



# C-Band Integrated Directional Antenna

WR-INT-ANT-SYS-07

**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 extend the enterprise to the network edge.

**MADE FOR DURABILITY**

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

**NO NDA REQUIRED**

© 2006 - 2024 Persistent Systems, LLC. All rights reserved. The Wave Relay<sup>®</sup> logo, the Persistent Systems, LLC logo and other designated trademarks and trade names are the property of Persistent Systems, LLC or their respective owners. Product specifications are subject to change without notice. This material is provided for informational purposes only; Persistent Systems, LLC assumes no liability related to its use and expressly disclaims any implied warranties of merchantability or fitness for any particular purpose.

The export and/or the release of certain products, technology and software to non-US persons might be subject to export restrictions. Please refer to the US export laws & regulations for details.

# SPECIFICATIONS

## RF

### Frequency

4.4 - 5.0 GHz

### Polarization

Horizontal & Vertical

### Gain

23.0 dBi

### Transmit Power

4W

### Port-to-Port Isolation

>30 dB

### Horizontal Beamwidth (-3 dB)

11°

### Vertical Beamwidth (-3 dB)

11°

## Physical

### Dimensions

15.6 x 14.4 x 5.2 in.

39.6 x 36.5 x 13.2 cm

### Weight (Integrated Antenna Only)

9.25 lbs.

4.2 kg

### Mounting

1" to 2" Pole Mounting Kit

+10° to -15° Elevation Adjustment

## Computing

### Operating System

Wave Relay 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

47W

### 20% Duty Cycle Power Consumption

14.3W

## Environmental

### Operating Temperature

-40°C to +60°C

### Ingress Protection

IP66 Certified

## I/O

### 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

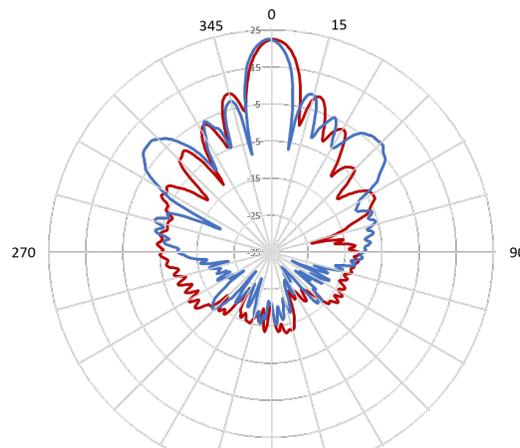
SHA-256 HMAC

### Hardware

Cryptographic Acceleration

Suite-B Algorithms

**Azimuth (Red) and Elevation (Blue) Pattern for Vertical & Horizontal Polarized Elements**



## NO NDA REQUIRED

© 2006 - 2024 Persistent Systems, LLC. All rights reserved. The Wave Relay® logo, the Persistent Systems, LLC logo and other designated trademarks and trade names are the property of Persistent Systems, LLC or their respective owners. Product specifications are subject to change without notice. This material is provided for informational purposes only; Persistent Systems, LLC assumes no liability related to its use and expressly disclaims any implied warranties of merchantability or fitness for any particular purpose.

The export and/or the release of certain products, technology and software to non-US persons might be subject to export restrictions. Please refer to the US export laws & regulations for details.

[persistentsystems.com](https://www.persistent-systems.com)