INTEGRATED ANTENNAS

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
- Multi-angle locking pointing arm for accurate and precise links

MORE DATA OVER LONGER RANGES

- 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
- Multi-angle locking pointing arm for accurate and precise links

SIMPLE INSTALLATION

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

ONE SOLUTION. INFINITE POSSIBILITIES.

PERSISTENT SYSTEMS

L-BAND INTEGRATED SECTOR ANTENNA

RF

Frequency
1.35 - 1.39 GHz

Polarization
Slant L/R & Vertical

Gain
12.0 dBi

Transmit Power
10W

Port-to-Port Isolation
>30 dB

Horizontal Beamwidth (-3 dB)
90°

Vertical Beamwidth (-3 dB)
40°

Physical

Dimensions
66 x 42.5 x 15 cm

Weight (Integrated Antenna Only)
4.5 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
45W

20% Duty Cycle Power Consumption
12.1W

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
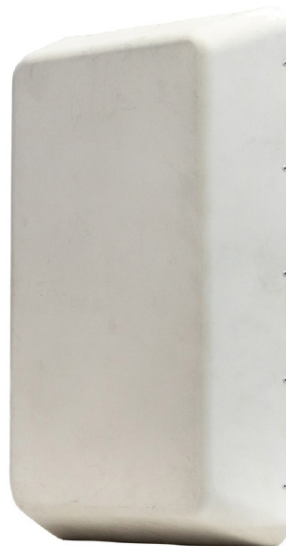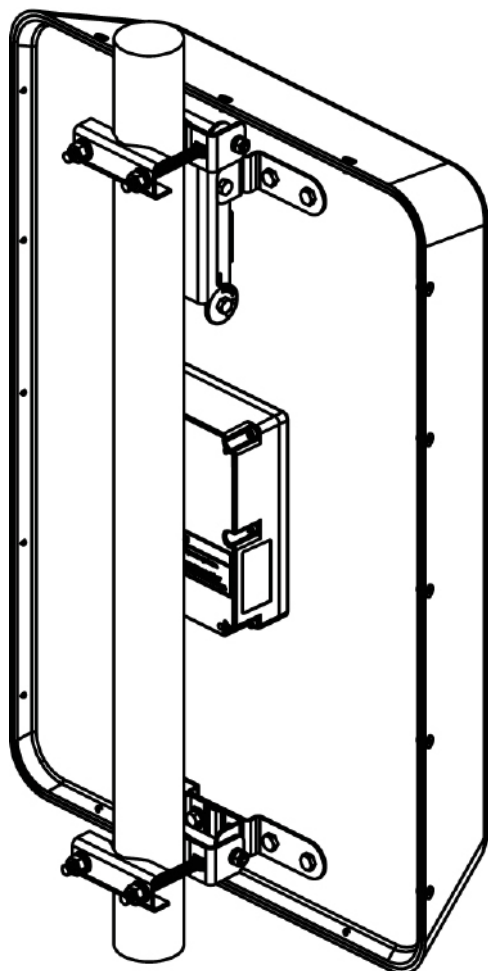IPv4 and IPv6 compatible
Integrated DHCP server

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

S-BAND INTEGRATED SECTOR ANTENNA

RF

Frequency
2.2 - 2.5 GHz

Polarization
Slant L/R & Vertical

Gain
12.0 dBi

Transmit Power
10W

Port-to-Port Isolation
>30 dB

Horizontal Beamwidth (-3 dB)
120°

Vertical Beamwidth (-3 dB)
11°

Physical

Dimensions
66 x 42.5 x 15 cm

Weight (Integrated Antenna Only)
4.5 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
45W

