DATASHEET

DISCONTINUED

RadioLinx® 802.11abg Industrial Hotspot™ RLXIB-IHW

The RadioLinx® 802.11abg Industrial Hotspot™ (RLXIB-IHW) is a high-speed wireless Ethernet radio, with PoE and Serial Encapsulation. The RLXIB-IHW operates at speeds up to 54 Mbps, using the IEEE 802.11b/g (2.4 GHz band) and 802.11a (5 GHz band) standards. Designed for global installations, the RLXIB-IHW offers many Industrial features including hazardous location certifications, IGMP Snooping, OFDM for noise immunity, repeater mode for mesh architecture/self healing, OPC server diagnostics, extended temperature, high vibration/shock and DIN-rail mounting.

Features	Benefits and Specifications
Conforms to IEEE 802.11a/b/g	◆ 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 1 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 operates as an access point and repeater/bridge and client ◆ Automatic 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
Backed by ProSoft Technology®	◆ Industrial data communications experts who understand your protocols, devices, and applications ◆ Indoor/outdoor radio network design assistance - accessory selection, path studies, and site survey ◆ Three year standard warranty

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, determine the best "path" between Master, Client and Repeater radios, and detect the presence of other vendors' 802.11 radios on the network.

Specifications

Radio	
Frequency Band (Varies by country)	802.11b/g: 2.412 to 2.462 GHz (FCC) 2.412 to 2.472 GHz (ETSI) 802.11a: 5.150 to 5.250 GHz (FCC/ETSI) 5.725 to 5.850 GHz (FCC)
Wireless Standards	802.11a, 802.11b, 802.11g, 802.11i
Transmit Power (Programmable) (varies by country)	Up to 50 mW without amplifier Up to 500 mW with optional amplifier
Channel data rates (Modulation)	802.11b: 11, 5.5, 2, 1 Mbps (DSSS - BPSK, QPSK, CCK) 802.11g: 54, 48, 36, 24, 18, 12, 9, 6 Mbps (OFDM) 802.11a: 54, 48, 36, 24, 18, 12, 9, 6 Mbps (OFDM)
Receiver Sensitivity (Typical)	-90 dBm @ 1 Mbps -85 dBm @ 11 Mbps -82 dBm @ 24 Mbps -75 dBm @ 54 Mbps
Channels Selection	1 to 13 (802.11b/g) 36, 40, 44, 48, 149, 153, 157, 161, 165 (802.11a)
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	114.3 x 116.8 x 44.45 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 Ports	(2) RP-SMA connectors
Weight	1.06 lbs (479g)
Environmental	
Operating Temperature	-30° C to +60° C
Humidity	To 90% RH, non-condensing
External Power	10 to 24 VDC (tolerance: -10% to +20%)
Average Power	<6W

Regulatory Approvals

Wireless Approvals

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

Hazardous Locations

ETL	ISA 12.12.01 Class 1 Division 2, Groups A, B, C, D
cCSAus	C22.2 No. 213
ATEX	Zone 2 Category 3

Additional Products

ProSoft Technology® offers a full complement of hardware and software solutions for a wide variety of industrial communication platforms.

Visit our web site at http://www.prosoft-technology.com for a complete list of products.