengthening arm type ADK-R/..., mounting pipe type ADK-C/..., angle adapter ADK-L and mounting clamp type ADK-O. All that elements enable almost unlimited numbers of combination of mounting one or more antennas in group on the antenna mast or asside it. All elements are made of stainless steel or steel and galvanically protected with zinc.

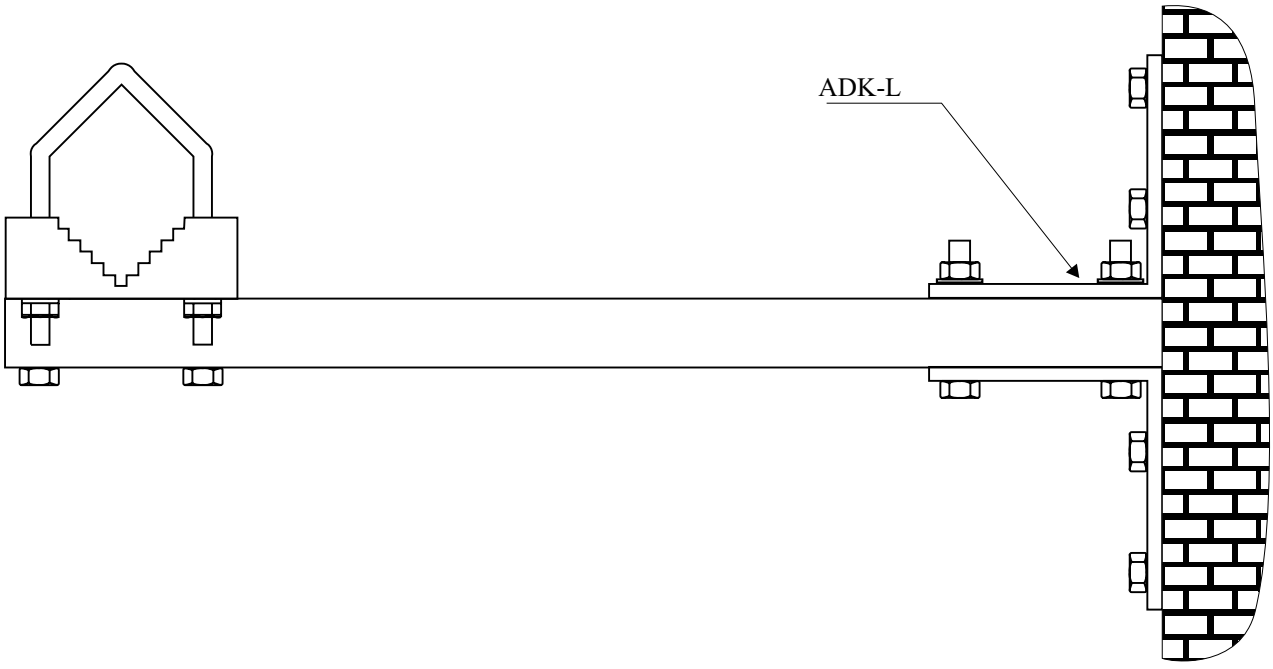





ADK-O/60
ADK-U/60


ADK-O/60
ADK-U/60


ADK-O/60
ADK-U/60
ADK-R/....


ADK-L

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APS-38

The family of power dividers type APS-38 is composed of two-, three- and four-way power dividers for use on standard VHF and UHF frequency ranges. Dividers enable connection of two or more antennas together in one antenna array or system. They are designed as passive dividers on the base of quarterwave line coaxial transformer with one input and two or more outputs. The outer section of the divider is made of aluminum alloy square tube with side mounted input and output connectors and transparently anodized. The divider could be mounted on mast with one of our standard universal mounting consoles family ADK.