20% Duty Cycle Power Consumption
12.1W

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
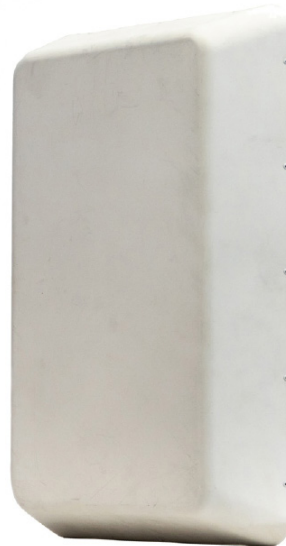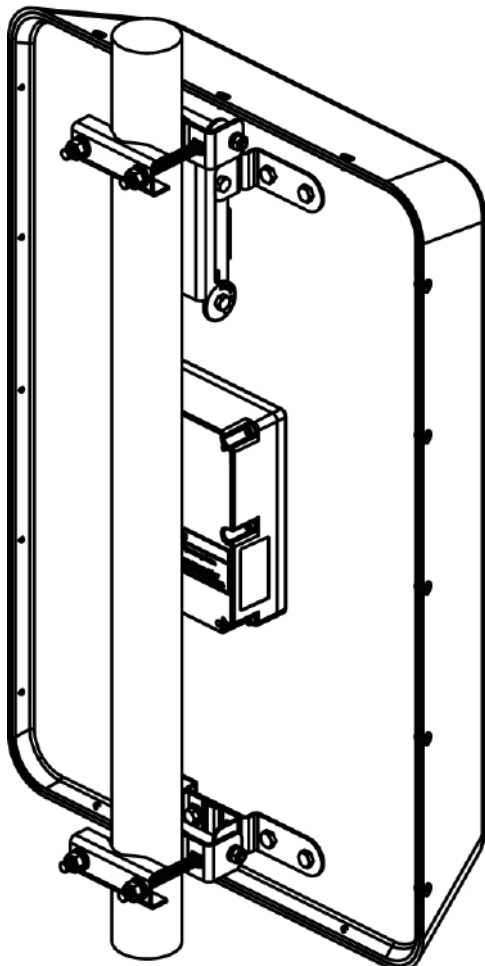
Node Entry Time
<1 sec.

Max. Number of Hops
No Limit

Max. Number of Nodes
No Limit

Max. Distance between Nodes
130 mi

C-BAND INTEGRATED SECTOR ANTENNA

RF

Frequency
4.4 - 5.0 GHz

Polarization
Slant L/R & Vertical

Gain
12.0 dBi

Transmit Power
6W

Port-to-Port Isolation
>30 dB

Horizontal Beamwidth (-3 dB)
120°

Vertical Beamwidth (-3 dB)
12°

Physical

Dimensions
41.9 x 25.4 x 14.2 cm

Weight (Integrated Antenna Only)
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
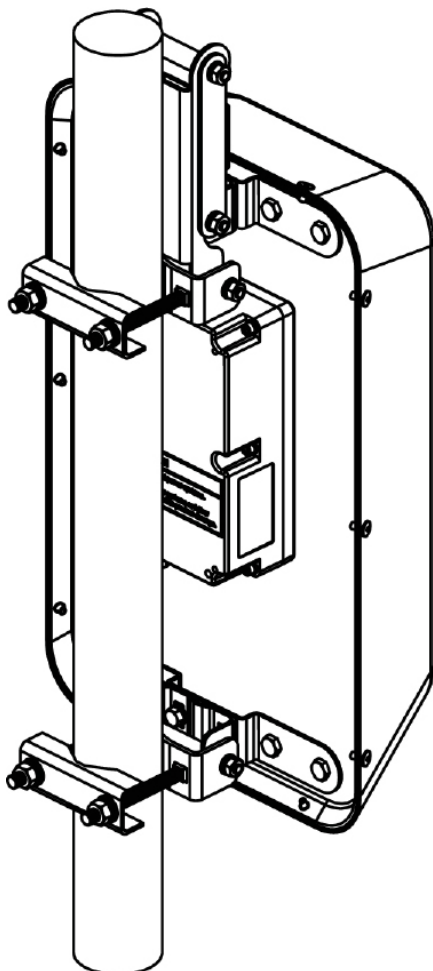No Master Node

Node Entry Time
<1 sec.

