# DCR-Q

# Dielectric<sup>®</sup>



The DCR-Q was born out of a request to develop a side-mount antenna to support 9 FM stations. Its quadrapole design is an evolution of the popular Dielectric DCR-M antenna. The DCR-Q meets the need of high power broadcasters desiring the azimuth pattern performance of a side-mounted antenna along with the broadband performance and high power handling of a panel. This highly engineered antenna has been specifically developed for multichannel combined applications. Deicers are recommended for applications where heavy icing conditions are anticipated. The relative low weight and windload of this antenna makes it ideal for towers that could not otherwise support a master FM panel antenna or for applications where the cost of reinforcing a tower is prohibitive.

## Specifications:

- 16 MHz bandwidth
- Array input power up to 200 kW
- Variable bay spacing
- Branch feed for multi-station operation
- Circularly polarized
- Brass construction
- Low ice sensitivity
- · Low weight and windload
- Designed for -10dB IBOC signals

### **Electrical Specifications**

Antenna Type	# of Bays	Power Gain	dB	Power Rating kW
DCR-Q1	1	0.43	-3.67	35
DCR-Q2	2	0.93	-0.032	70
DCR-Q4	4	1.79	2.53	140
DCR-Q6	6	2.5	3.98	200
DCR-Q8	8	3.3	5.18	200
DCR-Q10	10	4.2	6.23	200
DCR-Q12	12	5	6.99	200

### **Mechanical Specifications**

Antenna Type	# of Bays	Weight (lbs)	Windload lbs	Projected Area (ft)
DCR-Q1	1	220	226	4.5
DCR-Q2	2	440	452	9
DCR-Q4	4	880	903	18.1
DCR-Q6	6	1320	1355	27.1
DCR-Q8	8	1760	1808	36.2
DCR-Q10	10	2200	2260	45.2
DCR-Q12	12	2640	2710	54.2