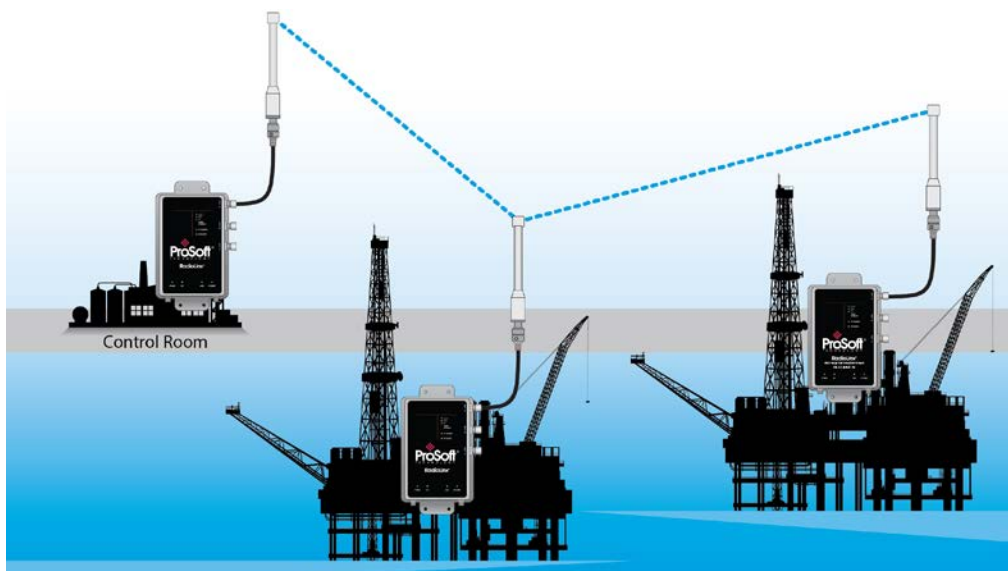# DATASHEET

## 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.

The Weatherproof Hotspot provides secure, reliable and fast connectivity with speeds up to 300 Mbps for SCADA automation, process control and mobile worker Wi-Fi infrastructures. In addition, the radio features Fast Roaming providing seamless networking for manufacturing assembly lines, material handling systems and underground mining applications.



Control Room

## Features

- 802.11n MIMO and channel bonding supports bandwidth-hungry applications such as Ethernet I/O and high-resolution video
- 802.11i, WPA-2 and 128-bit AES encryption ensures secure networking with advanced authentication
- Virtual Local Area Networks (VLAN) enable wireless traffic segmentation aiding scalability, and security
- UL Class1 Division 2 certified
- Contains a single watertight conduit (WC) hub for power and Ethernet connectivity
- Quality of Service (QoS) provides efficient wireless data prioritization assuring that I/O control devices traffic is always delivered
- RADIUS support ensures industrial-grade authentication and strong network traffic encryption

# Radio Specifications

| Specification | Description | |
|---|---|---|
| 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) | 149 to 165 |
| | *DFS channels with RADAR detection | |
| Wireless standards | 802.11n, 802.11a, 802.11g<br>802.11h (DFS), 802.11i (Security), 802.11e (QoS)<br>802.112Q (VLAN), 802.113af (PoE), IGMPv2 | |
| Transmit power (Programmable) *Subject to regional regulatory limits | 22 dBm @ MCS0, MCS8 (802.11an/gn)<br>17 dBm @ MCS7, MCS15 (802.11an/gn)<br>22 dBm @ 6 Mbps (802.11a/g)<br>17 dBm @ 54 Mbps (802.11a/g) | |
| | Antenna Impact:<br>3 Antennas/MIMO: Use values above<br>2 Antennas: Subtract 3 dB from values above<br>1 Antenna: Subtract 5 dB from values above | |

| Channel data rates 802.11n | MCS0 through MCS15,<br>1 Channel or 2 Channels with 1 Stream or 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 | |

| | |
|---|---|
| 802.11b | 1, 2, 5.5 and 11 Mbps |
| 802.11a/g | 1, 2, 5.5, 6, 9, 11,12, 18, 24, 36, 48, 54 Mbps |
| Receiver sensitivity (Typical) | -92 dBm @ MCS0, MCS8 (802.11an/gn)<br>-70 dBm @ MCS7, MCS15 (802.11an)<br>-74 dBm @ MCS7, MCS15 (802.11gn)<br>-92 dBm @ 6 Mbps (802.11an/gn)<br>-74 dBm @ 54 Mbps (802.11a)<br>-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<br>Legacy WPA TKIP, WEP support<br>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<br>29.2 x 17.8 x 7.0 cm |
| Shock | IEC 60068 2-6 (20G, 3-Axis) |
| Vibration | IEC 60068 2-27 (5G, 10 to 150 Hz) |
| Ethernet Port | (1) water/dust tight |
| | 10/100/1000 Base-T connector, shielded RJ45<br>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 |

**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 only |
| Humidity | Up to 100% RH |
| External Power | 10 to 24 VDC |
| Power over Ethernet | 802.3af compliant |
| Peak Power Consumption | < 8W |

# Regulatory Approvals

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

### Hazardous Locations

| |
|---|
| UL/cUL; Class1, Div 2 |
| Ex Certificate (ATEX Directive, Zone 2) |

### Regulatory

| |
|---|
| CE Mark |
| CSA/CB Safety |
| ETSI |
| FCC/IC |

## 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
(1) ProSoft Solutions DVD