



## 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

# 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.

41.9 x 25.4 x 14.2 cm

### Weight (Integrated Antenna Only)

8.75 lbs.

4 kg

### 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

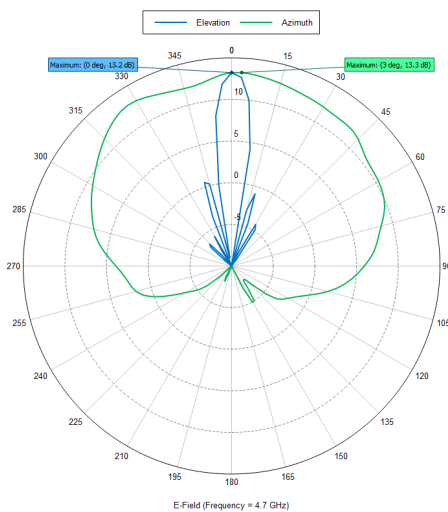
No Limit

### Max. Number of Nodes

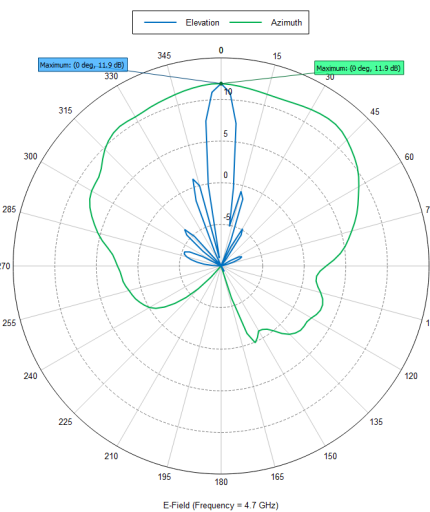
No Limit

### Max. Distance between Nodes

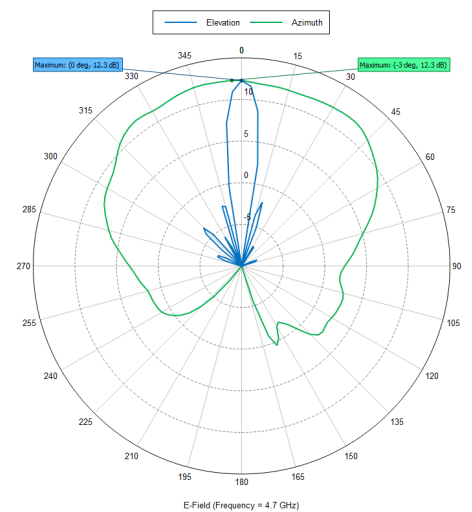
130 mi



**Azimuth (Green) and Elevation (Blue) Pattern for Vertical Polarized Element**



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



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