

54-88 MHz

Lo VHF Band I

Band I Panel Antenna



Each bay of the Band I panel antenna is composed of two independent panels, tuned in pairs. Made from hot dipped galvanized steel, the rugged all-weld design ensures long product life even in the harshest of broadcast environments.

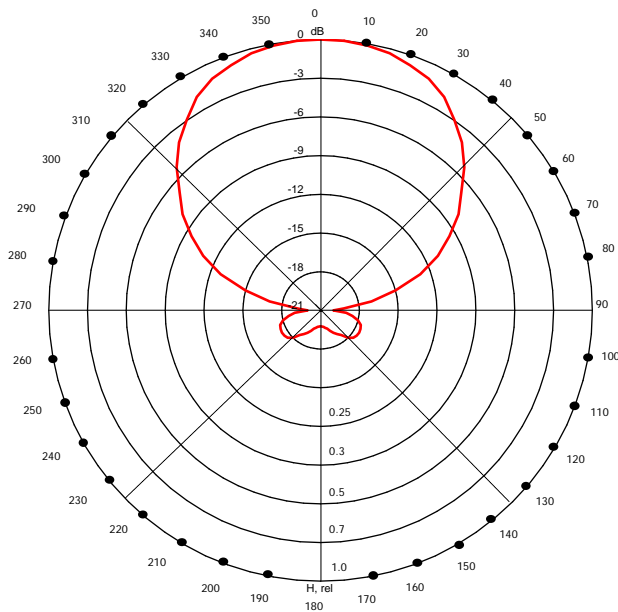
Each bay can handle up to 5kW, and multiple bays can be stacked horizontally or vertically for optimum coverage requirements. Higher input power is available upon request.

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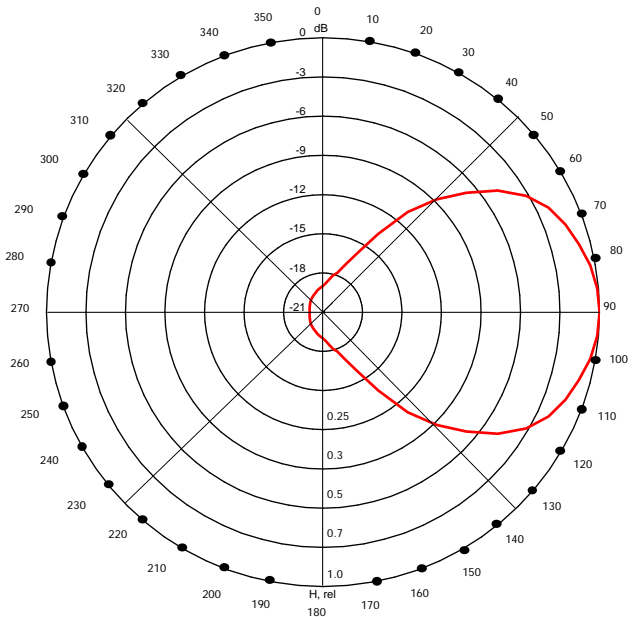
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Electrical



Horizontal Radiation Pattern (E-Plane)

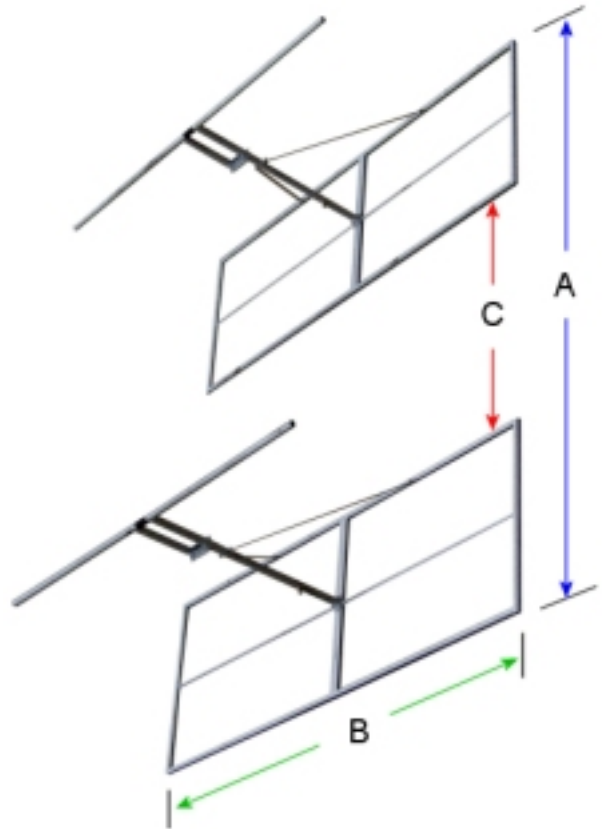


Vertical Radiation Pattern (H-Plane)

