ProSoft® TECHNOLOGY

DATASHEET

DISCONTINUED
RadioLinx® 802.11n Industrial Client
RLXIB-ICN

The RadioLinx 802.11n Industrial Hotspot series provides enterprise-class technology, optimized for rugged industrial performance and easy deployment in the field. These 802.11n Hotspots use multiple-input/multiple-output (MIMO) technology supporting up to 3 antennas. This allows fast data rates up to 300Mbps with EtherNet/IP Requested Packet Interval (RPI) times as low as 2 ms. The Industrial Client (RLXIB-ICN) provides connectivity to any third-party Access Point. It is also compatible with RadioLinx 802.11a/b/g radios.

More than just a new 802.11 technology, the RLXIB-IHN family adds RADIUS security for centralized management of security policies, VLANs for network traffic segmentation, and data prioritization while continuing to include the industrial wireless features that have made previous Industrial Hotspots successful.

Features	Benefits
Enterprise Class Technology	
300 Mbps RF Rates (MIMO)	◆ Multicast, I/O & Produce/Consume messaging at packet rates <1ms ◆ Video Monitoring & Automation Control Simultaneously
VLAN	◆ Separate Automation Networks & LAN Access ◆ Allow Mobile Workers access to Network Resources
Quality of Service	◆ Prioritize Control Data, Video & Voice ◆ Support for Voice over IP (VoIP) phones
RADIUS Security	◆ Centralized Management of Wireless Security Policies
Rugged Industrial Performance	
Ease of Deployment	◆ Single webpage setup by field personnel ◆ WirelessN Discovery Tool - view network topology, assign IP addresses for configuration, monitor network diagnostics, update radio firmware, and detect all 802.11 radios on the network, including third-party wireless devices ◆ ProSoft Wireless Designer for planning and specifying wireless networks
Reliable I/O Message Delivery	◆ Multicast I/O messages between PLCs transferred using wireless acknowledgements ◆ IGMP Snooping & Multicast Filtering enhance reliability
Industrial Grade	◆ Usable in Class I, Division 2 hazardous locations ◆ Designed for high vibration environments
-40°C to +75°C Operation	◆ Operation in all outdoor conditions ◆ Rugged construction withstands all operating environments

Configuration

RadioLinx WirelessN Discovery Tool is a configuration and monitoring tool for the RadioLinx 802.11n Industrial Client radios. Use RadioLinx WirelessN Discovery Tool 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.

RadioLinx®

Radio Specifications

Frequency Band	Frequency	Channel
(Varies by country)	2.412 to 2.462 GHz (FCC)	1-11
	2.412 to 2.472 GHz (ETSI)	1-13
	5.150 to 5.250 GHz (FCC/ETSI)	36 - 48
	5.250 to 5.350 GHz (FCC/ETSI)	52 - 64
	5.470 to 5.725 GHz (FCC/ETSI)	100 - 140
	5.725 to 5.850 GHz (FCC)	149 - 165
Standards	802.11n, 802.11a & 802.11g (Legacy) 802.11h (DFS), 802.11i (RADIUS), 802.11e (QoS) 802.1Q (VLAN), 802.3af (PoE), IGMPv2	
Transmit Power (Programmable) *Subject to Regional Regulatory Limits	22 dBm @ MCS0, MCS8 (802.11an/gn) 17 dBm @ MCS7, MCS15 (802.11an/gn) 22 dBm @ 6 Mbps (802.11a/g) 17 dBm @ 54 Mbps (802.11a/g)	
	Antenna Impact: 3 Antennas/ MIMO: Use values above 2 Antennas: Subtract 3 dB from values above 1 Antenna: Subtract 5 dB from values above	
Channel data rates (802.11n)	MCS0 – MCS15, 1-2 Channels & 1-2 Streams	

	1 Channel	2 Channels	Rate	Streams
	7 Mbps	15 Mbps	MCS0	1 Stream
	72 Mbps	150 Mbps	MCS7	
	14 Mbps	30 Mbps	MCS8	2 Streams
	144 Mbps	300 Mbps	MCS15	

Channel data rates (802.11a/g)	802.11a/g: 54, 48, 36, 24, 18, 12, 9, 6 Mbps
Receiver Sensitivity (Typical)	-92 dBm @ MCS0, MCS8 (802.11an/gn) -70 dBm @ MCS7, MCS15 (802.11an) -74 dBm @ MCS7, MCS15 (802.11gn) -92 dBm @ 6 Mbps (802.11an/gn) -74 dBm @ 54 Mbps (802.11a) -78 dBm @ 54 Mbps (802.11g)
Security	WPA2 Enterprise – 802.11i AES w/ RADIUS WPA2 Personal – 802.11i AES w/ Passphrase Legacy WPA TKIP, WEP support & MAC ID filter

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	(3) RP-SMA connector
Weight	1.1 lbs (499g)

Environmental

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

Agency Certifications

Wireless Approvals

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

Hazardous Locations

ANSI/ISA	12.12.01
CSA	C22.2 No. 213-M1987
ATEX	EN60079-0 and EN60079-15

Ordinary Locations

CE	EN60950 N. America & W. Europe
FCC/IC	Part 15, Class A
ETSI	ETSI EN300 328, ETSI EN301 893