

MDR1

Vertically or Horizontally Polarized (field selectable)
Omni-directional, Low Power Broadband
FM Dipole Antenna 87.5 -108 MHz

- Lightning Protection – All metal parts DC grounded
- Lightweight & foldable for shipping & ease of assembly
- Null fill, beam tilt & custom applications upon request
- No pressurization needed

Impedance: 50 Ohm

VSWR: < 1.2: 1

Input connector (each bay): “N” Type female

Construction: Aluminum

Typical center to center distance: (multi-bay arrays) 8½ ft (2.6 m)

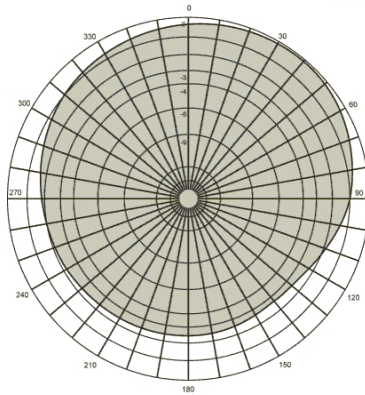
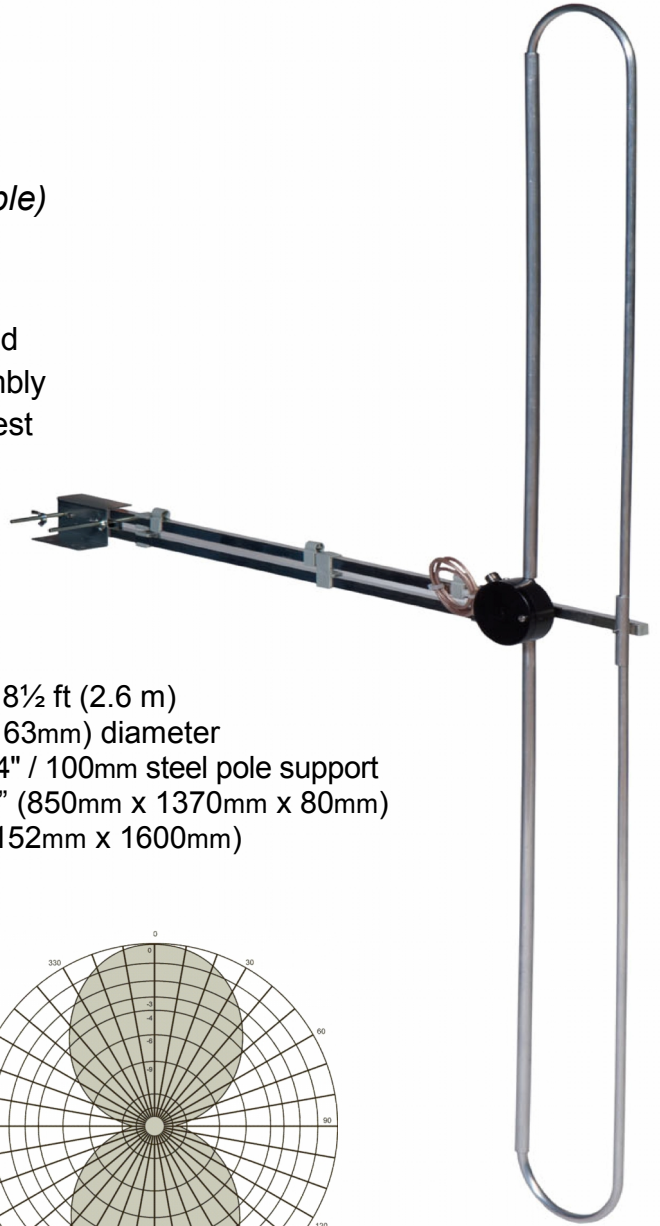
Bracket: Can clamp on supports 1” to 2 1/2” (25mm to 63mm) diameter

Pattern: Omni-directional +/- 2 dB typical on a standard 4” / 100mm steel pole support

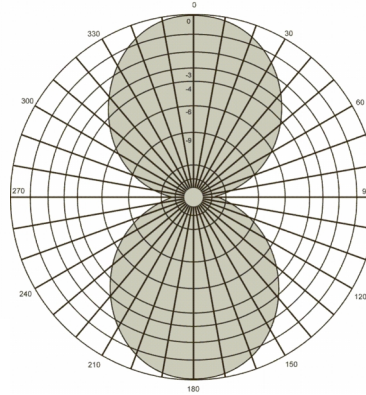
Approximate dimensions: (per bay) 33½” x 54” x 3¼” (850mm x 1370mm x 80mm)

Typical boxed size: (per bay) 6” x 6” x 63” (152mm x 152mm x 1600mm)

Typical weight: (per bay) 4 Lbs / 1.8 Kg (boxed)



Typical H-Plane



Typical E-Plane
(single bay)

Number of Bays	Gain (dbd)	Power Gain	Gain dBi	Power Rating	Vertical Height ft. / m.	Req. (*) Vertical Tower Space ft./ m.
1	1.5	1.4125	3.64	550 W	4' 6" / 1.37	14' 4" / 4.37
2	4.5	2.8183	6.64	1k W	13' / 3.97	22' 10" / 6.97
3	6	3.9810	8.14	1.5 kW	21' 6" / 6.57	31' 5" / 9.57
4	7.5	5.6234	9.64	2 kW	30' / 9.17	39' 11" / 12.17
5	8.5	7.0794	10.64	2.5 kW	38' 7" / 11.77	48' 5" / 14.77
6	9.3	8.5113	11.44	3 kW	47' 2" / 14.37	57' / 17.37
7	10	10	12.14	3.5 kW	55' 8" / 16.97	65' 2" / 19.97
8	10.5	11.2201	12.64	4 kW	64' 2" / 19.57	74' / 22.57
10	11.3	13.4896	13.44	5 kW	81' 3" / 24.77	91' 1" / 27.77
12	12.3	16.9824	14.44	6 kW	98' 4" / 29.97	108' 2" / 32.97

Values shown are typical. Actual values may vary with each specific installation. Power ratings are for single carrier. Attenuation of connecting cables not taken into account. Gain will be affected if null fill, beam tilt, special H / V ratio or special wavelength spacing is required. Gain is provided for one polarization and is equal in circularly polarized antennas for both horizontal and vertical components. If antenna is side mounted, the supporting structure will have a slight effect on radiation pattern and on VSWR. Contact us with details of your installation for customized data. (*)Total tower space recommended allows 5 ft (1.5 m) of clear tower space above and below the mounting area to protect from pattern interference by other antennas. On multi-bay arrays we suggest extending support pipe min. 5 ft (1.5 m) above the top bay and below the bottom bay.