

## **ANT90D**DIPOLE ANTENNA - FM BROADCAST

The Telewave ANT90D is a rugged, high-performance single dipole antenna designed for the FM broadcast band. This antenna provides 20 MHz bandwidth with no tuning required. The horizontal pattern is adjustable, and multiple elements can be stacked for increased gain and pattern control. This antenna is ideal for LPFM and translator stations for fill-in or smallmarket coverage.

Each dipole element is constructed with 6061-T6 aluminum, and welded at the base for maximum strength. Each element is also completely sealed with our high-tech Txylan<sup>TM</sup> coating, which resists water and ice

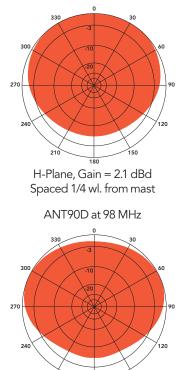
buildup, and provides exceptional protection from corrosive gases, UV radiation, salt spray, acid rain and windblown abrasives.

All components are at DC ground potential for lightning protection. A full clamp set is included for mounting to a 1.5"-3.5" diameter galvanized steel support pipe or tower leg.

Up to 15 degrees of electrical uptilt or downtilt can be specified for multiple element arrays. Desired tilt angle must be included with the order, and consultation with our antenna engineering staff is requested.



SPECIFICATIONS	
Frequency (continuous)	88-108 MHz
Power rating (typ.)	500 watts
Impedance	50 ohms
VSWR	1.5:1 or less
Pattern	Adjustable: Offset circular, cardioid, or bidirectional
Lightning protection	DC Ground
Termination	N-Male or 7-16 DIN (opt.) on harness feed cable
Gain (dependent on pattern)	1 - 2.05 dBd
Vertical beamwidth	1/4 wl 70°, 1/2 wl 73° 3/8 wl 84°
Horizontal beamwidth	1/4 wl 210°, 1/2 wl 88° 3/8 wl 240°
Dimensions (H x mast distance) max.	56 x 57 in.
Weight (antenna + clamps)	18 lb.
Wind rating / 0.5" ice	125 / 100 MPH
Maximum exposed area	1.9 ft. <sup>2</sup>
Lateral thrust at 100 MPH	74 lb.



H-Plane, Gain = 1.9 dBd Spaced 3/8 wl. from mast