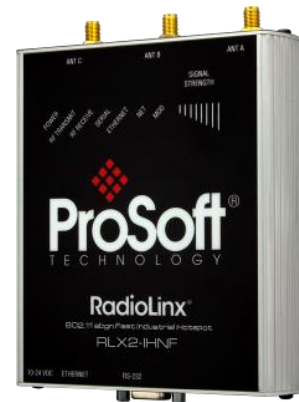


802.11abgn Fast Industrial Hotspot™ RLX2-IHNF

The ProSoft Technology Fast Industrial Hotspot (RLX2-IHNF) provides secure wireless solutions for plant-floor, SCADA automation, process control systems and mobile worker Wi-Fi infrastructure. It operates in the 2.4 or 5 GHz bands, including DFS channels, and is good for applications up to 2 mi. / 3.2 km.

The Hotspot supports Access Point, Repeater, and Client modes. 802.11n technology delivers fast data rates up to 300 Mbps. This provides excellent packet-per-second performance and robust communications in rugged industrial environments. The 802.11n MIMO & Channel bonding supports demanding wireless applications such as Ethernet I/O and high-resolution video.

The included IH Browser configuration and monitoring software allows the user to view network topology, assign IP addresses, monitor network diagnostics, and update radio firmware. The optional OPC Diagnostic Server is ideal for managing long-range wireless SCADA networks.



Features

- ◆ EtherNet/IP™- or Modbus®-based PLCs/PACs can use message instructions to read diagnostic information from the radios, helping to reduce down time when troubleshooting wireless network problems.
- ◆ 802.11i, WPA-2 Personal/Enterprise using 128-bit AES encryption ensures secure networking
- ◆ RADIUS security ensures secure networking with advanced authentication and encryption
- ◆ Virtual Local Area Networks (VLAN) allow for secure network segmentation
- ◆ Quality of Service (QoS) provides data prioritization for I/O control devices, video data, etc.
- ◆ Ultra-Fast Roaming (under 10ms) maintains seamless, high-speed connections to one or more devices on moving equipment and machines (such as cranes, AGVs, and carriers) as they travel between Access Points
- ◆ IGMP Snooping & Packet Filtering optimizes UDP multicast traffic for superior EtherNet/IP I/O communications
- ◆ Supports the ability to communicate with multiple Ethernet devices when used with existing third-party wireless infrastructures
- ◆ Supports Power over Ethernet (PoE) to reduce cabling costs
- ◆ Disaster recovery feature allows the radio configuration to be stored on a microSD card for quick field replacement
- ◆ Connect serial networks (Modbus, DNP 3, etc.) over 802.11 wireless networks
- ◆ Simple local and remote configuration, monitoring, and wireless network diagnostics
- ◆ SNMP support

Radio Specifications

Specification	Frequency	Channel	
Frequency band (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	
	5.260 GHz to 5.580 GHz (FCC/ETSI)*	52 to 116*	
	5.660 GHz to 5.700 GHz (FCC/ETSI)*	132 to 140*	
	5.725 GHz to 5.850 GHz (FCC/ETSI Series C only)	149 to 165	
* DFS channels with RADAR detection			
Wireless standards	802.11n, 802.11a, 802.11g, 802.11h (DFS), 802.11i (Security), 802.11e (QoS) 802.112Q (VLAN), 802.113af (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 2 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	
	6.5 Mbps	13.5 Mbps	
	65 Mbps	150 Mbps	
	13 Mbps	27 Mbps	
	130 Mbps	300 Mbps	
		Rate	
		Streams	
		MCS0	1 Stream
		MCS7	
		MCS8	2 Streams
		MCS15	
802.11b	11, 5.5, 2, 1 Mbps		
802.11a/g	54, 48, 36, 24, 18, 12, 11, 9, 6, 5.5, 2, 1 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 Personal/Enterprise – 802.11i AES WPA2 Personal – 802.11i AES w/ Passphrase Legacy WPA TKIP, WEP support MAC ID filter		
Physical			
Enclosure	Extruded aluminum with DIN rail mount		
Dimensions (H x W x D)	5.82 x 4.64 x 1.48 in 14.8 x 11.8 x 3.8 cm		
Shock	IEC 60068 2-6 (20G, 3-Axis)		
Vibration	IEC 60068 2-27 (5G, 10 to 150 Hz)		
Ethernet Port	(1) 10/100/1000 Base-T connector, shielded RJ45 IEEE 802.3, 802.3u, 802.3x		
Serial Port	(1) RS232 DB9 female (supports serial tunneling and ModBus TCP/IP to Modbus RTU connectivity)		
Antenna Port	(3) RP-SMA connectors		
Personality Module	Industrial microSD Memory Module (included)		
Weight	1.1 lbs (499 g)		
Environmental			
Operating Temperature	-40° to 167°F (-40° to 75°C) -40° to 158°F (-40° to 70°C), RLX2-IHNF Series B and C only		
Humidity	Up to 100% RH, with no condensation		
External Power	10 to 24 VDC		
PoE Injector	802.3af PoE Powered Device		
Peak Power Consumption	< 9W (Series B), < 8W (Series C)		



Where Automation
Connects™

Global Distribution

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 website at:

www.prosoft-technology.com

Global Support

We are there for you

All ProSoft Technology products are backed with free 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 website 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.

Agency Approvals & Certifications

Wireless Approvals

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

Hazardous Locations

UL/cUL; Class 1, Div 2

Ex Certificate (ATEX Directive, Zone 2)

Regulatory

ANATEL

CSA/CB Safety

CE Mark

ETSI

FCC/IC

MIC

NCC

NTRA



What's included in the box:

- (1) RLX2-IHNF (802.11 abgn Fast Industrial Hotspot Radio)
- (1) A2502S-OA (2 dBi omni-directional stub antenna)
- (1) Industrial-class microSD card with default configuration loaded
- (1) Power connector plug (for connection to customer's DC power source wiring)
- (1) Power connector wire insertion tool



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 website at: www.prosoft-technology.com

Ordering Information

To order this product, please use the following:

802.11 abgn Fast Industrial Hotspot

RLX2-IHNF-A (FCC model)
RLX2-IHNF-BR (ANATEL model)
RLX2-IHNF-E (ETSI model)
RLX2-IHNF-EG (NTRA model)
RLX2-IHNF-TW (NCC model)
RLX2-IHNF-JP (MIC model)

Optional Accessories

Bench Test Kit

RLX-IHBTk

Includes: 115/230 VAC bench power supply, Ethernet and serial cables

To place an order, please contact a local ProSoft distributor.

A list of ProSoft-authorized distributors is available on our website at:

www.prosoft-technology.com

and select *Where to Buy* from the menu.

Copyright © 2017 ProSoft Technology, Inc.
All rights reserved. 7/5/2017

Specifications subject to change without notice.