



WAVE RELAY® MANET
INTEGRATED ANTENNAS



TECHNOLOGY FOR EXTREME ENVIRONMENTS



WWW.STEATITE-COMMUNICATIONS.CO.UK





S-BAND INTEGRATED SECTOR ANTENNA

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.

More data over longer ranges

- MIMO technology delivers high throughput at long range
- Custom antenna polarisation designed to maximise 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

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

Made for durability

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





S-BAND INTEGRATED SECTOR ANTENNA

Frequency	2.2 - 2.5 GHz
Polarisation	Slant L/R & Vertical
Gain	12 dBi
Transmit Power	10W
Port-to-port Isolation	>30 dB
Horizontal Beamwidths (-3 dB)	120°
Vertical Beamwidths (-3 dB)	11°
Dimensions	66 x 42.5 x 15 cm (26 x 16.7 x 5.9 in.)
Weight (Integrated Antenna Only)	4.5 kg (10 lbs.)
Mounting	1" to 2" Pole Mounting Kit 0° to -15° Elevation Downtilt Adjustment
Operating Temperature	-40°C to +60°C (-40°F to 140°F)
Interfaces	Power + Ethernet (IP66 RJ45)
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

Operating System	Android™ 6.0 (Marshmallow)
Processor	1 GHz Quad Core ARM
RAM	2GB
Storage	32GB Flash
Crypto Modes	CTR-AES-256 Encryption SHA-256 HMAC
Hardware	Cryptographic Acceleration Suite-B Algorithms
Ethernet	10/100 Mbps
Integrated & Extension	Seamless layer 2 network
Protocols	Advanced multicast algorithms IPv4 and IPv6 compatible Integrated DHCP server
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

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.

More data over wide ranges

- MIMO technology delivers high throughput at long range
- Custom antenna polarisation designed to maximise 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

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

Made for durability

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





C - BAND INTEGRATED SECTOR ANTENNA

Frequency	4.4 - 5.0 GHz
Polarisation	Slant L/R & Vertical
Gain	12 dBi
Transmit Power	6W
Port-to-port Isolation	>30 dB
Horizontal Beamwidths (-3 dB)	120°
Vertical Beamwidths (-3 dB)	12°
Dimensions	41.9 x 25.4 x 14.2 cm (16.5 x 10 x 5.6 in.)
Weight (Integrated Antenna Only)	4 kg (8.75 lbs.)
Mounting	1" to 2" Pole Mounting Kit 0° to -15° Elevation Downtilt Adjustment
Operating Temperature	-40°C to +60°C (-40°F to 140°F)
Interfaces	Power + Ethernet (IP66 RJ45)
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

Operating System	Android™ 6.0 (Marshmallow)
Processor	1 GHz Quad Core ARM
RAM	2GB
Storage	32GB Flash
Crypto Modes	CTR-AES-256 Encryption SHA-256 HMAC
Hardware	Cryptographic Acceleration Suite-B Algorithms
Ethernet	10/100 Mbps
Integrated & Extension	Seamless layer 2 network
Protocols	Advanced multicast algorithms IPv4 and IPv6 compatible Integrated DHCP server
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

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.

More data over longer ranges

- MIMO technology delivers high throughput at long range
- Custom antenna polarisation designed to maximise 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

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

Made for durability

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





C-BAND INTEGRATED DIRECTIONAL ANTENNA

Frequency	4.4 - 5.0 GHz
Polarisation	Horizontal & Vertical
Gain	23.0 dBi
Transmit Power	4W
Port-to-port Isolation	>30 dB
Horizontal Beamwidths (-3 dB)	11°
Vertical Beamwidths (-3 dB)	11°
Dimensions	39.6 x 36.5 x 13.2 cm (15.6 x 14.4 x 5.2 in.)
Weight (Integrated Antenna Only)	4.2 kg (9.25 lbs.)
Mounting	Accepts up to 3 in. pole diameter
Operating Temperature	-40°C to +60°C (-40°F to 140°F)
Interfaces	Power + Ethernet (IP66 RJ45)
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

Operating System	Android™ 6.0 (Marshmallow)
Processor	1 GHz Quad Core ARM
RAM	2GB
Storage	32GB Flash
Crypto Modes	CTR-AES-256 Encryption SHA-256 HMAC
Hardware	Cryptographic Acceleration Suite-B Algorithms
Ethernet	10/100 Mbps
Integrated & Extension	Seamless layer 2 network
Protocols	Advanced multicast algorithms IPv4 and IPv6 compatible Integrated DHCP server
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





TECHNOLOGY FOR EXTREME ENVIRONMENTS

STEATITE LTD (COMMUNICATIONS)

Ravensbank Business Park,
Redditch,
Worcestershire,
B98 9EX

Telephone: +44 (0)1527 512 400
Email: communications@steatite.co.uk