TECHNICAL DATA	
Frequency range (MHz)	66-88, 146-176, 390-475
Impedance	50 ohm
VSWR	< 1,3
Maximum power	400 W
Connector	N fem.
Lenght	max. 100 cm
Mass	max. 0,5 kg

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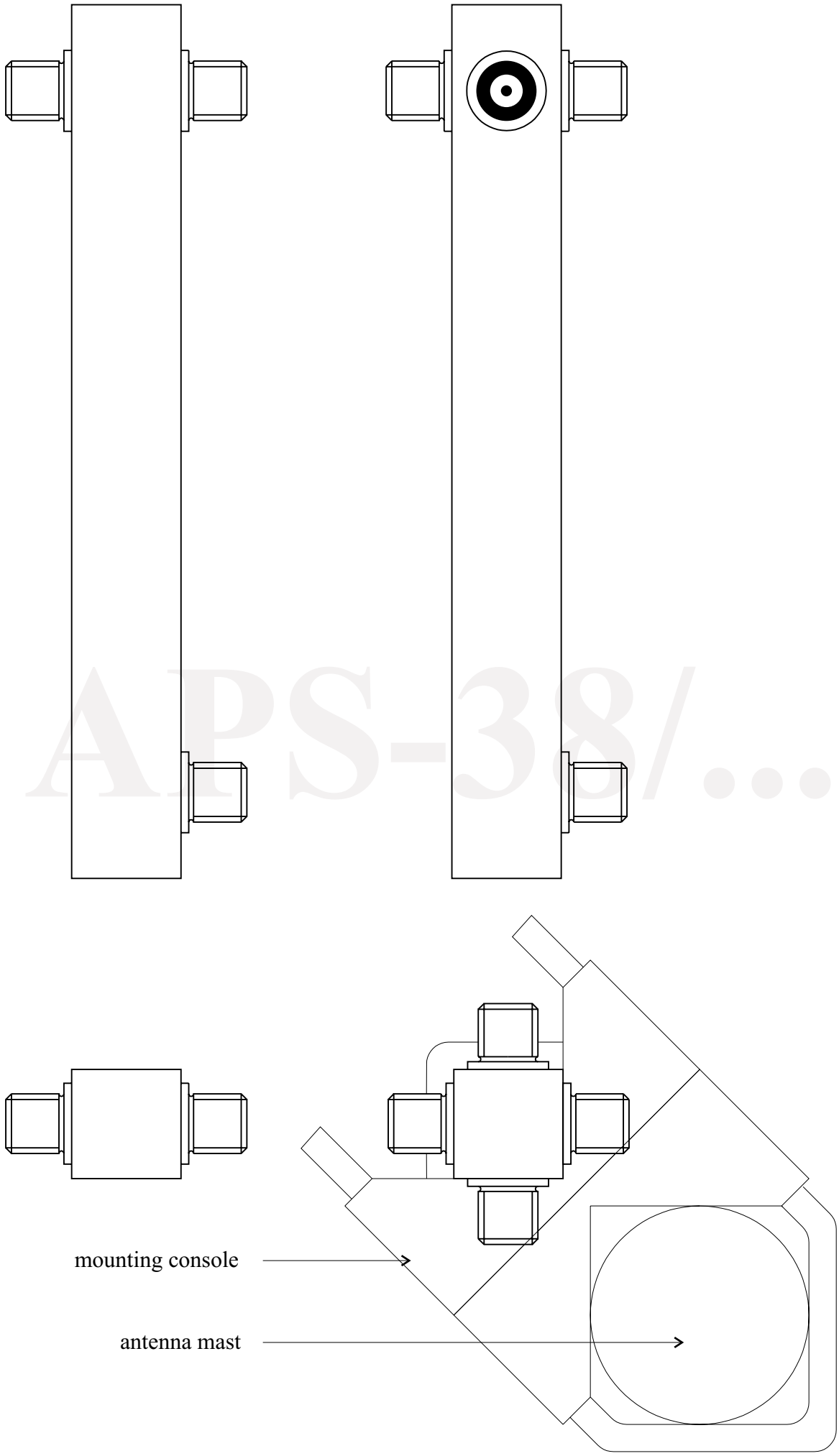
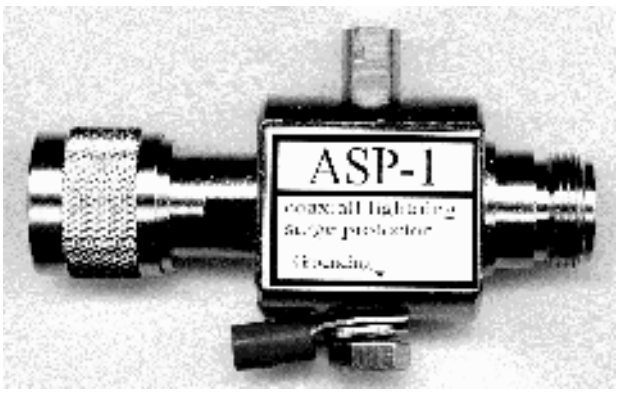
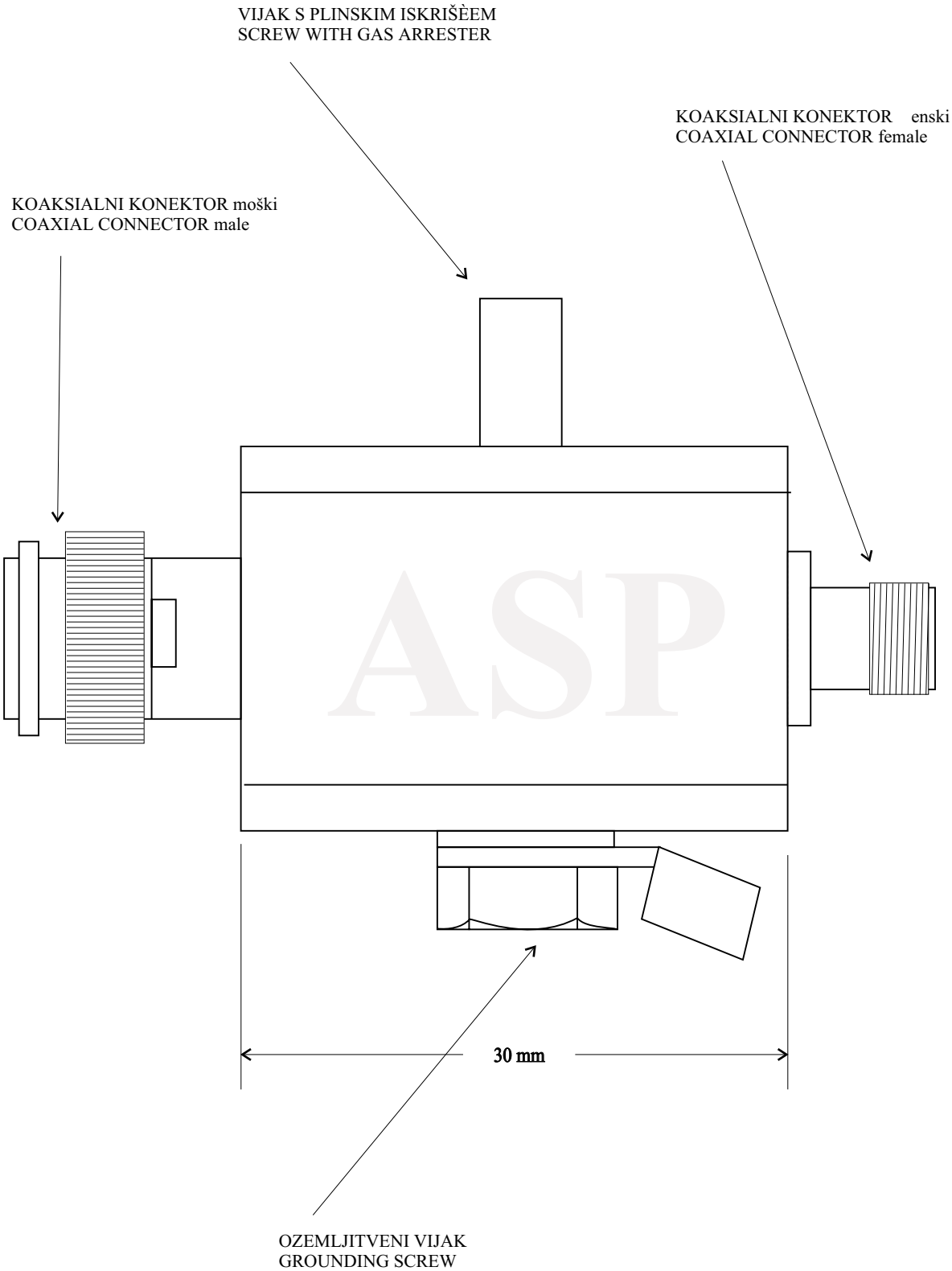


