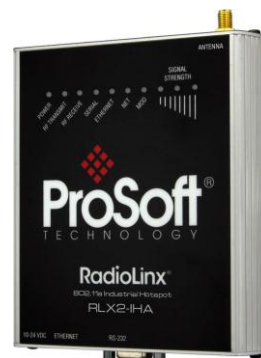# DATASHEET

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. 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 viewing network topology, assigning IP addresses, monitoring network diagnostics, and updating radio firmware. The OPC Diagnostic Server is ideal for managing long range wireless SCADA networks.

Features	Benefits
802.11a Access Point, Bridge, Repeater, and Client modes in one radio	♦ All-in-one radio supports long range applications in the 5 GHz spread spectrum band (fully compatible with RLXIB-IHA networks)
High transmit power; industrial operating temperatures; vibration and shock resistant	♦ Supports long distance while being dependable in critical control systems and extreme environments
Fast Roaming (less than 50 ms) with Full Bridging	♦ 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
802.11i, WPA2, and 128-bit AES encryption	♦ Ensures secure networking with advanced authentication and encryption
12/24 VDC and PoE power options	♦ Support for common industrial power sources or use Power over Ethernet (PoE) to reduce cabling costs
Built-in Serial Device Server	♦ Wirelessly connect serial (Modbus, DNP 3, etc.) devices over 802.11 wireless networks
Built-in web server	♦ Simple local and remote configuration, monitoring, and wireless network diagnostics
IH Browser Software Utility	♦ Centralized configuration and remote management of Industrial Hotspot networks
Disaster recovery feature (microSD)	♦ Quick field replacement without need of programming software or operator training

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

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 Power over Ethernet	10 VDC to 24 VDC 802.3af Compliant
Peak Power Consumption	< 7W

Regulatory Approvals

Wireless Approvals

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

Hazardous Locations

UL/cUL; Class 1, Div 2
Ex Certificate (ATEX Directive, Zone 2)

Regulatory

CSA/CB Safety
CE Mark
FCC/IC
ETSI

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
(1) Product Support DVD

ProSoft® TECHNOLOGY

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 web site at: www.prosoft-technology.com

Ordering Information

To order this product, please use the following:

802.11a High Power Industrial Hotspot™

RLX2-IHA-A

Includes: Radio, stub antenna, Power Connector Plug, microSD card, and Support DVD

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 Distributors from the menu.