



DATASHEET

802.11a High Power Industrial Hotspot™ RLX2-IHA

The 802.11a High Power Industrial Hotspot™ (RLX2-IHA) is a high-speed wireless Ethernet radio for long range applications up to 5 mi. / 8 km. The RLX2-IHA uses the 5 GHz band and supports a data rate up to 54 Mbps. The Hotspot supports Access Point, Repeater, Bridging, and Client modes. The RLX2-IHA offers fast roaming, hazardous location certifications, as well as vibration and shock resistance.

The included IH Browser configuration and monitoring software allows the user to view network topology, assign IP addresses, monitor network diagnostics, and update radio firmware. The optional OPC Diagnostic Server software is ideal for managing long-range wireless SCADA networks.



Features

- ◆ EtherNet/IP™- or Modbus®-based PLCs/PACs can use message instructions to read diagnostic information from the radios, helping to reduce down time when troubleshooting wireless network problems.
- ◆ 802.11i, WPA-2 Personal/Enterprise using 128-bit AES encryption ensures secure networking
- ◆ RADIUS security ensures secure networking with advanced authentication and encryption
- ◆ Virtual Local Area Networks (VLAN) allow for secure network segmentation
- ◆ Network Address Translation (NAT) lets machine builders deploy many machines without needing to change IP addresses every time
- ◆ Quality of Service (QoS) provides data prioritization for I/O control devices, video data, etc.
- ◆ Ultra-Fast Roaming (under 10ms) maintains seamless, high-speed connections to one or more devices on moving equipment and machines (such as cranes, AGVs, and carriers) as they travel between Access Points
- ◆ IGMP Snooping & Packet Filtering optimizes UDP multicast traffic for superior EtherNet/IP I/O communications
- ◆ Supports the ability to communicate with multiple Ethernet devices when used with existing third-party wireless infrastructures
- ◆ Supports Power over Ethernet (PoE) to reduce cabling costs
- ◆ Disaster recovery feature allows the radio configuration to be stored on a microSD card for quick field replacement
- ◆ Connect serial networks (Modbus, DNP 3, etc.) over 802.11 wireless networks
- ◆ Simple local and remote configuration, monitoring, and wireless network diagnostics via IH Browser utility or SNMP

Specifications

Radio

Frequency Band (Varies by country)	802.11a 5.150 GHz to 5.250 GHz (FCC/ETSI) 5.725 GHz to 5.850 GHz (FCC)
Wireless Standards	802.11a, 802.11i
Transmit Power (Programmable) (varies by country)	23 dBm (200 mW)
Channel Data Rates (Modulation)	802.11a: 54, 48, 36, 24, 18, 12, 9, 6 Mbps (OFDM)
Receiver Sensitivity (Typical)	-92 dBm @ 6 Mbps -84 dBm @ 24 Mbps -72 dBm @ 54 Mbps
Channel Selection	36, 40, 44, 48, 149, 153, 157, 161, 165
Security	WPA2 - 802.11i with 128 bit AES-CCM Legacy WPA TKIP, WEP support MAC ID filter, Admin password, RADIUS
Network Features	NAT, VLAN, QoS, IGMP Snooping

Physical

Enclosure	Extruded aluminum with DIN and panel mount
Size	14.8 x 11.8 x 3.8 cm (H x W x D) 5.82 x 4.64 x 1.48 in (H x W x D)
Shock	IEC 60068 2-6 (20g, 3-Axis)
Vibration	IEC 60068 2-27 (5g, 10Hz to 150Hz)
Ethernet Ports	(1) 10/100/1000 Base-T, RJ45 connector
Serial Port	(1) DB9 female (serial tunneling & encapsulation)
Antenna Port	(1) RP-SMA connector
Weight	1.1 lbs (499g)

Environmental

Operating Temperature	-40°C to +75°C (-40°F to +167°F)
Humidity	Up to 100% RH, with no condensation
External Power	10 VDC to 24 VDC
Power over Ethernet	802.3af Compliant
Peak Power Consumption	< 7W

Regulatory Approvals

Visit our website at www.prosoft-technology.com for current wireless approval information.

What's Included in the Box:

- (1) RLX2-IHA (802.11a High Power Industrial Hotspot)
- (1) A2502S-OA (2 dBi omni-directional stub antenna)
- (1) Industrial-class microSD card with default configuration loaded
- (1) Power Connector Plug (for connection to customer's DC power source wiring)
- (1) Power connector wire insertion tool



Additional Products

ProSoft Technology® offers a full complement of hardware and software solutions for a wide variety of industrial communication platforms. For a complete list of products, visit our website at: www.prosoft-technology.com

Ordering Information

To order this product, please use the following:

802.11a High Power Industrial Hotspot™

RLX2-IHA-A

Optional Accessories

Bench Test Kit

RLX-IHBTK

Includes: 115/230 VAC bench power supply, Ethernet and serial cables

To place an order, please contact your local ProSoft Technology distributor. For a list of ProSoft Technology distributors near you, go to: www.prosoft-technology.com and select *Where to Buy* from the menu.

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