

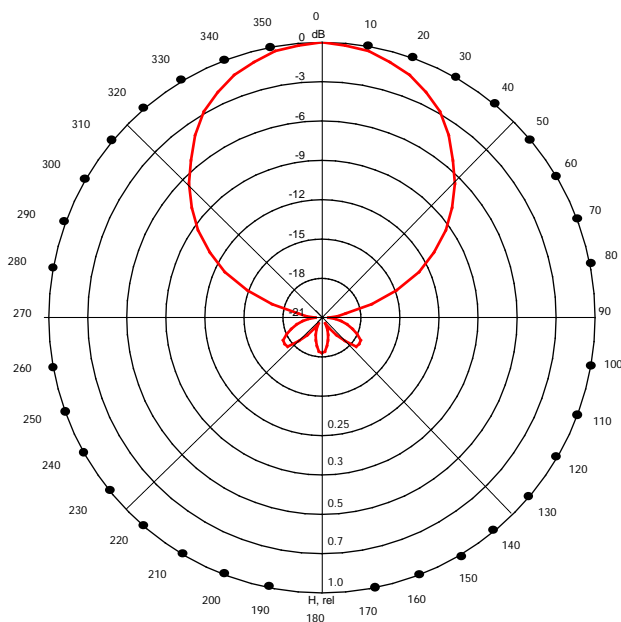
Models "PA41L-UHPHP" & "PA41H-UHPHP"



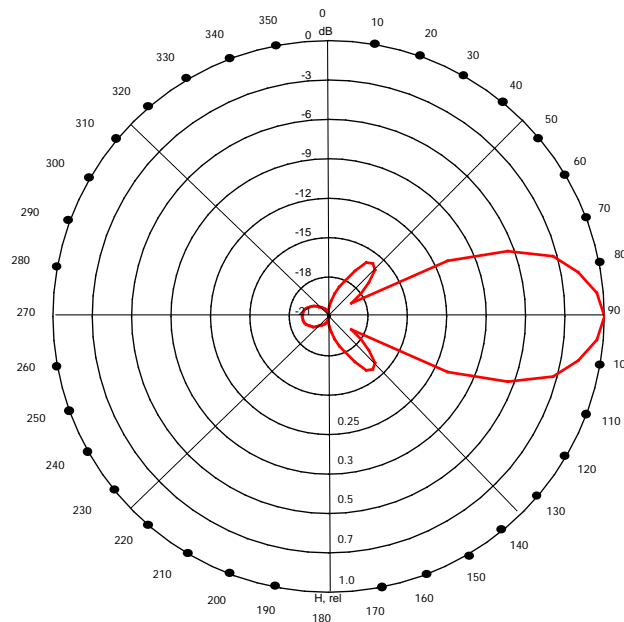
All weld broad band four dipole panel covering the 470-806 MHz spectrum. The robust design incorporates the finest materials available, ensuring many years of reliable performance. The radiating elements are completely welded to the support spine. This results in an enhanced reduction in PIM, even after many years of being in service, which makes this antenna ideal for digital TV broadcast or digital base station data applications.

The radome covering the dipoles and internal feed conductors allow this antenna to operate reliably under extreme snow, rain, frost, or icing conditions. Multiple bays can be stacked horizontally or vertically to satisfy required gain or coverage.

Electrical



H pol - Horizontal Radiation Pattern (E-Plane)



H pol - Vertical Radiation Pattern (H-Plane)

Frequency Range: 470-806 MHz

Input connector: 7-16 DIN female

VSWR: Model PA41H-UHPHP < 1.10 from 600-806 MHz  
Model PA41L-UHPHP < 1.10 from 470-600 MHz

Return Loss: Model PA41H-UHPHP < -26 dB from 600-806 MHz  
Model PA41L-UHPHP < -26 dB from 470-600 MHz

Gain: 11 dBd

Polarization: Horizontal

Impedance: 50  $\Omega$

Max. input power: 2 kW

-3dB HPBW (E-Plane): 64 degrees

-3dB HPBW (H-Plane): 28 degrees

## Mechanical

Exterior material  
 Reflector panel: Galvanized sheet metal  
 Radome: UV stabilized ASA

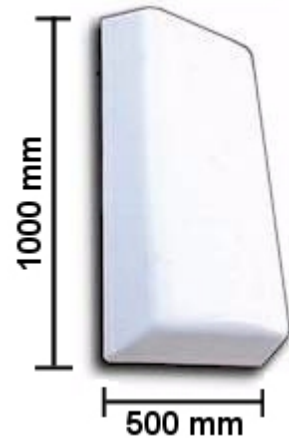
Interior material  
 Radiators: Structural Aluminum  
 Internal feed: Machined brass

Dimensions: 1000 mm X 500 mm rear panel grid

Grounding: Antenna and radiating elements are DC grounded for lightning protection

Mounting clamps: HDG clamps are available for coverage requirements

Icing protection: Radome protecting radiating elements and feed



# of Bays	Panels per Bay	Total # of Panels	Gain (dBd)	Gain (Pr)	Weight (Kg) w/o mounts	Overall Height (meters)	Windload kN @ 160 km/h
1	1	1	11.0	12.59	12	1.2	1.0
	2	2	8.5	7.08	24		1.3
	3	3	6.7	4.68	36		1.6
	4	4	5.6	3.63	48		1.5
2	1	2	14.4	27.54	24	2.25	2.0
	2	4	12.0	15.85	48		2.6
	3	6	10.2	10.47	72		3.2
	4	8	9.1	8.13	96		3.1
3	1	3	16.2	41.68	36	3.4	3.0
	2	6	13.8	23.99	72		3.9
	3	9	12.0	15.85	108		4.8
	4	12	10.9	12.30	144		4.6
4	1	4	17.5	56.23	48	4.5	4.0
	2	8	15.2	33.11	96		5.2
	3	12	13.4	21.88	144		6.4
	4	16	12.2	16.60	192		6.2
6	1	6	19.4	87.10	72	6.8	6.0
	2	12	17.0	50.12	144		7.8
	3	18	15.3	33.88	216		9.6
	4	24	14.1	25.70	288		9.3
8	1	8	20.5	112.2	96	9.0	8.0
	2	16	18.2	66.07	192		10.4
	3	24	16.5	44.67	288		12.8
	4	32	15.2	33.11	384		12.4

Antenna Height { H } in Meters Antenna Spacing { S } in mm		
No of Bays	H	S
1	1.2	-
2	2.25	1150
4	4.5	1150
6	6.8	1150
8	9.0	1150
12	14.0	1150

Weight in KG without mounting hardware			
No. of Bays	Panels / Bay	Total No. of Panels	Weight
1	2	2	24
	3	3	36
	4	4	48
2	2	4	48
	3	6	72
	4	8	96
4	2	8	96
	3	12	144
	4	16	192
6	2	12	144
	3	18	216
	4	24	288
8	2	16	192
	3	24	288
	4	32	384
12	2	24	288
	3	36	432
	4	48	576