Coaxial surge protectors against atmospheric discharges from the family ASP are intended for protection of radio stations and other equipment against indirect lightning and other discharging influences. The elements are usable within frequency range from 0 (DC) to 1500 MHz. They are composed of metal galvanically coated housing with two coaxial connectors. A special gas filled surge arrester is inserted in with the function of voltage-dependent switch. As soon as the voltage applied to the arrester exceeds the spark-over voltage, an arc is formed in the hermetically sealed region within nanoseconds. After that the arrester is capable to do his function further again.



TECHNICAL DATA	
Frequency range	0 - 1500 MHz
Impedance	50 ohm
VSWR	< 1.2
Insertion loss	< 0.2 dB
Spark-over voltage	350 V
Max. discharge current	5 kA
Connector	N, TNC, UHF, BNC
Mass	100 gr


VIJAK S PLINSKIM ISKRIŠÈEM
SCREW WITH GAS ARRESTER
KOAKSIALNI KONEKTOR enski
COAXIAL CONNECTOR female
KOAKSIALNI KONEKTOR moški
COAXIAL CONNECTOR male
30 mm
OZEMLJITVENI VIJAK
GROUNDING SCREW

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ASP-W

Coaxial surge protectors against atmospheric discharges type ASP-W and ASP-WH are intended for protection of radio stations and other equipment against indirect lightning and other discharging influences. Compared with the model ASP, the ASP-W is designed as waterproof coaxial feedthrough and intended to be mounted on properly grounded panel mount plate.
The element is usable within frequency range from 0 (DC) to 1500 MHz (ASP-W) or from 1500 to 2500 (ASP-WH). The model ASP-W is composed of metal nickel coated housing with two coaxial connectors (type N, BNC or TNC). A special gas filled surge arrester is inserted in with the function of voltage-dependent switch. As soon as the voltage applied to the arrester exceeds the spark-over voltage, an arc is formed in the hermetically sealed region within nanoseconds. After that the arrester is capable to do its function further again. The model ASP-WH has protection enabled with short-circuited 1/4 wave stub.

TECHNICAL DATA	
Frequency range	0-1500 MHz (N) 0-500 MHz (BNC, TNC) 1500-2500 MHz (ASP-WH)
Impedance	50 ohm
VSWR	< 1.35
Insertion loss	< 0.2 dB
Spark-over voltage	230 - 350 V (ASP-W)
Max. discharge current	5 - 20 kA (ASP-W) < 25 kA (ASP-WH)
Connector	N (ASP-04/W) BNC (ASP-05/W) TNC (ASP-06/W) N (ASP-WH)
Mass	170 g
Max. panel thickness	8 mm
Operating temperature	-40 .... +70^{o}C

