

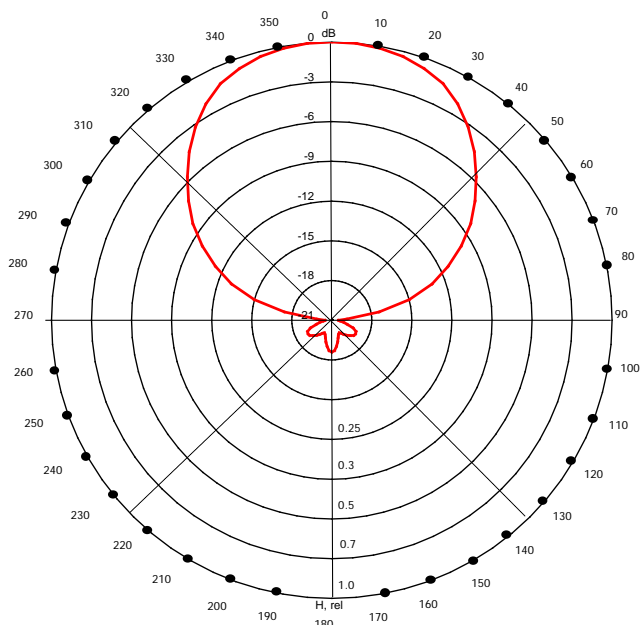
Model "PA31-SDP"



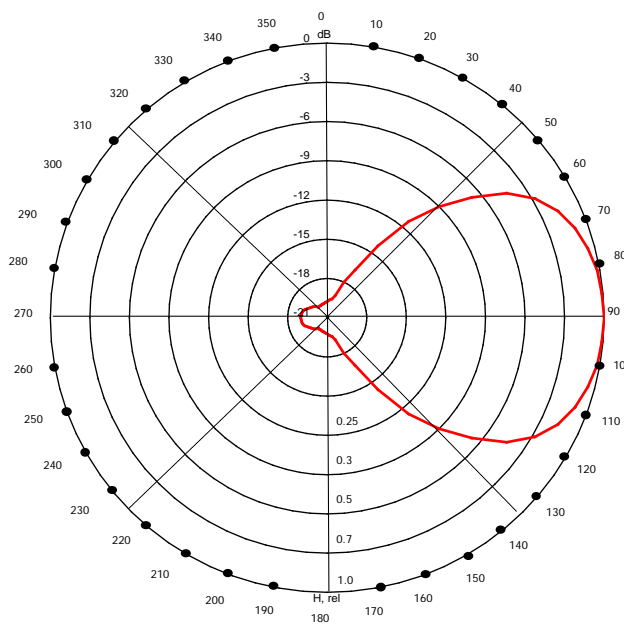
Double dipole panel composed of all weld steel, hot dipped galvanized for weather protection. The panel is broadband and can be used for single channel operation, or multiple channel operation in the 174 – 230 MHz spectrum.

The rugged mechanical design and internal feed conductors allow this antenna to operate reliably under extreme icing conditions. Each panel can easily handle 3kW of input power, and 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: 174-230 MHz

Input connector: N female or 7-16 female

VSWR: < 1.15

Gain: 8.0 dBd

Polarization: Horizontal or Vertical

Impedance: 50 Ω

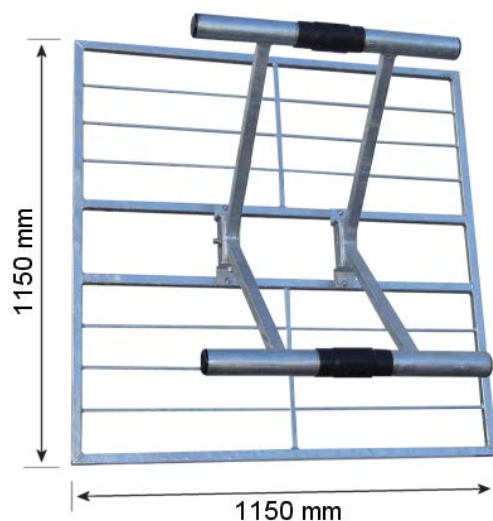
Max. input power: 3 kW

-3dB HPBW (E-Plane): 69 degrees

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

Mechanical

- Exterior material: Hot-dip galvanized steel
- Interior material: Machined brass and stainless steel
- Dimensions: 1150 mm X 1150 mm rear panel grid
- Grounding: Antenna and radiating elements are DC grounded for lightning protection
- Mounting clamps: HDG clamps are included for attachment to customer supplied mast of any OD. Please specify when ordering
- Icing protection: Antenna design and feed point radome ensure reliable operation under extreme icing
- Shipping: The antenna is shipped disassembled



# of Bays	Panels per Bay	Total # of Panels	Gain (dBd)	Gain (Pr)	Weight (Kg)	Overall Height (meters)	Windload kN @ 160 km/h
1	1	1	8.0	6.31	26	1.2	0.77
	2	2	5.9	3.89	52		1.4
	3	3	4.5	2.82	78		1.9
	4	4	3.0	1.99	104		2.5
2	1	2	11.0	12.59	52	2.7	1.4
	2	4	8.8	7.59	104		2.5
	3	6	7.4	5.50	156		3.9
	4	8	5.9	3.89	208		5.0
3	1	3	12.8	19.05	78	4.3	1.9
	2	6	10.6	11.48	156		3.9
	3	9	9.2	8.32	234		5.7
	4	12	7.7	5.89	312		7.8
4	1	4	13.9	24.55	104	5.8	2.5
	2	8	11.7	14.79	208		5.0
	3	12	10.3	10.72	312		7.8
	4	16	8.9	7.76	416		10.2
6	1	6	15.7	37.15	156	8.9	3.9
	2	12	13.6	22.90	312		7.8
	3	18	12.1	16.21	468		11.6
	4	24	10.7	11.75	624		15.5
8	1	8	16.9	48.98	208	12.0	5.0
	2	16	14.7	29.51	416		10.2
	3	24	13.3	21.38	624		15.5
	4	32	11.8	15.13	832		20.5

174-230 MHz
High VHF Band III

Antenna Height { H } in Meters Antenna Spacing { S } in mm		
No of Bays	H	S
1	1.2	-
2	2.7	1550
4	5.8	1550
6	8.9	1550
8	12.0	1550

Weight in KG without mounting hardware			
No. of Bays	Panels / Bay	Total No. of Panels	Weight
1	2	2	52
	3	3	78
	4	4	104
2	2	4	104
	3	6	156
	4	8	208
4	2	8	208
	3	12	312
	4	16	416
6	2	12	312
	3	18	468
	4	24	624
8	2	16	416
	3	24	624
	4	32	832

