DATASHEET

802.11g High Power Industrial Hotspot™
RLX2-IHG

The ProSoft Technology 802.11g High Power Industrial Hotspot™ (RLX2-IHG) is a high-speed wireless Ethernet radio for applications up to 10 mi. / 16 km. The RLX2-IHG uses the 2.4 GHz band and supports a data rate up to 54Mbps. The Hotspot supports Access Point, Repeater, Bridging, and Client modes. The RLX2-IHG offers fast roaming, hazardous location certifications, as well as vibration and shock resistance.

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
♦ Network Address Translation (NAT) lets machine builders deploy many machines without needing to change IP addresses every time
♦ 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 via IH Browser utility or SNMP

Specifications

Radio

Frequency Band (Varies by country)	802.11g: 2.412 GHz to 2.462 GHz (FCC) 2.412 GHz to 2.472 GHz (ETSI)
Wireless Standards	802.11b, 802.11g, 802.11i
Transmit Power (Programmable) (varies by country)	Up to 24 dBm (250 mW)
Channel Data Rates (Modulation)	802.11g: (OFDM) Mbps 54, 48, 36, 24, 18, 12, 9, and 6 802.11b: (DSS) Mbps 11, 5.5, 2, and 1
Receiver Sensitivity (Typical)	-94 dBm @ 1 Mbps -92 dBm @ 11 Mbps -84 dBm @ 24 Mbps -72 dBm @ 54 Mbps
Channel Selection	802.11g: 1 to 11 (FCC), 1 to 13 (ETSI)
Security	WPA2 Enterprise – 802.11i AES w/RADIUS [PEAP, TTLS, TLS, EAP] WPA2 Personal – 802.11i AES w/Passphrase Legacy WPA TKIP, WEP support, RADIUS
Network Features	NAT, VLAN, QoS, IGMP Snooping

Physical

Enclosure	Extruded aluminum with DIN and panel mount
Size	14.8 x 11.8 x 3.8 cm (H x W x D) 5.82 x 4.64 x 1.48 in (H x W x D)
Shock	IEC 60068 2-27 (20g, 3-Axis)
Vibration	IEC 60068 2-6 (5g, 10Hz to 150Hz)
Ethernet Ports	(1) 10/100/1000 Base-T, RJ45 connector
Serial Port	(1) DB9 female (serial tunneling & encapsulation)
Antenna Port	(1) RP-SMA connector
Weight	1.1 lbs (499g)

Environmental

Operating Temperature	-40°C to +75°C (-40°F to +167°F)
Humidity	Up to 100% RH, with no condensation
External Power Power over Ethernet	10 VDC to 24 VDC 802.3af Compliant
Peak Power Consumption	< 7W

Regulatory Approvals

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

What's Included in the Box:

(1) RLX2-IHG (802.11g High Power Industrial Hotspot)
(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