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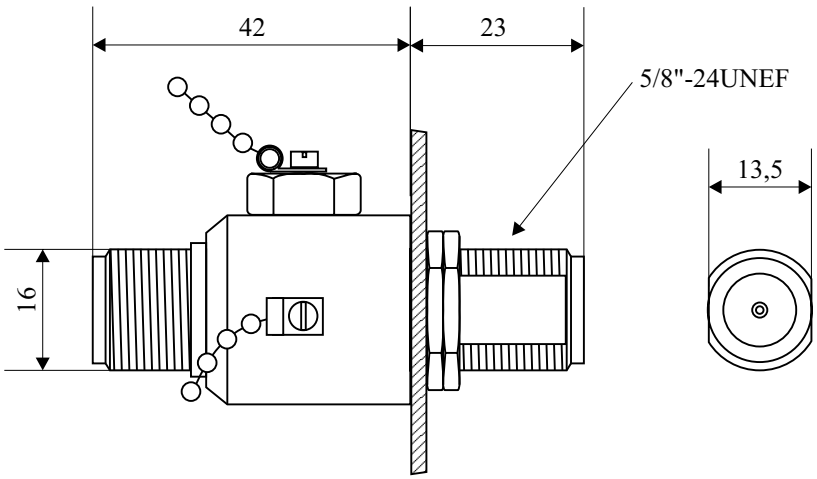
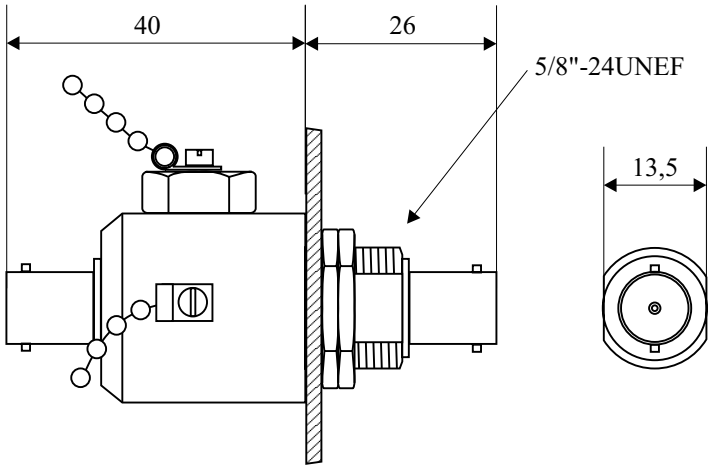
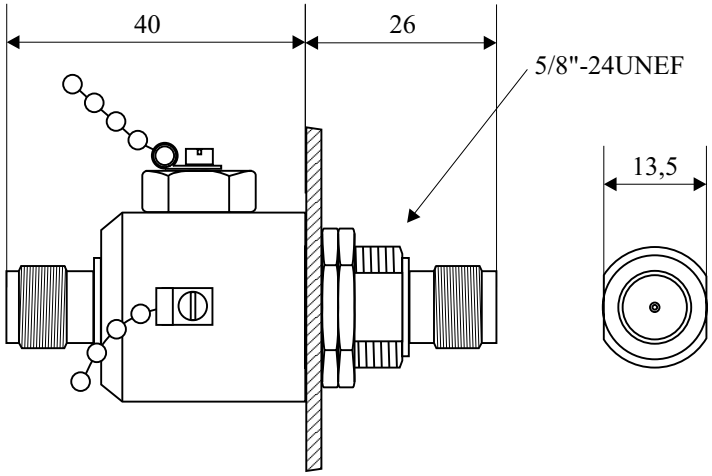


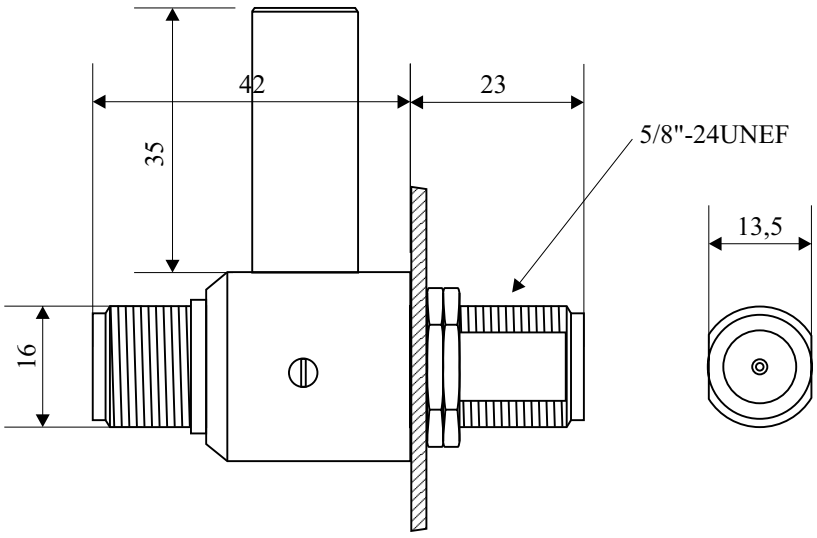
ASP-04/W
(Nf - Nf)



