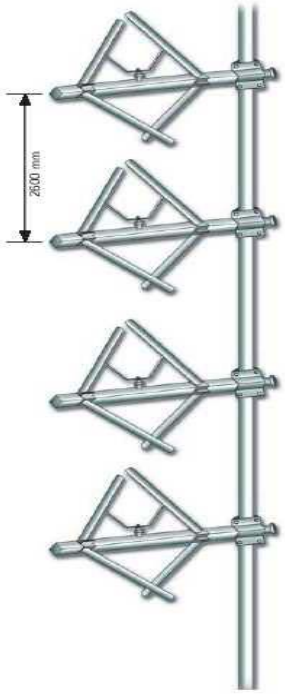
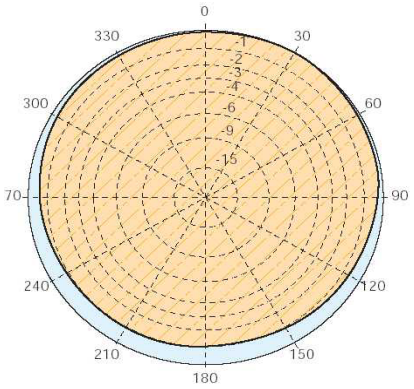
Telecom RADIO ANTENNAS

TFC2K

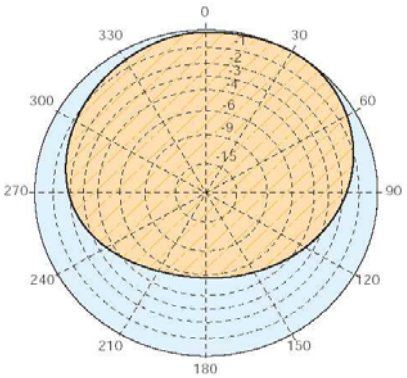
Circularly Polarized
Omni-directional,
Stainless Steel, Broadband
FM Antenna 87.5 - 108 MHz

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
Arms can be disassembled for easier transport
Impedance: 50 Ohm • VSWR: < 1.35: 1
Input connector: (each bay) "N" Type fem or 7/8" Flange or 1-5/8" Flange
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) diam.
Approx size: (1 bay) 61½" x 45½" x 45½" (1560mm x 1160mm x 1160mm)
Typical boxed size: (1 bay) 72"x 12"x 12" (1828mm x 304mm x 304mm)
Typical weight, 1 bay, boxed: 36 Lbs/16 Kg (7/8" & N type), or 50 Lbs/23 Kg (1 5/8" type)
Pattern: Omni-directional +/- 3 dB typical on a standard 4" / 100mm steel pole as support





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



N. of Bays	Gain (dBd)	Power Gain	Gain (dbi)	"N" Pwr Rating	7/8" Pwr Rating	1-5/8" Pwr Rating	Vertical height ft / m	Req (*) Vertical tower space ft/ m	Est wind load lbs/Kg	1 5/8" type W/L
1	- 3.4	0.46	-1.2	800 W	4 kW	7 kW	3' 10" / 1.16	13' 8" / 4.16	79 / 36	173 / 79
2	0.0	0.99	2.1	1.5 kW	7.5 kW	12 kW	12' 4"/ 3.76	22' 2" / 6.76	165 / 75	347 / 158
3	1.9	1.55	4.0	2.2 kW	11 kW	19 kW	20' 10"/ 6.36	30' 8" / 9.36	242 / 110	521 / 237
4	3.2	2.12	5.3	2.8 kW	15 kW	25 kW	29' 5"/ 8.96	39' 3" / 11.96	330 / 150	695 / 316
5	4.3	2.70	6.4	3.5 kW	18.5 kW	31 kW	37'11"/11.56	47' 9" / 14.56	402 / 183	869 / 395
6	5.2	3.28	7.3	4 kW	22 kW	38 kW	46' 5'/ 14.16	56' 3" / 17.16	484 / 220	1042 / 474
8	6.5	4.40	8.6	5.5 kW	29 kW	50 kW	63' 6"/ 19.36	73' 4" / 22.36	653 / 297	1390 / 632
12	8.4	6.85	10.5	7.5 kW	40 kW	75 kW	97' 8"/ 29.76	107'6" /32.76	979 / 445	2085 / 948

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 per EIA Standard RS-222-C for 100 mph (160 kph).