The Quad radio router has an integrated NATO Audio 6-pin U-283/U connector which enables standard push-to-talk headsets and speaker boxes to be connected to the system...

Key Features

- Peer-to-Peer Mobile Ad Hoc Network (MANET)
- Low Latency Command & Control
- Secure High Bandwidth Data
- Transfers Data, Video, & Voice
- Multiple Video Streams
- Real-time Position Location
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 37Mbps UDP and 27 Mbps TCP, Wave Relay® provides a dynamic, reliable, and secure wireless networking solution beyond mesh.

The Quad Radio Router includes four customisable 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 peers to man portable Wave Relay® devices.

### ALL WAVE RELAY® PRODUCTS INCLUDE:

**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
- Wave Relay® over IP (WRoIP)
- Dynamic Link Exchange Protocol (DLEP) Certified
- IPv4 and IPv6 compatible
- Integrated DHCP server
- Advanced multicast algorithm

**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

**ANDROID™**
- Multicast Video, position locator and chat in an Android application
- Supports commercial and custom phones and tablets
- Provides power through USB tether

**NATIVE VOICE CAPABILITY**
- Supports up to 16 channels of Push-to-talk (PTT) Voice
- G.711 Codec for Radio-over-IP (RoIP) interoperability

**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

### SPECIFICATION

#### GENERAL
- **Modulations**: OFDM, DSSS, CCK
- **Channel Width**: 5, 10, 20 or 40 MHz
- **Throughput**: 37 Mbps UDP (20 MHz channel)
- **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 / 145.5 g
- **Security**: FIPS 140-2 Level 2

#### DATA CONNECTION
- **19-Pin Connector**: 10/100 Ethernet (5)
- **PTT Audio**: RS-232 Serial (2)

#### POWER & ENVIRONMENTAL
- **Power Consumption**: Average - 8 W
  - Up to 55 W
- **Operating Temperature**: -40º to 85ºC
  - -40º to 185ºF
- **Enclosure**: IP67 Rated
- **Cooling**: Convection cooled

#### FREQUENCY

<table>
<thead>
<tr>
<th>WR FREQUENCY RANGE</th>
<th>WR OUTPUT POWER</th>
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</thead>
<tbody>
<tr>
<td>763-778 MHz</td>
<td>28dBm/600mW</td>
</tr>
<tr>
<td>907-922 MHz</td>
<td>28dBm/600mW</td>
</tr>
<tr>
<td>2312-2507 MHz</td>
<td>28dBm/600mW</td>
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<tr>
<td>2412-2462 MHz</td>
<td>28dBm/600mW</td>
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<tr>
<td>5180-5320, 5500-5700, 5745-5825 MHz</td>
<td>28dBm/600mW</td>
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<tr>
<td>2312-2507, 5180-5320, 5500-5700, 5745-5828 MHz</td>
<td>24dBm/250mW</td>
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<tr>
<td>4945-4985 MHz</td>
<td>26dBm/400mW</td>
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<td>2312-2507 MHz</td>
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<td>1352-1387 MHz</td>
<td>27dBm/500mW</td>
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<td>4800-4985 MHz</td>
<td>30dBm/1W</td>
</tr>
</tbody>
</table>

Technical specifications quoted are qualified and verified but do not indicate the maximum performance limitations of the equipment. Specifications are subject to change without notice. © & OEIssue A

**FOR MORE INFORMATION VISIT: www.rugged-systems.com**

**STEATITE RUGGED SYSTEMS**
MARLIN HOUSE
459 LONDON ROAD
CAMBERLEY
SURREY GU15 1UA
UNited KINGDOM

**TEL:** +44 (0)1276 686707
**FAX:** +44 (0)1276 684329
**EMAIL:** sales@rugged-systems.com

**www.rugged-systems.com**
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