ASP-05/W
(BNCf - BNCf)



ASP-06/W
(TNCf-TNCf)

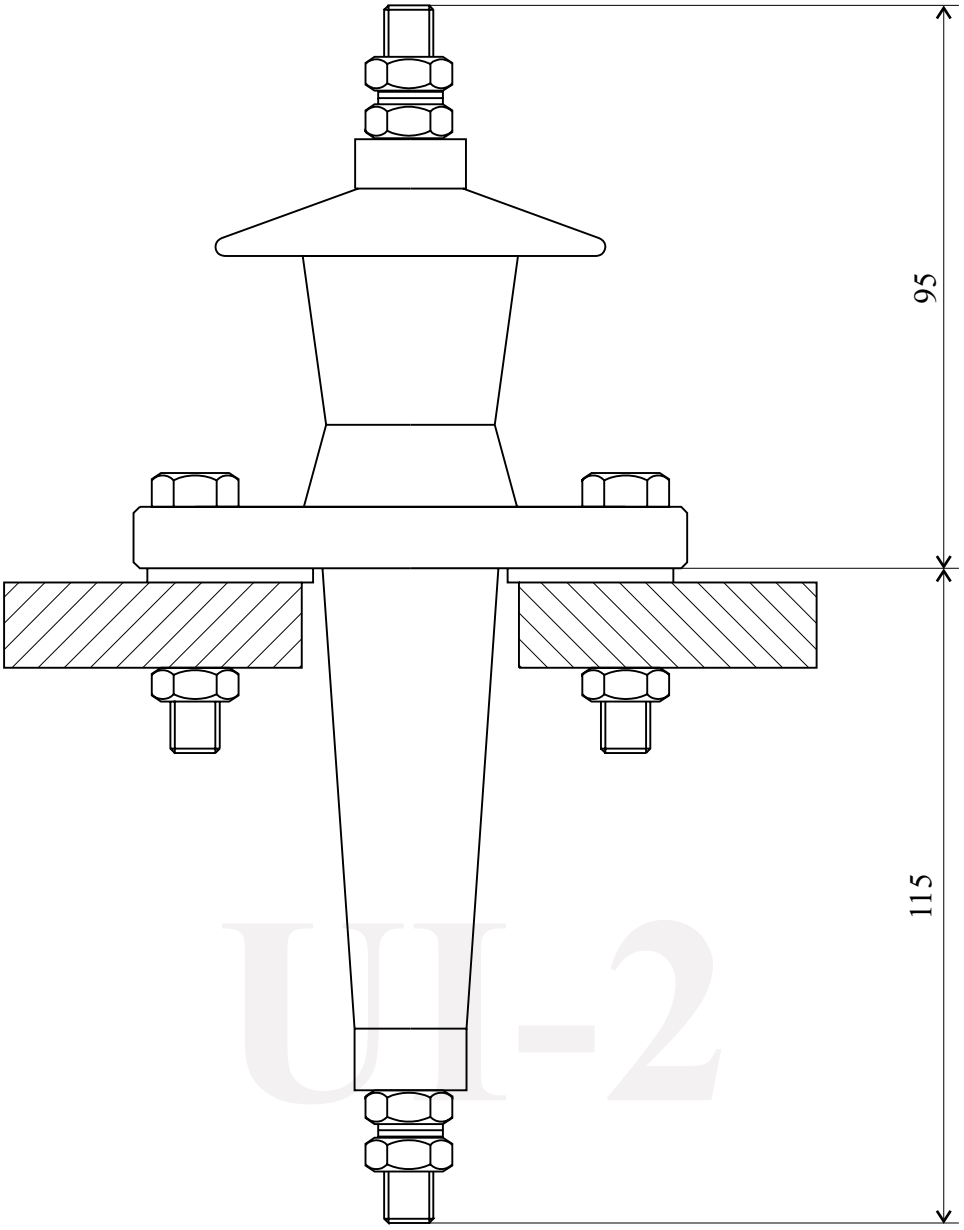


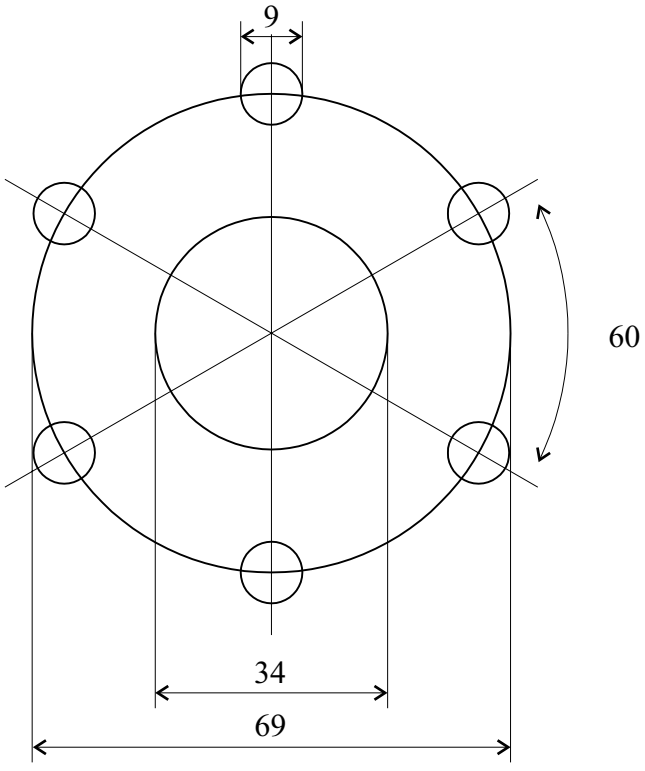
ASP-04/WH
(Nf - Nf)

UI-2

The antenna lead-in insulator UI-2 is intended for safe installation of antenna wire from transmitter or antenna tuning unit to connection element on the antenna. The insulator could be mounted on the wall of vehicle cabin or on some other objects (ships). It is made of polypropylene material and inside of it is a conductor with screw joints M8 and nuts for connection of antenna wire. The insulator is resistant against atmospheric influences and UV radiation. All metal parts are galvanically protected.

TECHNICAL DATA	
Max. RF voltage	20 kV
Mass	0.5 kg
Height	220 mm
Mounting	6 x M8
Temperature range	-40...+70°C

