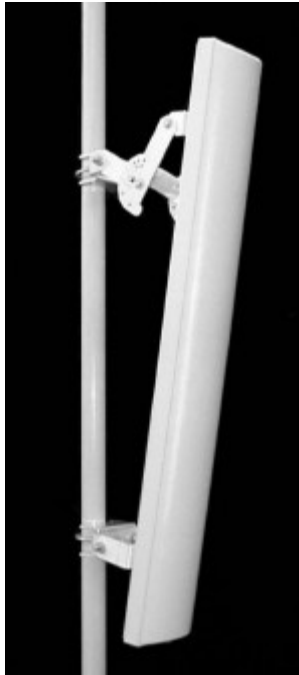


## TA-1806-16-90 Sector

### 1850-1990 MHz



The TA-1806-16-90 is a vertically polarized 90 degree sectoral antenna. The antenna consists of a printed broadband dipole array enclosed in an aluminum cavity with a UV stabilized ASA radome for superior weatherability. The use of 16 radiating elements allows for precise pattern control including upper sidelobe reduction and null fill. The antenna is at DC ground to aid in lightning protection.

#### Electrical Specifications

**Frequency Range:** 1850-1990 MHz  
**Gain:** 15 dBi  
**VSWR:** 1.43:1 max.  
**Front to Back Ratio:** 25 dB min.  
**Polarization:** Vertical  
**Power Rating:** 250 Watts  
**H-Plane Beamwidth:** 90 +/- 3 degrees  
**E-Plane Beamwidth:** 7.8 +/- 1 degrees  
**Electrical Downtilt:** 2, 5 degrees  
**Cross Pol. Discrimination:** 20 dB min.  
**Impedance:** 50 ohms nominal  
**3rd Order I.M. (2x20W):** -147 dBc  
**Termination:** 7/16 DIN female (N optional)

Typical mid band values. (For details , contact factory)  
 Specifications subject to change without notice

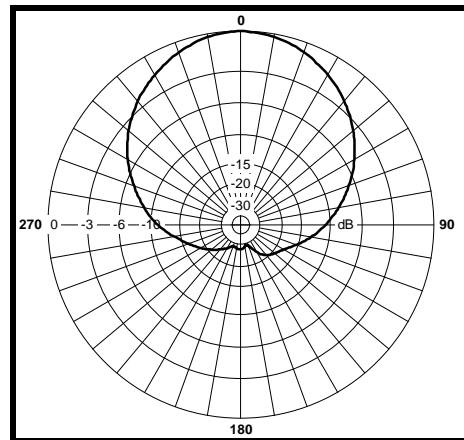
#### Mechanical Specifications

**Length:** 50 in. (1270 mm)  
**Width:** 6.5 in. (165 mm)  
**Depth:** 3.8 in. (96.5 mm)  
**Weight (incl. Clamps):** 14 lb. (6.4 kg)  
**Rated Wind Velocity:** 125 mph (200 km/h)  
**Hor. Thrust at rated wind:** 141 lb. (64.1 kg)  
**Mechanical Tilt:** 0 - 15° (in 1° increments)  
**Mounting (O.D.):** 1.0 - 3.5 in. (25.4 - 89 mm)

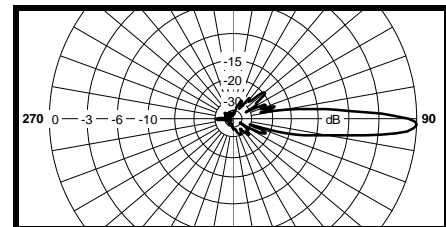
#### Materials

**Radiating Elements:** Plated copper on PCB  
**Reflector:** Irridated aluminum  
**Radome:** Gray UV stabilized ASA  
**Clamps:** Aluminum and HDG steel

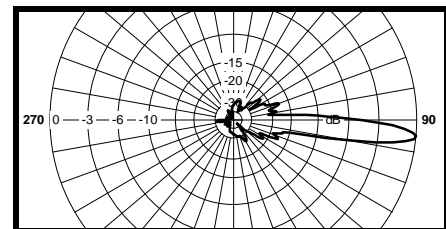
H-Plane



E-Plane



T2



T5