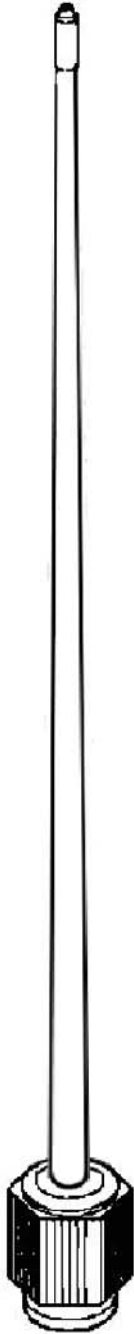


MPS-10M/1A

HF Omni Directional Broadband Whip Antenna



PRODUCT DESCRIPTION

Model Number: **MPS-10M/1A**
Part Number: **1500-0452-201**

- Air Cooled Balun Transformer
- 1 kW Power Handling Capability
- Powder Coated for Maximum Corrosion Protection

ELECTRICAL SPECIFICATIONS

Frequency Range: 2-30 MHz
Power Handling: 1 kW avg
Application: Transmitting and Receiving
Polarization: Vertical
Azimuth Beamwidth: Omnidirectional
Customer Input: Type N Female
VSWR: 2:1 nominal, 3:1 max
Input Impedance: 50 Ohms
Static Charges: Element at DC ground to prevent the accumulation of static charges
Matrix / Maintenance: RF Input at DC ground to ensure compatibility

MECHANICAL SPECIFICATIONS

Height: 457 inches
Diameter: 18 inches
Base Flange: 18 inches diameter
Hole Pattern: 8 holes and 15.25 inch diameter
Hole Diameter: 0.56 inch diameter
Weight: 188 lbs
Crated Weight: 358 lbs

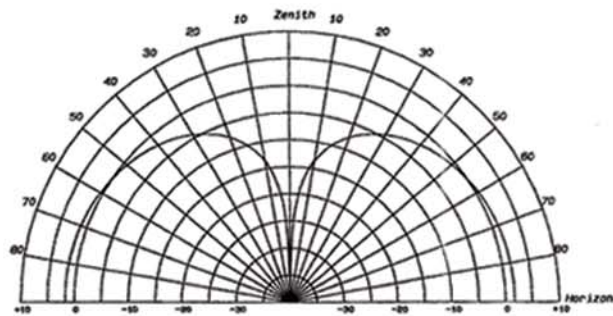
ENVIRONMENTAL SPECIFICATIONS

Temperature: -54° to 65° C
Dust: Test per MIL-STD-810 Method 510.2
Shock: MIL-STD-901C, Grade A, Class 1
Vibration: MIL-STD-167-1, Type I
Humidity: 0 to 100 %
Wind: 100 knots
Ice: 4.5 PSF On All Exposed Surfaces
Salt Fog: Withstands 100 Hour Test of 20% @ 65° C

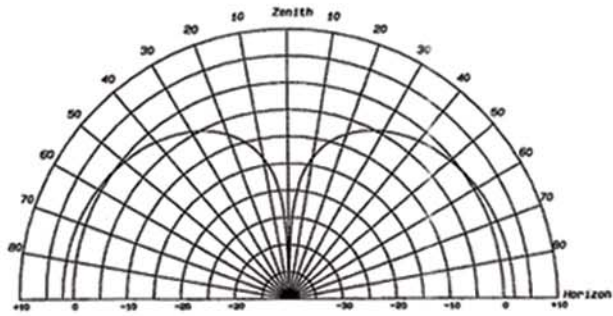
CONSTRUCTION

Antenna Base Unit: Welded Aluminum; All exposed surfaces powder coated for max corrosion protection
Radiating Element: Multiple copper wires embedded in fiberglass whip
Radome: Epoxy Fiberglass, painted with SW Polane paint, Haze Grey

