

802.11abgn Weatherproof IP67 Fast Industrial Hotspot RLX2-IHNF-WC

The RLX2-IHNF-WC Weatherproof IP67 Fast Industrial Hotspot is UL Class 1 Division 2 certified and features an IP66/67 rating. It is water-tight for use in extreme weather applications such as offshore oil rigs, and dust-tight for use in mining applications.

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

- ◆ 802.11n MIMO and channel bonding supports bandwidth-hungry applications such as Ethernet I/O and high-resolution video
- ◆ EtherNet/IP™-or Modbus®-based PLCs/PACs can use message instructions to read diagnostic information from the radios, helping 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 AeroScout RTLS (real-time location services) tagging by passing signals from tags to the network
- ◆ Supports Power over Ethernet (PoE) to reduce cabling costs
- ◆ Connect serial networks (Modbus, DNP 3, etc.) over 802.11 wireless networks
- ◆ SNMP support
- ◆ Simple local and remote configuration, monitoring, and wireless network diagnostics

Radio Specifications

Specification	Description
Frequency band (Varies by country)	2.412 GHz to 2.462 GHz (FCC)
	2.412 GHz to 2.472 GHz (ETSI)
	5.150 GHz to 5.250 GHz (FCC/ETSI)
	5.260 GHz to 5.580 GHz (FCC/ETSI)*
	5.660 GHz to 5.700 GHz (FCC/ETSI)*
	5.725 GHz to 5.850 GHz (FCC)
	*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 (802.11a/gn) 17 dBm @ MCS7, MCS15 (802.11a/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 through MCS15, 1 Channel or 2 Channels with 1 Stream or 2 Streams
	1 Channel 2 Channels Rate Streams
	6.5 Mbps 13.5 Mbps MCS0 1 Stream
	65 Mbps 150 Mbps MCS7
	13 Mbps 27 Mbps MCS8 2 Streams
130 Mbps 300 Mbps 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 (802.11a/gn) -70 dBm @ MCS7, MCS15 (802.11a) -74 dBm @ MCS7, MCS15 (802.11gn) -92 dBm @ 6 Mbps (802.11a/gn) -74 dBm @ 54 Mbps (802.11a) -78 dBm @ 54 Mbps (802.11g)
Security	WPA2 Enterprise – 802.11i AES w/RADIUS (PEAP, TTLS, TLS, EAP) WPA2 Personal – 802.11i AES w/ Passphrase Legacy WPA TKIP, WEP support MAC ID filter

Hardware Specifications

Physical

Specification	Description
Enclosure	Die-cast aluminum with pole mount
Dimensions (H x W x D)	11.5 x 7.0 x 2.75 in 29.2 x 17.8 x 7.0 cm
Shock	IEC 60068 2-27 (20g, 3-Axis)
Vibration	IEC 60068 2-6 (5g, 10Hz to 150Hz)
Ethernet Port	(1) water/dust tight 10/100/1000 Base-T connector, shielded RJ45 IEEE 802.3, 802.3u, 802.3x, 802.3af
Antenna Port	(3) N connectors
Weight	3.9 lbs (1.6 kg) less cables and pole mounting bracket



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Environmental

Operating Temperature	-40°F to 167°F (-40°C to 75°C) -40°F to +158°F (-40°C to +70°C), RLX2-IHNF-WC Series B and C only
Humidity	Up to 100% RH
External Power	10 to 24 VDC
Power over Ethernet	802.3af compliant
Peak Power Consumption	< 8W

Agency Approvals & Certifications

Please visit our website: www.prosoft-technology.com

What's included in the box:

- (1) RLX2-IHNF-WC (802.11abgn Weatherproof IP67 Fast Industrial Hotspot Radio)
- (2) U bolts for mounting
- (1) Oval Clip & Seal Cap for conduit connections
- (1) 5 foot CAT 6 Ethernet PoE cable
- (1) 5 foot flying leads power cable



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:

802.11abgn Weatherproof IP67 Fast Industrial Hotspot

RLX2-IHNF-WC-A (FCC model)
RLX2-IHNF-WC-E (ETSI model)

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 *Where to Buy* from the menu.

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