Max. Number of Hops
No Limit

Max. Number of Nodes
No Limit

Max. Distance between Nodes
130 mi

C-BAND INTEGRATED DIRECTIONAL ANTENNA

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
39.6 x 36.5 x 13.2 cm

Weight (Integrated Antenna Only)
4.2 kg

Mounting
Accepts up to 3 in. pole diameter

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
47W

20% Duty Cycle Power Consumption
14.3W

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
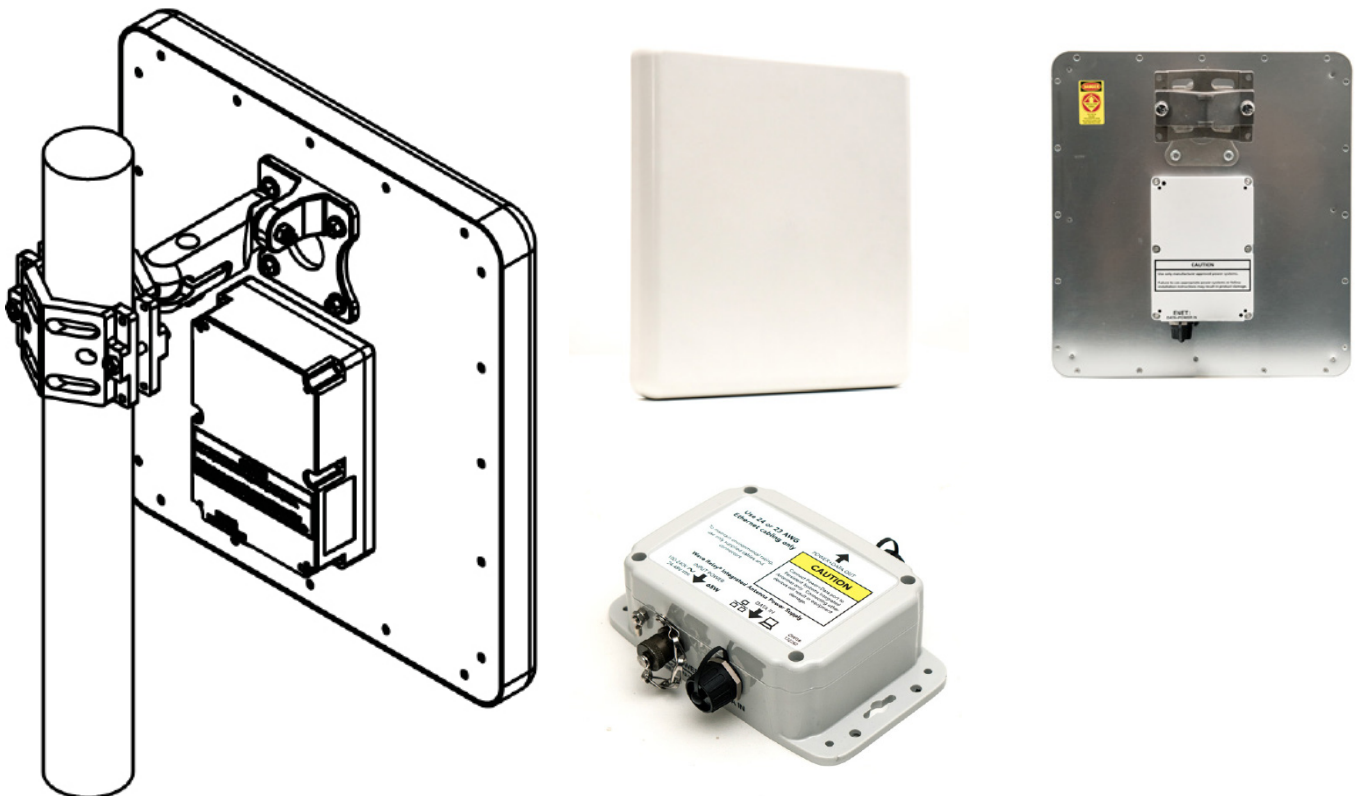No Master Node

Node Entry Time
<1 sec.

Max. Number of Hops
No Limit

Max. Number of Nodes
No Limit

Max. Distance between Nodes
130 mi