

DATASHEET

RadioLinx® 802.11n Dual Weatherproof Industrial Hotspot RLXIB-IH2N-W: M12 Ethernet RLXIB-IH2N-WC: Conduit RJ-45 Ethernet for UL C1D2

The RadioLinx 802.11n Industrial Hotspot series provides wireless solutions for plant-floor and field automation applications. The Industrial Hotspot family provides the rugged performance and ease of deployment required for industrial applications. These 802.11n Hotspots use multiple-input/multiple-output (MIMO) technology supporting up to three antennas on each of its two radios. This allows fast data rates up to 300Mbps, providing advanced performance in industrial environments. The Dual Weatherproof Radio (RLXIB-IH2N-W) is a great selection for use as a repeater maintaining full bandwidth from each radio, repeating traffic without sacrificing speed. It also has an IP67 rating, making it water and dust-tight for use in all weather and mining applications.

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
300 Mbps RF Rates (MIMO)	<ul style="list-style-type: none"> ◆ Multicast, I/O & Produce/Consume messaging at packet rates < 1 ms ◆ Video Monitoring and Automation Control Simultaneously
Dual Radio	<ul style="list-style-type: none"> ◆ Extend range without sacrificing speed ◆ Separate Control Data on 5 GHz, mobile worker access on 2.4 GHz
VLAN	<ul style="list-style-type: none"> ◆ Separate Automation Networks & LAN Access ◆ Allow Mobile Workers access to Network Resources
Quality of Service	<ul style="list-style-type: none"> ◆ Prioritize Control Data, Video & Voice ◆ Support for Voice over IP (VoIP) phones
RADIUS Security	<ul style="list-style-type: none"> ◆ Centralized Management of Wireless Security Policies
Ease of Deployment	<ul style="list-style-type: none"> ◆ Single webpage setup by field personnel ◆ Simple system design with ProSoft Wireless Designer
Personality Module	<ul style="list-style-type: none"> ◆ Easy field replacement without use of programming software ◆ Stores configuration settings on industrial memory module
Reliable I/O Message Delivery	<ul style="list-style-type: none"> ◆ Multicast I/O messages between PLCs transferred using wireless acknowledgements ◆ IGMP Snooping & Multicast Filtering enhance reliability
Industrial Grade	<ul style="list-style-type: none"> ◆ Usable in Class I, Division 2 hazardous locations ◆ Designed for high vibration environments
-40 °C to +75 °C Operation	<ul style="list-style-type: none"> ◆ Operation in all outdoor conditions ◆ Rugged construction withstands all operating environments
IP67 Rating	<ul style="list-style-type: none"> ◆ Watertight for use in all weather conditions ◆ Dust-tight for use in mining applications

Configuration

RadioLinx WirelessN Discovery Tool is a configuration and monitoring tool for the RadioLinx® 802.11n Industrial Hotspot 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.

Radio Specifications

Frequency Band	Frequency	Channel
(Varies by country)	2.412 GHz to 2.462 GHz (FCC)	1 to 11
	2.412 GHz to 2.472 GHz (ETSI)	1 to 13
	5.150 GHz to 5.250 GHz (FCC/ETSI)	36 to 48
	5.250 GHz to 5.350 GHz (ETSI)	52 to 64
	5.470 GHz to 5.580 GHz (ETSI)	100 to 116
	5.680 GHz to 5.700 GHz (ETSI)	136 to 140
	5.725 GHz to 5.850 GHz (FCC)	149 to 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)	22 dBm @ MCS0, MCS8 (802.11an/gn) 17 dBm @ MCS7, MCS15 (802.11an/gn)	
*Subject to Regional Regulatory Limits	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 through MCS15, 1 Channel or 2 Channels with 1 Stream or 2 Streams	
	1 Channel	2 Channels
	Rate	Streams
	7 Mbps	15 Mbps
	72 Mbps	150 Mbps
	14 Mbps	30 Mbps
	144 Mbps	300 Mbps
Channel data rates (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	Die-cast aluminum with pole mount	
Size (Width x Height x Depth)	7 inches x 11.5 inches x 2.75 inches 180 mm x 295 mm x 70 mm	
Shock	IEC 60068 2-6 (20g, 3-Axis)	
Vibration	IEC 60068 2-27 (5g, 10Hz to 150Hz)	
Ethernet Ports	Two Water/Dust Tight M12 connector 10/100Mbps IEEE 802.3, 802.3u, 802.3x (RLXIB-IH2N-W-A, RLXIB-IH2N-W-E) Single RJ45 via 1/2 Inch NPT, and 1/2 Inch NP3 hole 10/100Mbps IEEE 802.3, 802.3u, 802.3x (RLXIB-IH2N-WC-A)	
Antenna Port	(6) N connectors	
Personality Module	Industrial SD Memory Module	
Weight	4.5 lbs (2 kg)	
Environmental		
Operating Temperature	-40°F to +167°F (-40°C to +75°C)	
Humidity	Up to 100% RH, with no condensation	
External Power	10 Vdc to 24 Vdc (RLXIB-IH2N-W-A, RLXIB-IH2N-W-E Only)	
PoE Injector	PoE Powered Device (non-standard)	
Average Power	less than 13 Watts	



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:

RadioLinx® 802.11n Industrial Hotspot

RLXIB-IH2N-W-A Americas FCC

RLXIB-IH2N-W-E EMEA ETSI

RLXIB-IH2N-WC-A North America Hazardous Locations

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.

Place your order by email or fax to:

North American / Latin American / Asia Pacific
orders@prosoft-technology.com
fax to +1 661.716.5101

Europe / Middle East / Africa
europe@prosoft-technology.com
fax to +33 (0) 5.61.78.40.52

Agency Approvals & Certifications

Wireless Approvals

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

Hazardous Locations

ANSI/ISA	12.12.01 groups A, B, C, D
CSA	C22.2 No. 213-M1987
ATEX	EN60079-0 and EN60079-15
cULus	ISA 12.12.01 Class I Division 2, Groups A, B, C, D T-6 (RLXIB-IH2N-WC-A Only)

Ordinary Locations

CSA/CB	EN60950 N. America & W. Europe
FCC/IC	Part 15, Class A and ICES-03
ETSI	ETSI EN300 328 and ETSI EN301 893



Where Automation Connects™

Global Distribution

We think like you do

ProSoft Technology® products are distributed and supported worldwide through a network of over 500 distributors in over 50 countries. Our knowledgeable distributors are familiar with your application needs. For a complete list of distributors, go to our web site at:

www.prosoft-technology.com

Global Support

We are there for you

All ProSoft Technology products are backed with free, unlimited technical support. Contact our worldwide Technical Support team directly by phone or email.

Global Offices

We are where you are

ProSoft Technology has regional offices worldwide available to help you with all your industrial application needs. If you need help choosing a ProSoft Technology solution for your particular application check out our contact information under distributor sales on the web site at:

www.prosoft-technology.com.

Whether your application is large or small, our technical professionals are there to help you choose the right communication solution.