



DCR-MFE "FUNKY ELBOW"

- Variable spacing
- Broad bandwidth capability
- Array input power 100kW or more
- Series fed for multi-station operation
- Circularly polarized
- Stainless steel construction
- Low ice sensitivity
- Fine matcher included
- Match bay spacing to existing tower for more consistent pattern results
- Radomes/deicers available



The DCR-MFE antenna is center fed, meeting the needs of high-power, high bandwidth and short spaced bay requirements.

Variable Bay Spacing

Through the use of a series feed system, proper RF phase to each bay is maintained, even at reduced bay spacings. This allows for bay spacings between 1/2 and full wavelength. The reduction in bay spacing can have multiple benefits including: 1) A significant reduction in the amount of "downward" radiation. 2) Broader elevation beam. 3) More constant patterns.

It must be noted that reducing the bay spacing for a given number of bays also reduces the gain. An 8 bay with full wavelength spacing has a gain of 4.3x. The elevation pattern of an 8 bay half wavelength with a gain of 2.4x resembles the elevation pattern of a 4 bay full wavelength in terms of beam width and gain. A variety of bay spacing is available; contact factory for details.

High-Power Input Capability

The DCR-M is designed with input line sizes up to 6-1/8" EIA. This allows for array input power levels in excess of 100kW.

Beam Tilt & Null Fill

Beam tilt and/or null fill are options typically offered in arrays of eight bays or more, however they may also be utilized on smaller arrays.

Directional Arrays

The DCR-MFE antenna is available in directional arrays which are custom-built to the needs of the specific station.

Multi-Station Operation

The high-power handling and wideband characteristics for the DCR-MFE make this antenna an excellent alternative to high cost panel antennas.

To aid in selecting the elevation pattern most suitable to your application, please visit our website and download Dielectric's Antenna Planning software.

General Specifications

Pattern Circularity in Free Space	± 1 dB
VSWR (max.) at Input, Up to 8 MHz	1.15:1 typical, call for quote on specific application
Input	3 1/8" 50 ohm Standard, larger sizes available
Section Dimensions	Diameter: 36" (915mm) / Height: 29" (737mm)