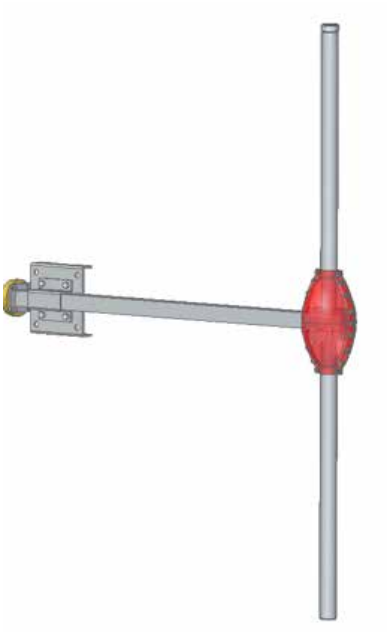

VERTICALLY POLARIZED MEDIUM POWER FM ANTENNA

- 1 kW for a single bay
- Low cost
- Low windload
- Vertical polarization
- High-power handling
- Lightweight aluminum construction
- Input power up to 40 kW
- VSWR field adjustable

The DCV antenna is designed for installations where a high-power vertical polarization antenna is desired. It has an input power rating of 5 kW per bay. It is available in stacked arrays of up to 8 sections with an input power rating of 40 kW.

The Dipole element is made of lightweight aluminum tubing with a protective coating of iridite, resulting in a strong and lightweight structure. Where required, low windload radomes are available as an option.

Power gain is proportional to the number of dipoles in the array. Each dipole provides approximately 1.0 gain (0 dB). This factor improves slightly with the number of sections in the array as well as with directional patterns. Contact the factory to determine the gain for your application.

The bandwidth of the DCV antenna allows for the use with multi-station applications. The VSWR over a 6 MHz band using a branch feed system is 1.2:1.0. The VSWR using an end fed configuration is 1.2:1.0 over a 3 MHz band.

Diplexing equipment and transmission line for multi-station systems can be provided by Dielectric allowing one supplier for all your RF requirements.

Wind Spec	Channel	Wavelength	Ice
G	108	109.3 in	0 in

Vertical Dipole Windloads

# of Bays	EPA (ft^2)	W (lbf)	H2 (ft)	W_{ice} (lbf)
1	2.2	18.4		0
2	4.8	39.4	9.1	0
3	8.6	65.9	18.2	0
4	13.4	96.9	27.3	0
5	19.0	132.5	36.4	0
6	25.6	172.7	45.5	0
7	33.0	217.4	54.6	0
8	41.4	266.7	63.7	0
9	50.8	320.5	72.9	0
10	61.0	378.9	82.0	0

* Includes 7/8 feed line