Frequency Range:	54-88 MHz, channel specific
Input connector:	N female or 7-16 female
VSWR:	< 1.20
Gain:	7.5 dBd
Polarization:	Horizontal
Impedance:	50 Ω
Max. input power:	5 kW
-3dB HPBW (E-Plane):	72 degrees
-3dB HPBW (H-Plane):	56 degrees

Mechanical

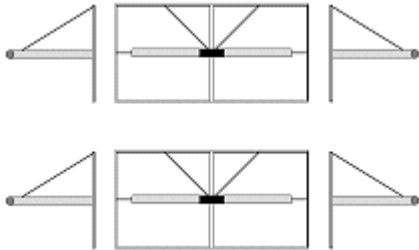
- Exterior material: Hot-dip galvanized steel
- Interior material: Machined brass and stainless steel
- Grounding: Antenna and radiating elements are DC grounded for lightning protection.
- Mounting clamps: HDG clamps are included for attachment to customer supplied mast of any OD. Please specify when ordering
- Icing protection: An optional feed point radome is available for severe icing
- Shipping: The antenna is shipped disassembled



Channel	2	3	4	5	6
Frequency range	54-60 MHz	60-66 MHz	66-72 MHz	76-82 MHz	82-88 MHz
Dim. A (mm)	4000	3580	3340	2925	2720
Dim B (mm)	2980	2650	2480	2170	2020
Dim C (mm)	1780	1600	1490	1315	1220
Weight (kg)	105	92	83	75	70
Wind load (kN)@ 160 km/h					
Frontal	2.20	2.00	1.90	1.75	1.50
Lateral	1.10	1.00	1.00	0.90	0.80

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Side view of a 1 Bay, 3 Panels per bay Array.

No of Bays	Panels / bay	No of Panels	Gain (dB)	Gain (Pr)	Windload (kN) @ 160 km/h				
					Ch 2	Ch 3	Ch 4	Ch 5	Ch 6
1	2	2	5.4	3.47	3.4	3.1	3.0	2.7	2.5
	3	3	3.5	2.24	5.2	5.0	4.7	4.1	3.8
	4	4	2.0	1.58	6.4	6.0	5.8	5.2	4.7
2	2	4	8.4	6.92	6.9	6.5	6.2	5.5	5.1
	3	6	6.5	4.47	10.4	10.0	9.4	8.2	7.6
	4	8	5.0	3.16	12.8	12.0	11.6	10.4	9.4
3	2	6	10.4	10.96	10.2	9.3	9.0	8.1	7.5
	3	9	8.4	6.92	15.6	15.0	14.1	12.3	11.4
	4	12	7.0	5.0	19.2	18.0	17.4	15.6	14.1
4	2	8	11.5	14.13	13.8	13.0	12.5	12.1	10.0
	3	12	9.5	8.91	20.8	20.0	18.8	16.4	15.2
	4	16	8.1	6.46	25.6	24.0	23.2	20.8	18.8
6	2	12	13.3	21.38	20.8	20.0	18.8	16.4	15.2
	3	18	11.4	13.80	31.2	30.0	28.2	24.6	22.8
	4	24	9.9	9.77	38.4	36.0	34.8	31.2	28.2
8	2	16	14.5	28.18	27.5	26.0	25.0	22.2	20.4
	3	24	12.6	18.20	41.6	40.0	37.6	32.8	30.4
	4	32	11.1	12.88	51.2	48.0	46.4	41.6	37.6

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Antenna Height H in Meters (Antenna Spacing S in Meters)					
No of Bays	Ch 2	Ch 3	Ch 4	Ch 5	Ch 6
1	4.0	3.6	3.3	2.9	2.7
2	9.6 (5.6)	8.6 (5.0)	8.0 (4.7)	7.0 (4.1)	6.5 (3.8)
3	15.2 (5.6)	13.6 (5.0)	12.7 (4.7)	11.1 (4.1)	10.3 (3.8)
4	20.8 (5.6)	18.6 (5.0)	17.4 (4.7)	15.2 (4.1)	14.1 (3.8)
6	32.0 (5.6)	28.6 (5.0)	26.7 (4.7)	23.3 (4.1)	21.7 (3.8)
8	43.2 (5.6)	38.6 (5.0)	36.1 (4.7)	31.5 (4.1)	29.3 (3.8)

Weight in KG without mounting hardware						
No. of Bays	Panels / Bay	Ch 2	Ch 3	Ch 4	Ch 5	Ch 6
1	2	210	184	166	150	140
	3	315	276	249	225	210
	4	420	368	332	300	280
2	2	420	368	332	300	280
	3	630	552	498	450	420
	4	840	736	664	600	560
3	2	630	552	498	450	420
	3	945	828	747	675	630
	4	1260	1104	996	900	840
4	2	840	736	664	600	560
	3	1260	1104	996	900	840
	4	1680	1472	1328	1200	1120
6	2	1260	1104	996	900	840
	3	1890	1656	1494	1350	1260
	4	2520	2208	1992	1800	1680
8	2	1680	1472	1328	1200	1120
	3	2520	2208	1992	1800	1680
	4	3360	2944	2656	2400	2240

