



## Features

- High packet and data performance - up to 100000 packets per second and up to 1 Gigabit per second data rate
- Five Gigabit Ethernet ports
  - Two router interfaces
  - Four switched LAN ports via high performance switch
  - One WAN port
- TCP/IP
- Implements standard communication protocols
- Compatible with third party telecom equipment
- Easily integrated into existing networks
- Extensive configuration flexibility, providing a wide range of satellite and terrestrial network solutions
- Broad set of services, including DHCP client and server, DNS client, FTP/TFTP client, etc
- Solid state design provides high reliability
- Extensive control, monitoring and statistics via M&C Ethernet Port
- Cisco-like Command Interpreter
- Environmentally sealed box
- No fans, no moving parts

## Overview

**Advantech Wireless' RAR9160** router is a solid state, embedded, efficient and reliable solution for IP networking. It implements a variety of standard communication protocols, which are compatible with third-party telecommunication equipment and can be easily integrated into existing networks. **Advantech Wireless' RAR9160** provides cost effective networking solutions for wide range of applications including satellite networks, terrestrial networks and last mile applications.

## Applications

The **RAR9160** is designed to provide best in class performance for critical applications under harsh environments:

- Well suited for Commercial-Off the Shelf (COTS) military programs
- Government networks
- Satellite, Cable or Terrestrial Networks
- Access points to public network, last mile solutions

# Ruggedized Router RAR9160



<b>Performance Specifications</b>	
<p><b>Interfaces:</b>  <u>Input/Output Interfaces:</u>                      4x 10/100/1000 Base-T Ethernet LAN ports (RJ45)                      1x 10/100/1000 Base-T Ethernet WAN port (RJ45)                      High Performance weatherproof connectors</p> <p><b>Performance:</b>  <u>Data Throughput</u>                      Up to 1Gbps  <u>IP Packet Throughput</u>                      100,000 PPS</p>	<p><b>Services:</b></p> <ul style="list-style-type: none"> <li>• DHCP client, server</li> <li>• DNS client</li> <li>• FTP/TFTP client</li> <li>• CDP</li> <li>• IP spoofing</li> <li>• AAA (Authentication, authorization and accounting)</li> <li>• Local AAA (Access rights table)</li> <li>• RADIUS, TACACS+ (Client, Remote server authentication)</li> </ul>
<p><b>Data Link Protocols:</b></p> <ul style="list-style-type: none"> <li>• IEEE802.3 10Base-T, IEEE802.3u 100Base-Tx, 1000 Mbps - Gigabit Ethernet (IEEE 802.3z)</li> <li>• Bridging, Rapid Spanning Tree Protocol</li> <li>• MAC level Access Lists</li> <li>• Static ARP</li> <li>• Proxy ARP</li> <li>• VLAN</li> </ul>	<p><b>Management:</b></p> <ul style="list-style-type: none"> <li>• Terminal configuration ports: RS-232 console and telnet</li> <li>• Command line interface (CLI)</li> <li>• Cisco like command interpreter</li> <li>• Script support</li> <li>• Running and startup configurations saving and recovery</li> <li>• SNMP agent v.1, v.2, v.3, MIB II</li> <li>• Built-in diagnostic: Ping, traceroute</li> <li>• Local statistics (interfaces, IP, TCP, UDP, ICMP, Frame Relay and etc.)</li> <li>• Debugging functions</li> </ul>
<p><b>Stacks:</b>  <u>TCP/IP</u></p> <ul style="list-style-type: none"> <li>• Routing: static, dynamic (RIP v.1, v.2, OSPF v.2);</li> <li>• Packets filtering (firewall)</li> <li>• Policy Based Routing</li> <li>• IP aliases support</li> <li>• UDP broadcasts forwarding (DHCP, DNS, BOOTP, etc.)</li> <li>• IPSEC</li> <li>• NAT, PAT</li> <li>• IP tunnels: GRE, IP/IP</li> <li>• Load balancing</li> <li>• QoS Level 3 :                             <ul style="list-style-type: none"> <li>- FIFO queue (FIFOQ)</li> <li>- Priority queuing (PRIQ)</li> <li>- Class based queuing (CBQ)</li> <li>- Random Early Detection (RED)</li> <li>- Waited Fair Queue (WFQ)</li> </ul> </li> <li>• Configurable IP policy: ICMP, routing, switching, TCP, UDP</li> </ul>	<p><b>Physical and Power Specifications</b></p> <p><u>Dimensions</u></p> <ul style="list-style-type: none"> <li>• See outline drawing</li> </ul> <p><u>Weight:</u></p> <ul style="list-style-type: none"> <li>• 11 lbs / 5kgs</li> </ul> <p><u>Power Options:</u></p> <ul style="list-style-type: none"> <li>• 90 – 264 VAC (50/60Hz), or</li> <li>• 18-36 VDC</li> </ul> <p><u>Operating temp:</u></p> <ul style="list-style-type: none"> <li>• -30°C to 60°C (-22°F to 140°F).</li> </ul> <p><u>Storage temp:</u></p> <ul style="list-style-type: none"> <li>• -55°C to 85°C (-67°F to 185°F).</li> </ul> <p><u>Relative humidity:</u></p> <ul style="list-style-type: none"> <li>• Operating: Up to 100%, rain 2" per hour,</li> <li>• Non-Operating: Up to 100%.</li> </ul>

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Ref.: PB-RAR9160-11125