

# Model : DPA10

- **Band II panel**
- **Broadband 87.5-108 MHz**
- **Demountable**
- **Vertical or Horizontal polarization**
- **Stainless steel AISI 304**
- **Directional pattern**



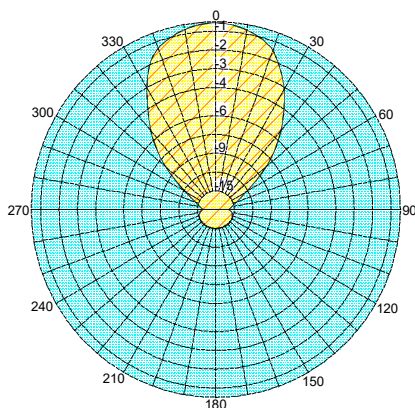
## ELECTRICAL DATA

<b>Frequency range</b>	87.5÷108 MHz
<b>Impedance</b>	50 Ohm
<b>Connectors</b>	1+5/8" EIA
<b>Max Power</b>	10KW (1+5/8" EIA)
<b>VSWR</b>	≤ 1.25:1
<b>Polarization</b>	Horizontal or Vertical
<b>Gain</b>	4.5 dB (referred to half-wave dipole)
<b>Half power beam width</b>	E plane ± 32° H plane ± 58°
<b>Lightning protection</b>	All metal parts DC grounded

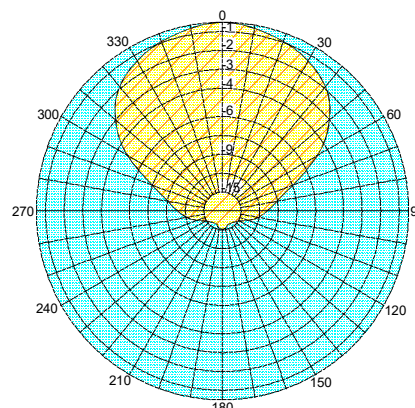
## MECHANICAL DATA

<b>Dimensions</b>	2125x720x990 mm
<b>Weight</b>	32 Kg ref. stainless steel
<b>Wind surface</b>	0.13 m <sup>2</sup> (side) 0.56 m <sup>2</sup> (front)
<b>Wind load Max wind velocity</b>	108 kg (front - wind speed at 160 km/h) 200 km/h.
<b>Materials</b>	Reflector: stainless steel AISI 304 Dipole: stainless steel AISI 304 Internal parts: treated aluminium Radome: PTFE
<b>Icing protection</b>	Feed point radome
<b>Radome color</b>	White
<b>Mounting</b>	With special pipe clamps 50 ÷ 110 mm dia.

## RADIATION PATTERN (MID BAND)

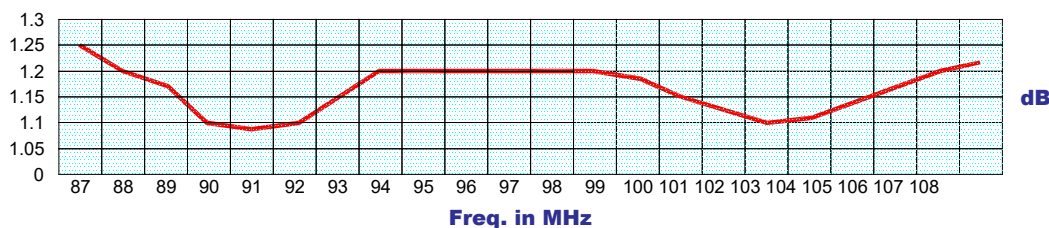


**E-plane**

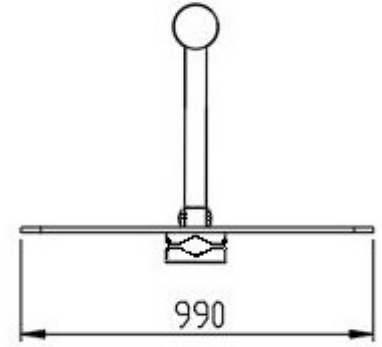
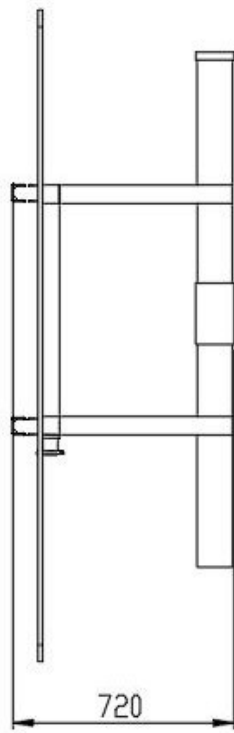
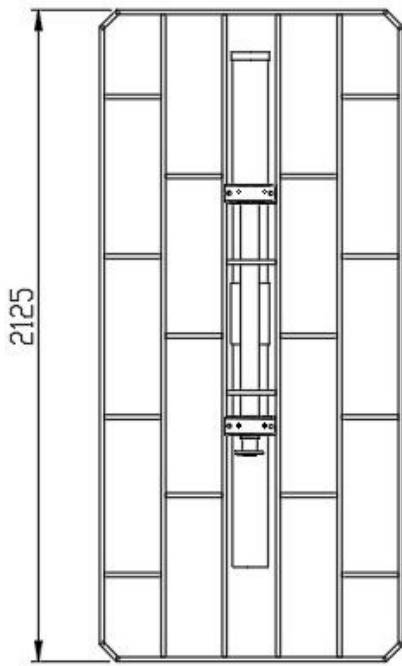


