



FRF-171-503

DATA SHEET

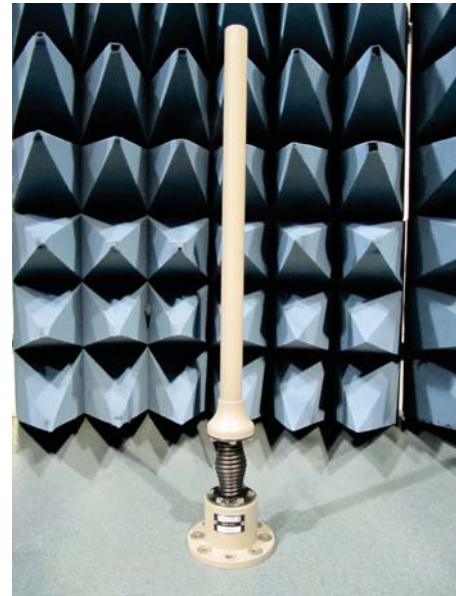
Description:

The FRF-171-503 antenna provides 2-ports with omnidirectional coverage making it well suited for use with advanced radios that support 2x2 spatial diversity MIMO as well as consolidating multiple antennas. This single installation multi-band communications antenna is useful for both commercial and military applications such as: EW, Electromagnetic Surveillance, Spectrum Monitoring, and Metrology. The FIRST RF Corporation FRF-171 series antenna systems have high power omnidirectional capability over a broad frequency range, with the choice of adding additional pattern and bandwidth capability. The antenna systems are designed to meet the most stringent military standard environmental requirements including tactical and commercial vehicles as well as fixed site installations. The antenna series has gone through extensive environmental and performance testing to ensure reliability in the harshest environments. The antenna exceeds MILSTD-810F performance requirements and has passed rigorous road test conditions (Munson Road Test) when suitably mounted on the vehicle platform. The product is the latest extension in the FIRST RF family of high performance multi-band antennas.

RF Performance Overview:



FRF-171-503 on HMMWV with optional 18" Riser



FRF-171-503

Antenna Information:

Frequency Band: S\X-Band (2-6 GHz contiguous)
Typical Gain: > +3 dBiL each port
VSWR: 3.0:1 maximum, 2.0:1 typical
Connectors: 2 Ports
S,C Port 1 Type N Female
S,C Port 2 Type N Female
2 Elevation Phase Centers Supports 2x2 spatial diversity MIMO
Isolation: 40 dB typical

Environmental:

Designed to exceed MIL-STD-810F
Temperature: -40 to +65°C Operational
Power Input: 100W CW

Mechanical Overview:

Nominal height: < 30"
Nominal Antenna Weight: <6 lbs
Radome: Electrically Insulated to 10kV rms