C-Band Integrated Sector Antenna
WR-INT-ANT-SYS-05

Extended Coverage. Maximum Performance
The power of the Wave Relay® MANET integrated directly into an antenna extends the enterprise to the edge and over large geographic areas.

Simple Installation
- Wave Relay® 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 Wide Areas
- 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 extend the enterprise 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

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# SYSTEM SPECIFICATIONS

## RF
- **Frequency**: 4.4 - 5.0 GHz
- **Polarization**: Slant L/R & Vertical
- **Gain**: 12 dBi
- **Transmit Power**: 6W
- **Port-to-Port Isolation**: >30 dB
- **Horizontal Beamwidth (-3 dB)**: 120°
- **Vertical Beamwidth (-3 dB)**: 12°

## Physical
- **Dimensions**: 16.5 x 10 x 5.6 in.
- **Weight (Integrated Antenna Only)**: 8.75 lbs.
- **Mounting**: 1” to 2” Pole Mounting Kit
  - 0° to -15° Elevation Downtilt Adjustment

## Environmental
- **Operating Temperature**: -40°C to +60°C

## I/O
- **Interfaces**: Power + Ethernet (IP66 RJ45)

## Electrical
- **Lightning Protection**: Integral surge suppression
- **Power Input**: 100 - 240 VAC 50/60 Hz
  - 24 - 48 VDC
- **Peak Power Consumption**: 65W
- **20% Duty Cycle Power Consumption**: 18.5W

## Android™ Computer
- **Operating System**: Android™ 6.0 – Marshmallow
- **Processor**: 1 GHz Quad Core ARM
- **RAM**: 2GB
- **Storage**: 32GB Flash

## Security
- **Crypto Modes**: CTR-AES-256 Encryption
  - SHA-256 HMAC
- **Hardware**: Cryptographic Acceleration
  - Suite-B Algorithms

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

## MANET
- **MANET**: Wave Relay®
  - 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

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**Azimuth (Green) and Elevation (Blue) Pattern**
- **for Vertical Polarized Element**
- **for Slant Left Polarized Element**
- **for Slant Right Polarized Element**