

**698-806 MHz**

**700 MHz Band**



## **700 MHz Base Station Sector Panel Antenna**

### **Model HP700**

Horizontally polarized broadband two panel array covering the 698-806 MHz spectrum for the newly licensed 700 MHz Band. The radiating elements and structural dipoles are entirely welded to the support spine. This results in an enhanced reduction in PIM, even after many years of being in service. The integrated mounting hardware supplied provides the option of beam width adjustability in the field.

The radome covering the dipoles and internal feed conductors allow this antenna to operate reliably under extreme snow, rain, frost, or icing conditions. Each panel is rated for 500 watts of input power, and multiple bays can be stacked horizontally or vertically to satisfy required gain or coverage.



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## **Electrical**

Frequency: 698-806 MHz  
Gain: 14.5dBd @ 60°, 12.9dBd @ 90°, 12.1dBd @ 120°  
Beam width: 60, 90 and 120 degrees, field adjustable  
Impedance: 50 ohms  
VSWR: <1.15:1  
Polarization: Horizontal  
Max. Input Power: 500W standard, higher input power available  
PIM: < -135 dBc  
Input Connector: N female  
F/B Ratio: 22 dB  
XPD: 25 dB typical  
Beam tilt: Any degree of mechanical available

## **Mechanical**

Weight: 62 lbs (including mounting hardware)  
Mounting: Hot dipped galvanized steel, customized to tower spec or standard pipe OD  
Radiating Elements: Structural Aluminum 4 dipole panel with machined brass connectivity  
Reflector: Galvanized sheet metal  
Radome: UV stabilized ASA  
Grounding: Antenna and radiating elements are fully DC grounded via the mounting hardware for lightning protection.  
Dimensions: 750mm wide X 2400mm long X 600mm deep  
Wind load: 1.6 kN Frontal, 550 N Lateral @ 160 km/h  
Vertical Height Req'd: 2.5 m / 8.0 feet

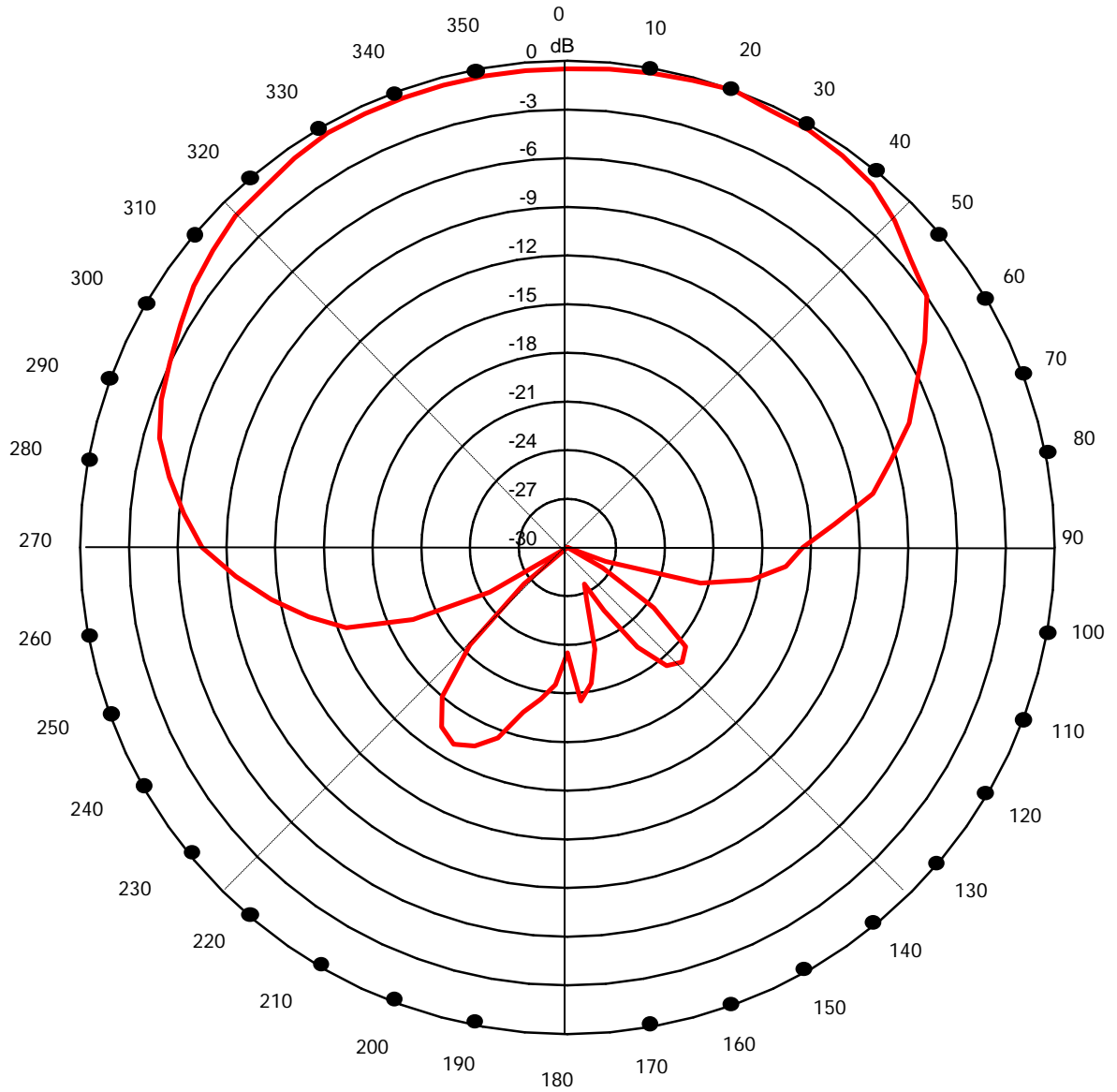
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**120 Degree Coverage**

