DATASHEET

DISCONTINUED

RadioLinx® Industrial 802.11abg Ethernet and Serial Client

RLXIB-IESC

The RadioLinx® Industrial 802.11abg Ethernet and Serial Client (RLXIB-IESC) is a high-speed wireless Ethernet client, with PoE and Serial Encapsulation. The RLXIB-IESC 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-IESC offers many Industrial features including hazardous location certifications, OFDM for noise immunity, OPC server diagnostics, extended temperature, high vibration/shock and DIN-rail mounting.

Features	Benefits
Conforms to IEEE 802.11a/b/g	♦ 802.11abg wireless client for a single Ethernet or serial device ♦ Open standard protects wireless network investment ♦ High speed (54 Mbps), low latency communications ♦ Connects to RadioLinx Industrial Hotspot or third party 802.11abg Access Points
Rugged and Powerful	♦ Metal enclosure, industrial operating temperatures, vibration and shock resistant ♦ Certified for use in hazardous locations and explosive atmosphere (ISA 12.12.01 Class I Div 2, ATEX Zone 2 Category 3) ♦ Transmit power and radio frequencies programmable for use globally ♦ Cryptographic strength security with WPA2 - 802.11i with 128 bit AES encryption and CCM integrity check
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 Install, Configure and Monitor	♦ Built-in web server for browser-based configuration and remote diagnostics ♦ Included OPC Server for HMI-based wireless network diagnostics ♦ Power over Ethernet (PoE) enables radio placement near antenna to reduce antenna cable costs and improve wireless network performance

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)	802.11b/g: 2.412 GHz to 2.462 GHz (FCC) 2.412 GHz to 2.472 GHz (ETSI) 802.11a: 5.150 GHz to 5.250 GHz (FCC/ETSI) 5.725 GHz 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. (not applicable for hazardous locations)
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
Shock	IEC 60068 2-6 (20g, 3-Axis)
Vibration	IEC 60068 2-27 (5g, 10Hz to 150Hz)
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	-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
PoE Injector	48 Vdc
Average Power	<6W

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

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