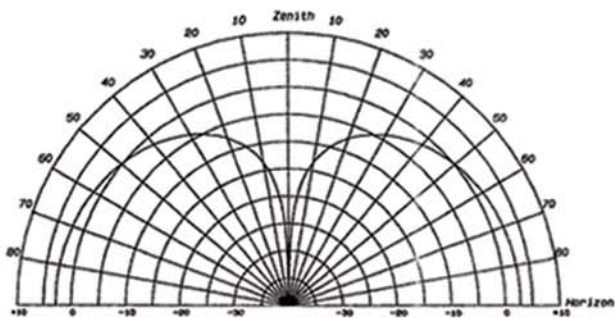
MPS-10M/1A



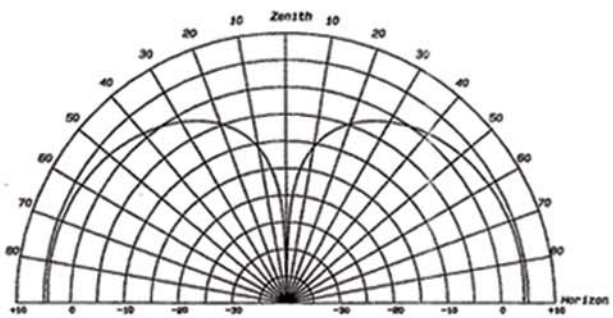
Elevation Pattern - 2 MHz Vertical Polarization
Gain: 1.69 dBi without AMU



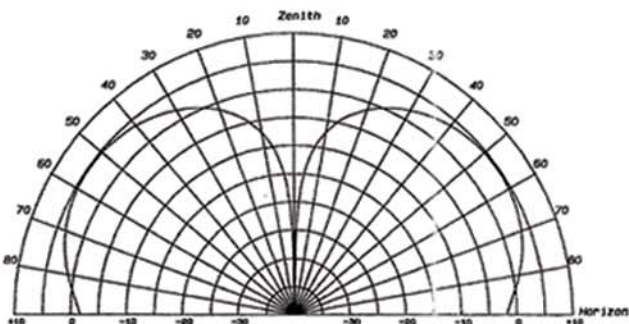
Elevation Pattern - 5.16 MHz Vertical Polarization
Gain: 1.92 dBi without AMU



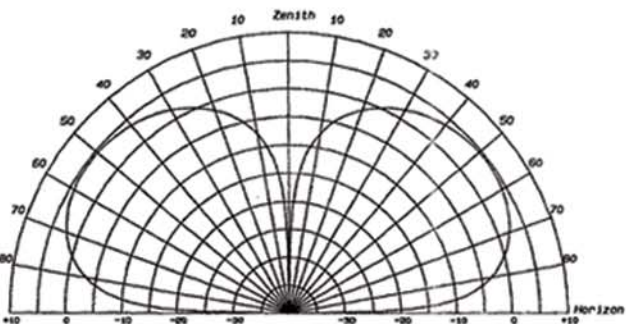
Elevation Pattern - 10.16 MHz Vertical Polarization
Gain: 2.77 dBi without AMU



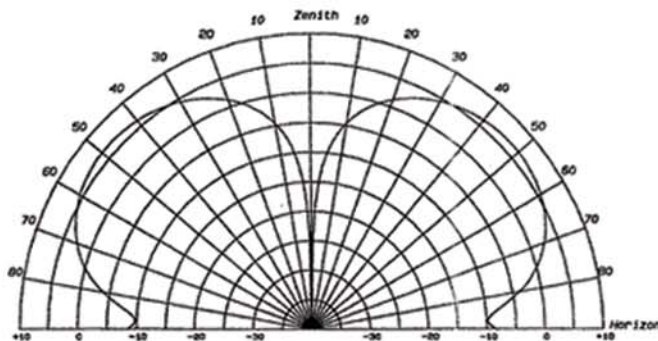
Elevation Pattern - 15.24 MHz Vertical Polarization
Gain: 4.38 dBi without AMU



Elevation Pattern - 19.99 MHz Vertical Polarization
Gain: 4.75 dBi without AMU



Elevation Pattern - 26.2 MHz Vertical Polarization
Gain: 4.61 dBi without AMU



Elevation Pattern - 30 MHz Vertical Polarization
Gain: 6.55 dBi without AMU