



\*shown with radome option

### DCR-T

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 compatible
- 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 8-bay configurations, full- or half-wave spaced
- Available with optional radome (as shown in picture)
- Directional patterns available

### 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)	Windload <sup>1</sup> ft <sup>2</sup> (m <sup>3</sup> )
20 (0.503)	20.7 (0.526)	17.5 (8.0)	2.4 (2.2)

<sup>1</sup> 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)	Without Radomes		With Radomes		Power Rating kW
						Weight (lbs) λ Spaced	EPA (ft <sup>2</sup> ) λ Spaced	Weight (lbs) λ Spaced	EPA (ft <sup>2</sup> ) λ Spaced	
DCRT1	1	0.46	-3.37	0.46	-3.37	20	2.9	50	3.8	1
DCRT2	2	1	0	0.7	-1.55	50	6.2	110	8	2
DCRT3	3	1.5	1.76	1	0	72	9.1	162	11.9	3
DCRT4	4	2.1	3.22	1.2	0.79	99	13.6	219	17.3	4
DCRT5	5	2.7	4.31	1.5	1.76	124	18.4	274	23	5
DCRT6	6	3.2	5.05	1.8	2.55	150	23.8	330	29.3	6
DCRT7	7	3.8	5.8	2.1	3.22	183	29.8	373	35.5	7
DCRT8	8	4.3	6.34	2.3	3.62	212	36.5	432	43	8

**Notes:**

- Wind area C<sub>A</sub>A<sub>C</sub> is calculated per the TIA/EIA-222-G 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<sub>A</sub>A<sub>C</sub> 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](http://Dielectric.com/Software).
- Contact factory for mechanicals for antenna with radomes.