POWERLITE™ DCR-T FM ANTENNA

Dielectric®

The DCR-T antenna is a low-power version of Dielectric's popular DCR Series FM antennas.

Dielectric Advantages

- Circularly polarized
- Branch feed
- Band tunable
- Ideal for Class A and B stations
- IBOC compatable
- Low VSWR, <1.1:1 over operating channel (+/- 100 kHz)
- 1 kW per bay power handling
- Light weight

- Easy Installation
- All-aluminum construction
- Null fill and beam tilt available
- Bay input 7-16 DIN
- Standard array input 1 ⁵/₈" EIA
- 1- to 6-bay configurations, full- or half-wave spaced
- Available with optional radome (as shown in picture)
- Directional patterns available

*shown with radome option

Electrical Specifications

Band	Polarization	Circularity	VSWR	Input	Power Rating
FM (88-108 MHz)	Circular	± 1 dB free space	w/o field trim 1.2:1 Top Mounted 1.5:1 Side Mounted with field trim 1.07:1 (± 100 kHz)	Bay 7-16 DIN Array 1 ⁵/₈" EIA	500 W/Input

Mechanical Specifications—Individual Bay

Height ft (m)	Diameter in (m)	Weight lb (kg)	Windload¹ ft² (m³)
20 (0.503)	20.7 (0.526)	17.5 (8.0)	2.4 (2.2)

1 Wind area CAAC per TIA/EIA-222-F (CA = 1.4)

Antenna Type	# of Bays	RMS Gain Full Wave Spaced (ratio)	RMS Gain Full Wave Spaced (dBd)	RMS Gain Half Wave Spaced (ratio)	RMS Gain Half Wave Spaced (dBd)	Weight lb (kg)	Wind Area ft² (m³)	With Radome Weight lb (kg)	With Radome Wind Area ft² (m³)	Power Rating kW
DCRT1	1	0.46	-3.37	0.46	-3.37	17.5 (8.0)	17.5 (8.0)	2.4 (0.22)	2.4 (0.22)	1
DCRT2	2	1	0	0.7	-1.55	47.4 (21.5)	46.5 (21.1)	6.0 (0.56)	5.7 (0.53)	2
DCRT3	3	1.5	1.76	1	0	67.9 (30.9)	66.1 (30.0)	9.4 (0.87)	8.8 (0.82)	3
DCRT4	4	2.1	3.22	1.2	0.79	90.2 (40.1)	56.0 (39.1)	13.3 (1.24)	12.0 (1.11)	4
DCRT6	6	3.2	5.05	1.8	2.55	145.8 (66.3)	142.2 (64.6)	20.3 (1.89)	18.8 (1.74)	6

Notes:
- Wind area C_AC_C is calculated per the TIA/EIA-222-F standard
- RMS gain are for midband and include feed system losses. Actual gain will vary depending on feed systems, frequency, null fill and beam tilt.
- C_AC_C include bays, power dividers, inter-bay feed lines and standard brackets for mounting.
- For more information, reference the Dielectric pattern viewer software at Dielectric.com/Software.
- Contact factory for mechanicals for antenna with radomes.