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 2-27 (20g, 3-Axis)

Vibration
IEC 60068 2-6 (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

Agency Approvals & Certifications

Please visit our website: www.prosoft-technology.com

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

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