

QUAD RADIO ROUTER



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 Quad Radio Router includes four customizable radio interfaces, and five 10/100 Mbps Ethernet ports that are IP67 rated and designed for outdoor use. An integrated NATO Audio 6-pin U-283/U connector enables standard push-to-talk headsets and speaker boxes to be connected to the system. Two RS-232 serial ports are available that enable serial-over-Ethernet connectivity.

THE QUAD RADIO ROUTER CAN BE VEHICLE MOUNTED FOR MOBILE DEPLOYMENTS, MAST MOUNTED TO COVER LARGE GEOGRAPHIC AREAS, AND/OR PAIRED WITH A TRACKING ANTENNA SYSTEM KIT TO PROVIDE LONG-RANGE, AIR-TO-GROUND CONNECTIVITY.



It seamlessly operates peer to peer to any Wave Relay® MPU devices.

- 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



GSA Schedule
Contract # GS-35F-0168Y
Small Business



ISO 9001:
2008

MADE IN USA



QUAD RADIO ROUTER

PERSISTENT SYSTEMS

FREQUENCY

WR Pin #	WR Frequency Range	WR Output Power
WR-RAD-02	907-922 MHz	27dBm/500mW
WR-RAD-03	2312-2507 MHz	28dBm/600mW
WR-RAD-04	2412-2462 MHz	28dBm/600mW
WR-RAD-09	5180-5320, 5500-5700, 5745-5825 MHz	28dBm/600mW
WR-RAD-12	2312-2507 MHz	33dBm/2W*
WR-RAD-14	1352-1387 MHz	27dBm/500mW
WR-RAD-15	4400-4800 MHz	25dBm/320mW
WR-RAD-16	4800-4985 MHz	26dBm/400mW

SPECIFICATIONS

Modulations	OFDM, DSSS, CCK
Channel Width	5, 10, 20 or 40 MHz
Throughput	41 Mbps UDP (20 MHz channel) 31.1 Mbps TCP (20 MHz channel) 27 Mbps Multicast Throughput
Radio	(4) N-Type Female
GPS	(1) SMA Connection (3.3V Active Antenna)
Size	8.5 x 6 x 2 in 21.6 x 15.2 x 5.1 cm
Weight	3.2 lb / 1451.5 g
Security	FIPS 140-2 Level 2

DATA CONNECTION

Connection	10/100 Ethernet (5)
Type	RS-232 Serial (2) PTT Audio 8-48 VDC Input Power

POWER & ENVIRONMENTAL

Power Consumption	Average - 8 W Up to 55 W
Operating Temperature	-40° to 85°C -40° to 185°F
Enclosure	IP67 Rated
Cooling	Convection cooled

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 Suite B algorithms
- Tamper evident
- AES-CTR-256 with SHA-512 HMAC
- Over the air re-keying

NATIVE VOICE CAPABILITY

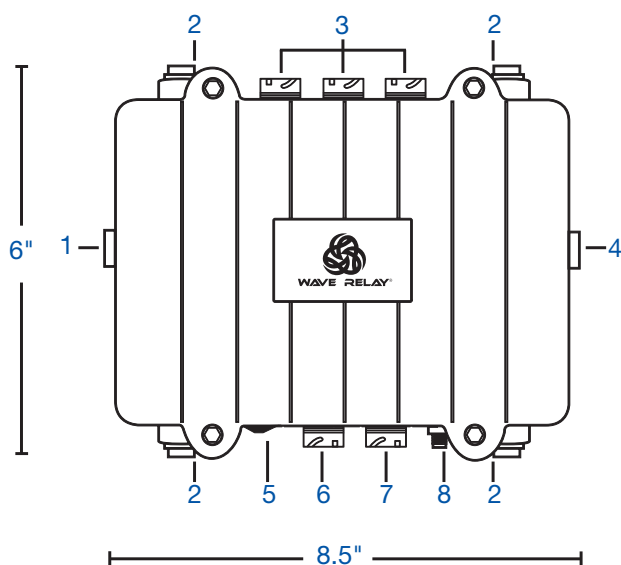
- Supports up to 16 channels of Push-to-talk (PTT) Voice
- G.711 codec with toll-quality audio

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



WR - RTR2 - XXXXXXXX

- 1 Power 8-48 VDC
Serial 8-48 VDC
- 2 RF Connector
N Female
- 3 Ethernet
- 4 Voice
- 5 On/Off
Pushbutton/LED
- 6 Ethernet 1
Power 8-48 VDC
- 7 Ethernet 2
- 8 GPS

* For Military or Export Use Only