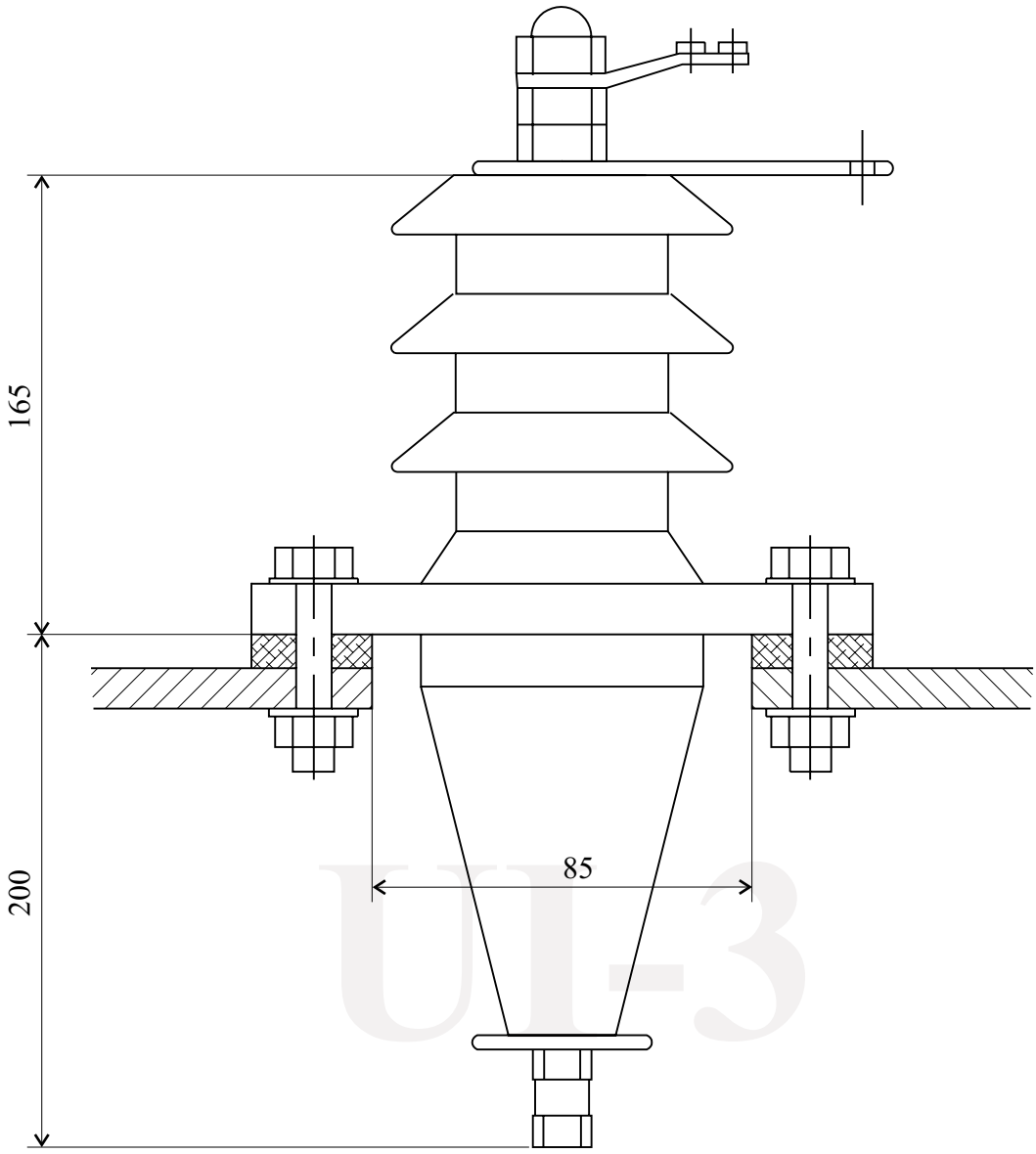

95
115

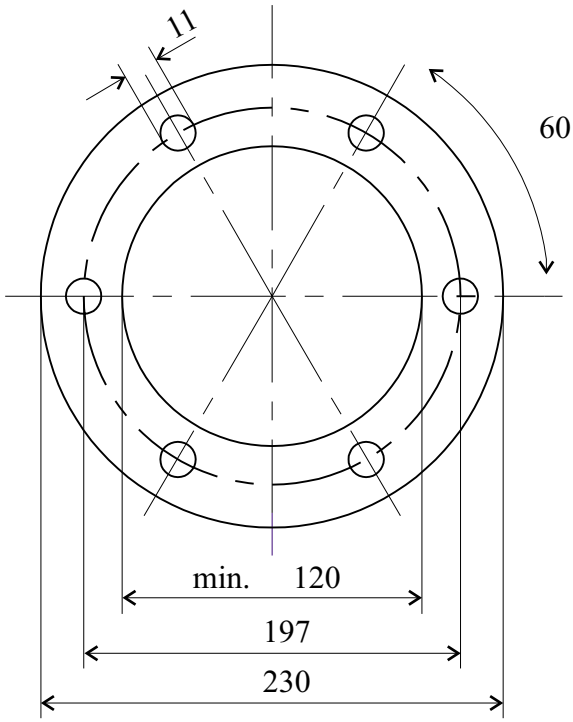

9
60
34
69

UI-3

The antenna lead-in insulator UI-3 is intended for use on ships for safe installation of the antenna wire from transmitter or antenna tuning unit to connection element on the main transmitting antenna. The insulator is made of highest quality polypropylene material with excellent electrical and mechanical characteristics. The flange is made of composite material (epoxy fiberglass). The insulator is designed primarilly for side mounting. On the lower part of the insulator is special connecting element for transmiter wire and on the upper part is a special cable joint for connection of the antenna wire.

TECHNICAL DATA	
Max. RF voltage	20 kV
Mass	5 kg
Height	365 mm
Mounting	6 x M 10
Temperature range	-40/+70 C


165
200
85


11
60
min. 120
197
230