Wave Relay® is a Mobile Ad Hoc Networking System (MANET) designed to maintain connectivity on the move. It is a scalable, peer-to-peer network which provides data, video, and voice even in the most challenging applications. With user throughput of 41 Mbps UDP and 31.1 Mbps TCP, Wave Relay® provides a dynamic, reliable, and secure wireless networking solution beyond mesh.

THE SECTOR ARRAY ROUTER PROVIDES LONG RANGE, HIGH THROUGHPUT, AND SUPERIOR DEPLOYMENT FLEXIBILITY.

The Sector Array Antenna is the solution to long range omni-directional coverage while maintaining high throughput with easy deployment. The Sector Array houses three independent antennas, providing 360° horizontal and wide vertical coverage. Each antenna covers a 120° area and RF transmissions are directed towards the destination which minimizes interference and maximizes the capacity of the network. This same design also facilitates efficient reception & rejection utilizing three radio modules in the Quad Radio Router maximize communication per sector. The vertical beam width is ideal for vehicular & maritime networks, allowing data to stream without interruption even under the most challenging conditions.

- Peer-to-Peer Mobile Ad Hoc Network (MANET)
- Secure High Bandwidth Data
- Transfers Data, Video, & Voice
- Multiple Video Streams
- Real-time Position Location
- Push To Talk (PTT) Voice
- Wave Relay® over IP (WRoIP)
- 27Mbps Multicast Throughput
- Cloud Relay™ Compatible
SECTOR ARRAY RADIO ROUTER

SPECIFICATIONS

2.4 GHz Sector Array
- Frequency: 2312 - 2507 MHz
- Range: 10 Miles
- Throughput: 41 Mbps UDP, 20 MHz Channel
- Weight: 13.2 lbs / 6 kg
- Size: 6" Diameter, 29" Length
- VSWR: 2.0:1

5 GHz Sector Array
- Frequency: 5180-5320, 5500-5700, 5745-5825 MHz
- Range: 10 Miles
- Throughput: 41 Mbps UDP, 20 MHz Channel
- Weight: 10 lbs / 4.5 kg
- Size: 4" Diameter, 24" Length
- VSWR: 2.0:1

MECHANICAL
- Sector Array (3): N-Type Female connectors
- Quad Radio Router (4): N-Type Female
- GPS: SMA Female
- Voice NATO Standard U-283/U 6-Pin Audio connector
- Serial: 4-Pin RS-232 Serial
- Mounting Pole, Wall, or Magnetic Mount

RADIO
- OFDM with Adaptive Modulation Algorithms
- Channel Width: 5, 10, 20 or 40 MHz
- Variable power setting
- Support for various RF bands
- Peer to peer with other Quads or MPU’s

ENVIRONMENTAL
- Operating Temperature: -40° to 85° C
- Cooling: Convection cooled with integrated thermal transfer plates

NETWORKING
- Seamless layer 2 network connectivity
- Industry leading Wave Relay® MANET routing
- 802.11a/b/g AP compatible with MANET
- Integrated serial-to-Ethernet capability
- Cursor-on-Target compatible
- Wave Relay® over IP (WRoIP)
- Dynamic Link Exchange Protocol (DLEP) Certified
- IPV4 and IPV6 compatible
- Integrated DHCP server
- Advanced multicast algorithms

SECURITY
- Integrated hardware cryptographic accelerator
- FIPS 140-2 (Up to level 2)
- Utilizes all Suite B algorithms
- Active response to tamper
- AES-CTR-256 with SHA-512 HMAC
- Over the air re-keying

NATIVE VOICE CAPABILITY
- Supports up to 16 channels of Push-to-talk (PTT) Voice
- G.711 codec with toll-quality audio

MANAGEMENT
- Secure web management interface
- Network wide management and configuration functionality
- Google™ Earth based network monitoring

MANUFACTURING & WARRANTY
- Designed and manufactured in USA
- Limited one year warranty
- Monthly training classes available
- Courses led by industry experts
- ISO 9001:2008 certified
- MIL-STD certified

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