DATASHEET

DISCONTINUED

RadioLinx® 802.11a High Power Industrial Hotspot™
RLXIB-IHA

The RadioLinx® 802.11a High Power Industrial Hotspot™ (RLXIB-IHA) is a high-speed wireless Ethernet radio, with Power over Ethernet and Serial Encapsulation. The RLXIB-IHA operates at speeds up to 54 Mbps, using the IEEE 802.11a (5 GHz band) standard. In addition to transmit power up to 250 mW, the RLXIB-IHA offers many Industrial features including hazardous location certifications, IGMP Snooping, OFDM for noise immunity, simultaneous bridge / repeater / access point mode, OPC server diagnostics, extended operating temperature, high vibration/shock resistance and DIN-rail mounting.

Features	Benefits
Conforms to IEEE 802.11a	◆ Open standard protects wireless network investment ◆ High speed (54 Mbps), low latency communications ◆ Radio-based IGMP snooping/querying to filter multicast industrial Ethernet maximizing bandwidth
Rugged and Powerful	◆ Metal enclosure, industrial operating temperatures, vibration and shock resistant ◆ Certification approved for use in hazardous locations and explosive atmosphere (UL1604 Class I Div 2, ATEX Zone 2 Category 3) ◆ Transmit power and radio frequencies programmable for use globally
Data and Network Security	◆ Cryptographic strength security with WPA2 - 802.11i with 128 bit AES encryption and CCM integrity check ◆ Limit access to approved device MAC IDs
Flexible and Reliable	◆ Single radio can be configured as an access point and repeater/bridge or as a client ◆ User selectable automatic or manual network configuration (can be prioritized or fixed) with self-healing network and master redundancy for reliable large networks (e.g., SCADA) ◆ Power over Ethernet (PoE) enables radio placement near antenna to reduce antenna cable costs and improve wireless network performance
Serial Device Connectivity	◆ Encapsulation / de-encapsulation of serial data to / from TCP or UDP packets ◆ Advanced features include multicast and Domain Name Server (DNS) support
Easy to Configure and Monitor	◆ Built-in web server for browser-based configuration and remote diagnostics ◆ Included OPC Server for HMI-based wireless network diagnostics

Configuration

RadioLinx IH Browser is a configuration and monitoring tool for the RadioLinx Industrial Hotspot™ radios. Use RadioLinx IH Browser to view your network topology, assign IP addresses to radios for configuration, monitor network diagnostics, update radio firmware and detect the presence of other vendors' 802.11 radios on the network.

Specifications

Radio

Frequency Band (Varies by country)	802.11a 5.150 to 5.250 GHz (FCC/ETSI) 5.725 to 5.850 GHz (FCC)
Wireless Standards	802.11a, 802.11i
Transmit Power (Programmable) (varies by country)	24 dBm (250 mW) @ 6 Mbps 24 dBm (250 mW) @ 24 Mbps 21 dBm (125 mW) @ 54 Mbps
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	115 x 117 x 45 mm (W x H x D) 4.5 x 4.6 x 1.75 inches
Ethernet Ports	One 10/100 Base-T connector, shielded RJ45 IEEE 802.3, 802.3u, 802.3x
Antenna Port	(1) RP-SMA connector
Weight	1.1 lbs (499g)

Environmental

Operating Temperature	-40° C to +75° C
Humidity	To 90% RH, non-condensing
External Power	10 to 24 VDC
PoE Injector	802.3af PoE Powered Device
Average Power	<9W

Regulatory Approvals

Wireless Approvals

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

Hazardous Locations

UL	ANSI/ISA 12.12.01 Class I, Division 2, Groups A, B, C, D
cULus	C22.2 No. 213-M1987
CSA/UL	ANSI/EN60950-1
ATEX	EN60079-0/-15 Zone 2 Category 3