**Horizontal Plane – HP700-120**



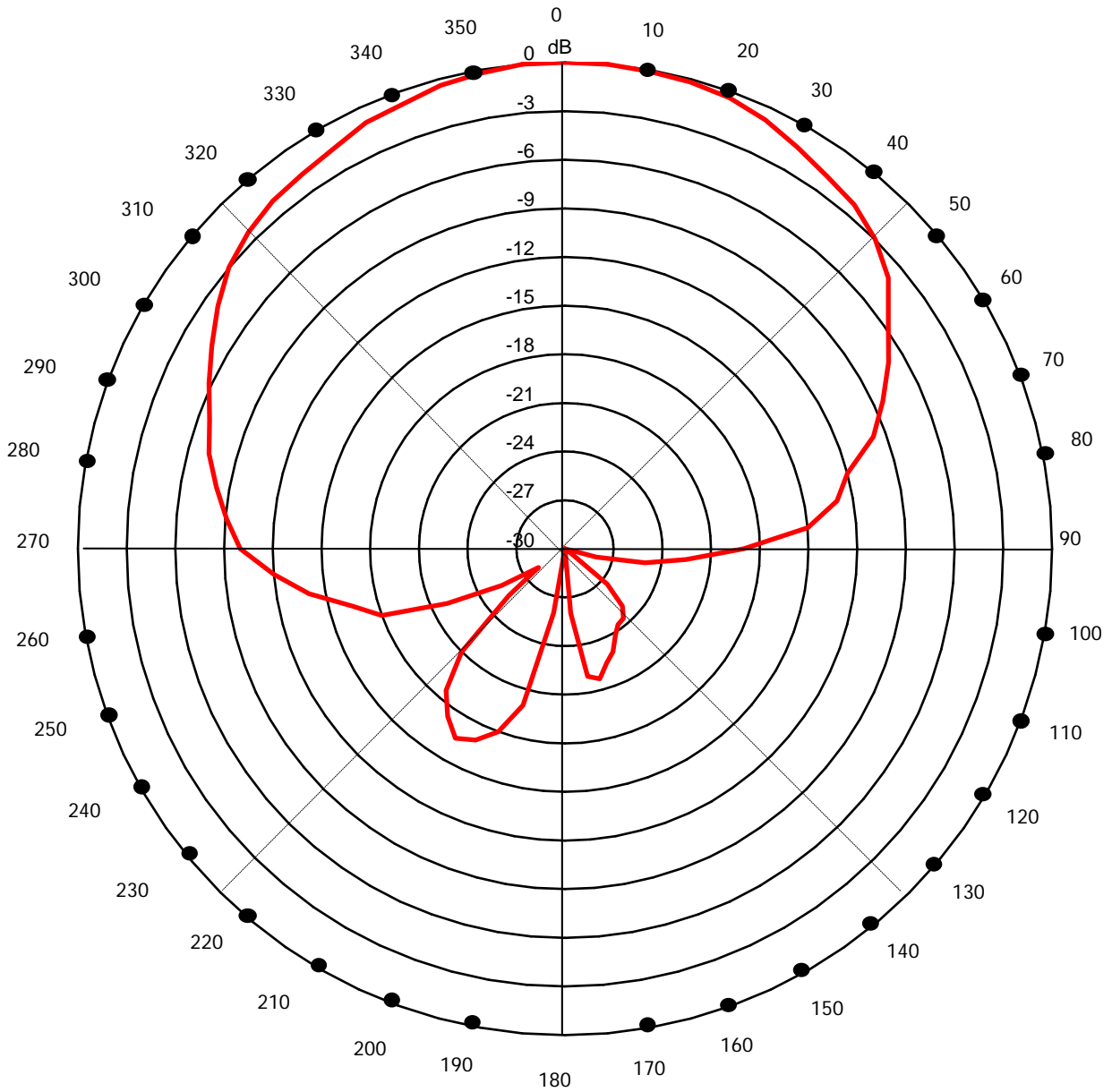
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**90 Degree Coverage**

**Horizontal Plane – HP700-90**



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**Vertical Plane – HP700-90 &120**

