

# TFLBDI

## Vertically Polarized 87.5 - 108 MHz Omni-directional, Stainless Steel Broadband FM Dipole Antenna

Lightning Protection – All metal parts DC grounded  
Null fill, beam tilt & custom applications upon request

Pressurization available upon request

Optional mini white fiberglass feedpoint radome available

Impedance: 50 Ohm • VSWR: < 1.35: 1

Input connector: (each bay) "N" Type fem. or 7/8" Flange

Typical ctr. to ctr. distance: (multi-bays) 8 1/2 ft (2.6 m.)

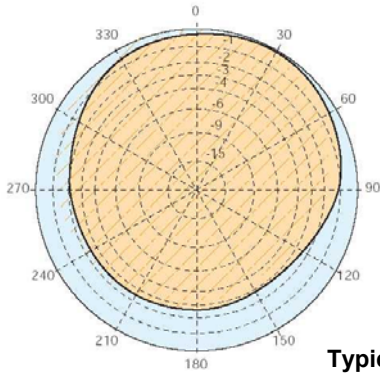
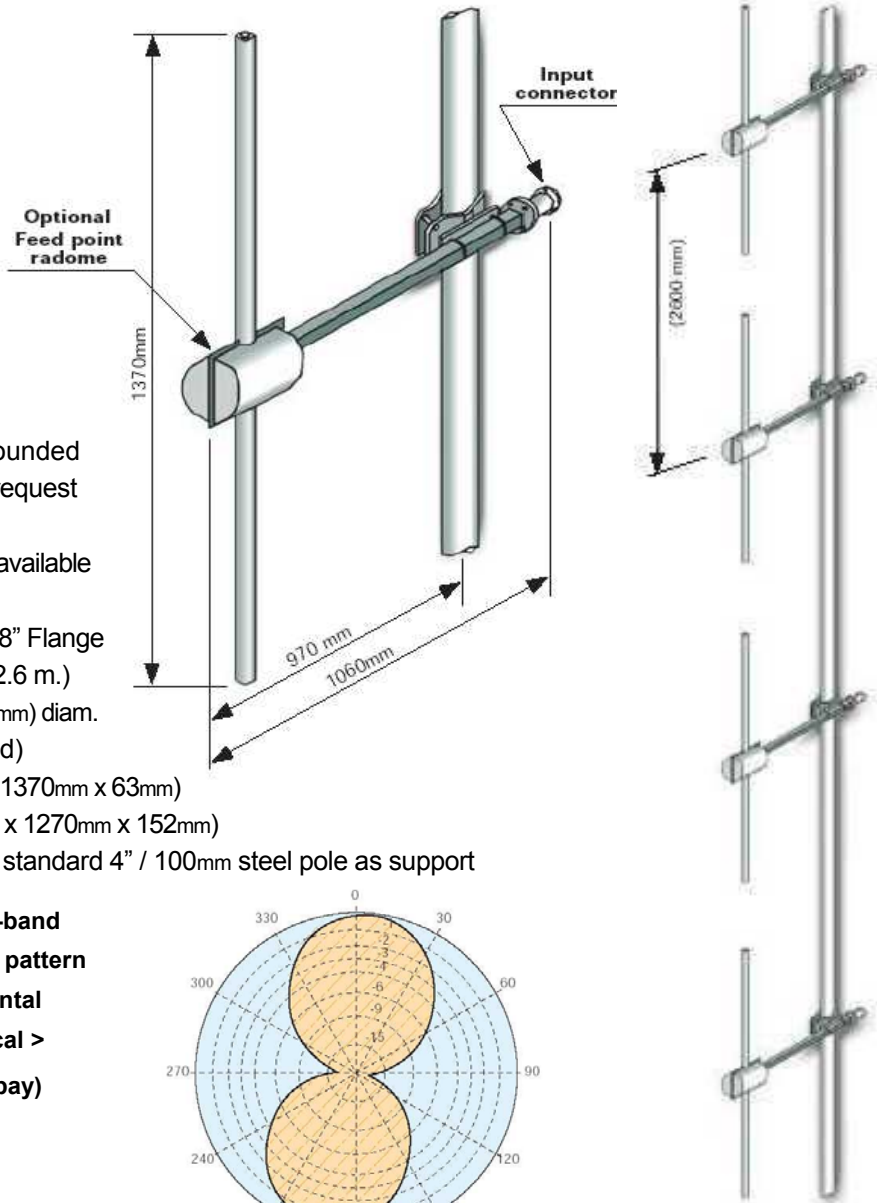
Bracket: can clamp on 1" to 4 3/16" (25mm to 110mm) diam.

Typical weight: (1 bay) 24 Lbs / 11 Kg (boxed)

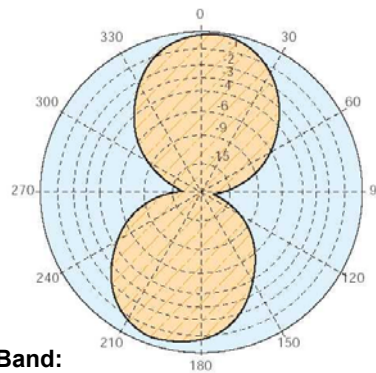
Approx size: (1 bay) 41 3/4" x 54" x 2 1/2" (1060mm x 1370mm x 63mm)

Typical boxed size: (1 bay) 63" x 50" x 6" (1600mm x 1270mm x 152mm)

Pattern: Omni-directional +/- 3 dB typical on a standard 4" / 100mm steel pole as support



**Typical mid-band  
radiation pattern  
< Horizontal  
Vertical >  
(each bay)**



**Typical gain (dBd) across the FM Band:**



Number of bays	Gain (dBd)	Power Gain	Gain dBi	Pwr Rating w/ "N" type	Pwr Rating w/ 7/8" Fl.	Vertical Height ft. / m.	Req. (*) Vertical Tower Space ft. / m.	Est. Wind Load Lbs / Kg
1	1.5	1.4	3.6	800 W	3.5 kW	4' 6" / 1.37	14' 4" / 4.37	22.2 / 10.1
2	4.5	2.8	6.6	1.5 kW	6 kW	13' / 3.97	22' 10" / 6.97	44.4 / 20.2
3	6	4	8.1	2 kW	9 kW	21' 6" / 6.57	31' 5" / 9.57	66.6 / 30.3
4	7.5	5.6	9.6	3 kW	12 kW	30' / 9.17	39' 11" / 12.17	88.8 / 40.4
5	8.5	7.05	10.6	3.6 kW	15 kW	38' 7" / 11.77	48' 5" / 14.77	111 / 50.5
6	9.3	8.4	11.4	4.4 kW	18 kW	47' 2" / 14.37	57' / 17.37	133.2 / 60.6
8	10.5	11.3	12.6	5.5 kW	24 kW	64' 2" / 19.57	74' / 22.57	177.6 / 80.8
12	12.3	16.9	14.4	8 kW	36 kW	98' 4" / 29.97	108' 2" / 32.97	266.4 / 121.2

Values shown are typical. Actual values may vary with each specific installation. Attenuation of connecting cables not taken into account. Gain will be affected if null fill, beam tilt or special wavelength spacing is required. 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. Estimated wind loads are calculated w/o radome per EIA Standard RS-222-C for 100 mph (160 kph)