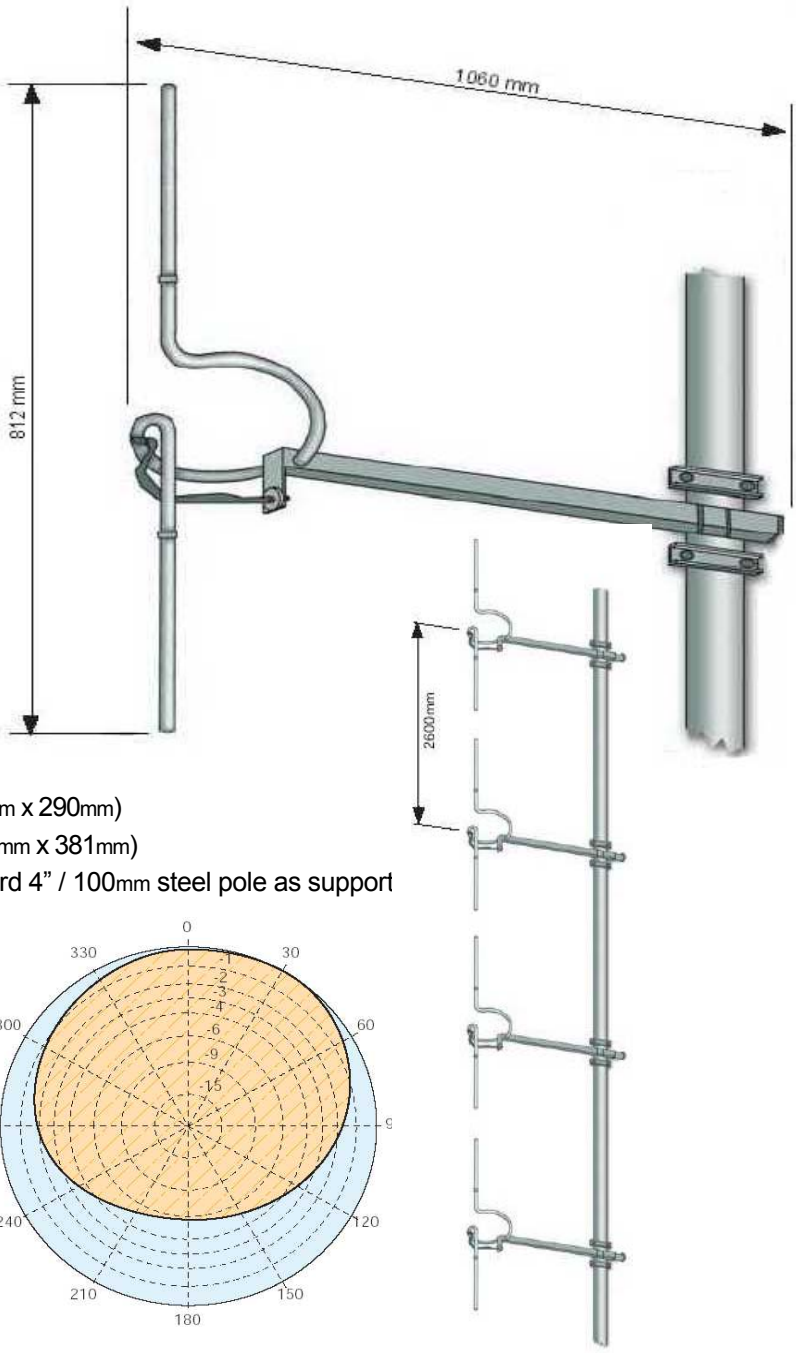
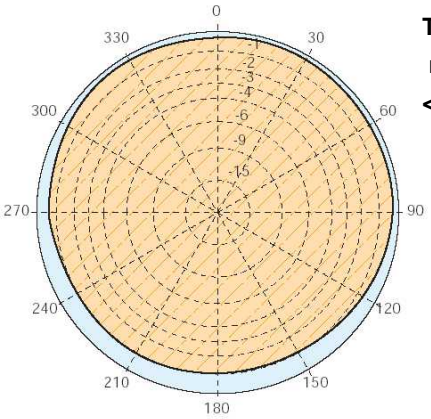
Telecom RADIO ANTENNAS

TFC1K

Circularly Polarized
Omni-directional,
Stainless Steel, Tuned
FM Antenna 87.5 - 108 MHz



Lightning Protection – All metal parts DC grounded
No pressurization needed
Null fill, beam tilt & custom applications upon request
Impedance: 50 Ohm • VSWR: < 1.1: 1 within 500 kHz
Input connector: (each bay) "N" Type fem or 7/16" fem
Typical ctr. to ctr. distance: (multi-bays) 8 ½ ft (2.6 m.)
Bracket: can clamp on 1" to 4 3/16" (25mm to 110mm) dia.
Typical weight: (1 bay) 14.3 Lbs / 6.5 Kg (boxed)
Approx size: (1 bay) 41¾" x 32" x 11½ " (1060mm x 812mm x 290mm)
Typical boxed size: (1 bay) 48"x 15"x 15" (1219mm x 321mm x 381mm)
Pattern: Omni-directional +/- 3 dB typical on a standard 4" / 100mm steel pole as support



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

Number of Bays	Gain (dBd)	Power Gain	Gain (dbi)	Pwr Rating "N" type	Pwr Rating 7/16"	Vertical Height ft. / m.	Req. (*) Vertical Tower Space ft/ m	Est. Wind Load lbs/Kg
1	-3.4	0.46	-1.2	800 W	1.2 kW	2' 8" / 0.81	12' 6" / 3.81	13.2 / 6
2	0.0	0.99	2.1	1.5 kW	2 kW	11' 2" / 3.41	21' / 6.41	26.4 / 12
3	1.9	1.55	4.0	2.2 kW	3 kW	19' 9" / 6.01	29' 7" / 9.01	39.6 / 18
4	3.2	2.12	5.3	2.8 kW	4 kW	28' 3" / 8.61	38' / 11.61	52.8 / 24
5	4.3	2.70	6.4	3.5 kW	5 kW	36' 9" / 11.21	46' 7" / 14.21	66 / 30
6	5.2	3.28	7.3	4 kW	6 kW	45' 4" / 13.81	55' 2" / 16.81	79.2 / 36
8	6.5	4.40	8.6	5.5 kW	7.5 kW	62' 4" / 19.01	72' 3" / 22.01	105.6 / 48
12	8.4	6.85	10.5	7.5 kW	10 kW	96' 6" / 29.41	106' 4" / 32.41	158.4 / 72

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, 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. Estimated wind loads are calculated w/o radome per EIA Standard RS-222-C for 100 mph (160 kph)