# **PERSISTENT SYSTEMS**

# S-Band Integrated Sector Antenna

WR-INT-ANT-SYS-01

### EXTENDED COVERAGE. MAXIMUM PERFORMANCE

The power of the Wave Relay<sup>®</sup> MANET integrated directly into an antenna extends the enterprise to the edge and over large geographic areas.

#### SIMPLE INSTALLATION

- Wave Relay<sup>®</sup> MANET integrated directly into antenna
- No external RF cabling reduces hassle and loss of gain
- Simple mounting bracket for quick setup
- One cable for Power + Data
- Adjustable downtilt for complete coverage

#### MORE DATA OVER LONGER RANGES

- MIMO technology delivers high throughput at long range
- Custom antenna polarization designed to maximize radio performance
- No external RF cabling allows you to leverage the full gain of the antenna
- High throughput allows you to blanket large geographic areas with coverage.

#### MADE FOR DURABILITY

- Built for long-term installation on towers, buildings, and poles
- IP66 rated to protect against weather
- Weatherized Ethernet connector means you don't have to climb towers in inclement weather to adjust configuration

#### **NO NDA REQUIRED**

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# **SPECIFICATIONS**

#### RF

Frequency 2.2 - 2.5 GHz **Polarization** Slant L/R & Vertical Gain 12 dBi **Transmit Power** 10W **Port-to-Port Isolation** >30 dB Horizontal Beamwidth (-3 dB) 120° Vertical Beamwidth (-3 dB) 11°

#### **Physical**

**Dimensions** 26 x 16.7 x 5.9 in. 66 x 42.5 x 15 cm Weight (Integrated Antenna Only) 10 lbs. 4.5 kg Mounting 1" to 2" Pole Mounting Kit 0° to -15° Elevation Downtilt Adjustment

### Computing

**Operating System** Wave Relav OS Processor 1 GHz Quad Core ARM RAM 2GB Storage 32GB Flash

### Electrical

**Lightning Protection** Integral surge suppression **Power Input** 100 - 240 VAC 50/60 Hz 24 - 48 VDC **Peak Power Consumption** 45W 20% Duty Cycle Power Consumption 12.1W

#### Environmental

**Operating Temperature** -40°C to +60°C MIL-STD-810H Vibration DEF STAN 00-035, Part 3, Issue 5 Vibration/Wind

## 1/0

Interfaces Power + Ethernet (IP66 RJ45)

### MANET

MANET Wave Relay® MANET Self-Forming/Healing Peer-to-Peer No Master Node **Node Entry Time** <1 sec. Max. Number of Hops No Limit Max. Number of Nodes No Limit Max. Distance between Nodes 130 mi

### Networking

Ethernet 10/100 Mbps Integration and Extension Seamless layer 2 network Protocols Advanced multicast algorithms IPv4 and IPv6 compatible Integrated DHCP server

#### Security

**Crypto Modes** CTR-AES-256 Encryption SHA-256 HMAC

#### Hardware

Cryptographic Acceleration Suite-B Algorithms

# for Vertical Polarized Element



# for Slant Left Polarized Element

#### Azimuth (Green) and Elevation (Blue) Pattern Azimuth (Green) and Elevation (Blue) Pattern Azimuth (Green) and Elevation (Blue) Pattern for Slant Right Polarized Element





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