



DATASHEET

RadioLinx[®] 802.11n Industrial Hotspot RLXIB-IHN

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 3 antennas. This allows fast data rates up to 300Mbps, providing advanced performance in industrial environments.

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
Plant-wide Network Integration	
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
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
Rugged Industrial Performance	
Ease of Deployment	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> EtherNet/IP I/O Messaging using v17 and earlier firmware Implicit messaging support between any Rockwell device
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

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 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
Wireless Standards	802.11n, 802.11h, 802.11i, 802.11a, 802.11g (Legacy)	
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 – MCS15, 1-2 Channels & 1-2 Streams	
	1 Channel	2 Channels
	7 Mbps	15 Mbps
	72 Mbps	150 Mbps
	14 Mbps	30 Mbps
	144 Mbps	300 Mbps
		Rate
		MCS0
		MCS7
		MCS8
		MCS15
		Streams
		1 Stream
		2 Streams
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 (499 g)	
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	

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
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



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-IHN

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.

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