**H-plane**

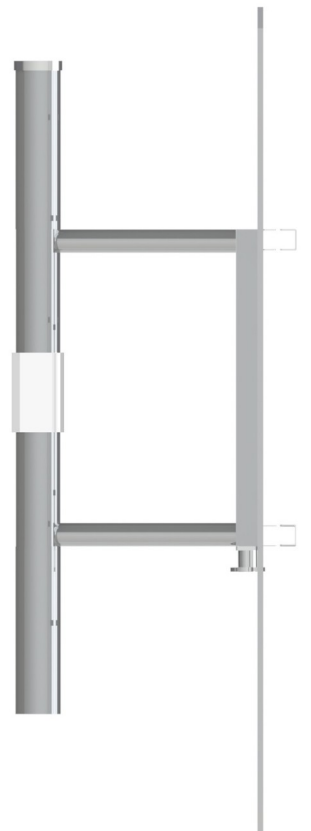
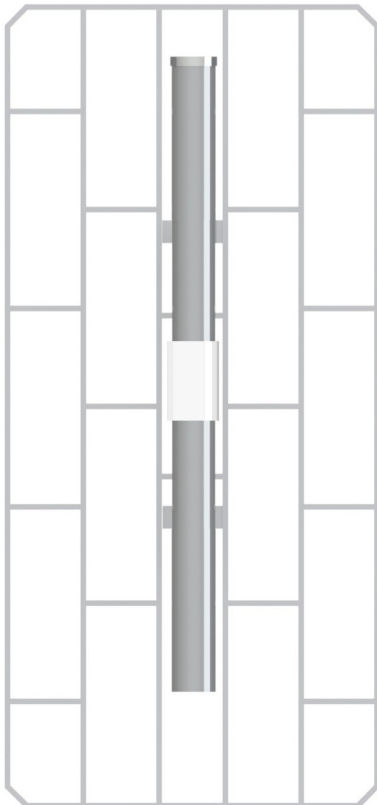
## VSWR



**Dimensions mm.**



**Various view**



## Radiations systems with DPA10 antenna

### Directional pattern

#### ELECTRICAL DATA

Frequency range	87.5 ÷ 108 MHz
Impedance	50 Ohm
Connector	EIA flange according to system power rating
VSWR	≤ 1.25:1 Max
Polarization	Horizontal or Vertical
Gain	According to requirement
Horizontal pattern	Any type according to requirements
Vertical pattern	Null fill, beam tilt and special requirements to order
Other facilities	The antenna system can be supplied in split feed with two equal half antennas. Each half can accept full power

#### MECHANICAL DATA

Height of array	Subject to number of bays ( refer to table )
Total net weight	Refer to table
Wind load	Refer to table
Pressurizable	Yes (on request)
Radome colour	White
Mounting hardware	Stainless steel clamps
Shipping	As required

#### TECHNICAL DATA

Number of bays	Dipole per bay	Gain <sup>1</sup>		Weight <sup>2</sup> kg	Antenna height L m	Wind load (v=160 km/h) kg
		dB	times			
2	1	7.5	5.6	64	4.6	216
4	1	10.5	11.3	128	9.8	432
6	1	12.3	16.9	192	15.0	678
8	1	13.5	22.5	256	20.2	864
12	1	15.3	33.8	384	30.6	1296

<sup>1</sup> referred to a half wave dipole. Attenuation of connecting cables not taken into account.

<sup>2</sup> without mounting hardware

<sup>3</sup> the systems comprised: antennas, cables and splitter – for more details to see catalog different version on request

- Vertical tower space, wind load and weight numbers given are typical. Actual values vary with the specific installation. Contact us for more details of your installation.
- Gain will be reduced if null fill, beam tilt or special wavelength spacing is provided.
- Antenna radiation aperture is the distance from the centre of the top bay to the centre of the bottom bay.
- Five ft (1.6mt) of pipe required above the top bay and below the bottom bay for to protect from pattern interference by other antennas.
- Antenna wind load is calculated for 100 Mph (160Km/h) per EIA-222-C standard.

