

Wireless POINT I/O Adapter ILX34-AENWG

The ProSoft Technology® Wireless POINT I/O Adapter is a high-speed, standards-based 802.11g wireless input/output (I/O) communication adapter offering a convenient wireless alternative for linking Rockwell Automation® controllers to distributed process I/O modules. Combining Rockwell Automation's field proven I/O with ProSoft Technology's Integrated Wireless Architecture™ technology and support, the Wireless POINT I/O Adapter provides users an optimum distributed I/O communication solution.

The Wireless POINT I/O Adapter Add-On Profile (AOP) utilizes the familiar RSLogix™ 5000 programming environment and connection-based EtherNet/IP™ protocol to simplify configuring and communicating with POINT I/O racks scattered throughout the process facility. The compact size of POINT I/O systems, when coupled with the Wireless POINT I/O Adapter, make them ideal for collecting data from and controlling moving systems such as robots, automated carts, overhead cranes, earthmovers, as well as fixed-position racks in hard-to-reach areas of the process plant.

The Wireless POINT I/O Adapter can be used in networks with RadioLinX® Industrial Hotspots or third party 802.11g access points to provide high-speed, low latency 802.11g client communication over widely spaced plant areas. This ability to work with existing standards-based wireless technology protects and leverages the end-users' investment. For security, the Wireless POINT I/O employs 802.11i WPA2 with AES Encryption.



Features	Benefits
EtherNet/IP connection-based communication	<ul style="list-style-type: none"> ◆ Connection-based IP communication for the highest level of integration with Rockwell Automation® controllers and software
Program using RSLogix 5000 version 17 or later and AOP	<ul style="list-style-type: none"> ◆ Simplified integration with a familiar programming environment ◆ Easy to configure, no special configuration software required ◆ Integrated web page for wireless configuration
802.11g client	<ul style="list-style-type: none"> ◆ Standards-based wireless protects investment and allows communication with RadioLinX Industrial Hotspots or 3rd party 802.11g access points ◆ High-speed, low latency wireless communication
Supports ProSoft Technology Integrated Wireless Architecture when used with RadioLinX Industrial Hotspots	<ul style="list-style-type: none"> ◆ Optimizes wireless bandwidth through intelligent routing of multicast packets ◆ Limits loss of I/O messages
Uses Rockwell Automation® POINT I/O modules	<ul style="list-style-type: none"> ◆ Field-proven, cost effective I/O platform ◆ POINT I/O diagnostic features include channel-level diagnostics, removal and insertion under power ◆ Many Input/Output types to choose from – digital I/O, analog I/O, POINT Guard I/O, RTD, thermocouple, serial-interface for ASCII, and counters ◆ Easy to add / customize point count – up to 63 POINT I/O modules per adapter

Configuration

Both wireless and I/O configuration is done using the ILX34-AENWG Add-On Profile in RSLogix 5000 v17 (or later). Configuration of wireless parameters may be done using the integrated web pages to enable configuration of I/O modules over-the-air.

General Specifications

- ◆ Data communication interface via IEEE 802.11g 54Mb Wireless standard
- ◆ Configuration interface via 10/100 full/half duplex Cat5 cable
- ◆ EtherNet/IP messages encapsulated within standard TCP/UDP/IP protocol
- ◆ Half/full duplex 54 Mbps wireless operation
- ◆ Communication to and from other POINT I/O modules on the same DIN-rail
- ◆ Communication supported by RSLinx software
- ◆ I/O configuration via RSLogix™ 5000 software
- ◆ No network scheduling required
- ◆ No routing tables required
- ◆ Support of connections from multiple controllers simultaneously

Functional Specifications

Expansion I/O Capacity

POINTBus Current Output	ILX34-AENWG uses 1.0A, 300 mA available for I/O modules. Use 1734-EP24DC backplane extension power supplies to extend beyond 300 mA
Maximum # of Modules	63 modules
Max # of Rack Optimized Connections	5 for digital I/O modules only
Max # of direct connections	20

Hardware Specifications

Power Supply

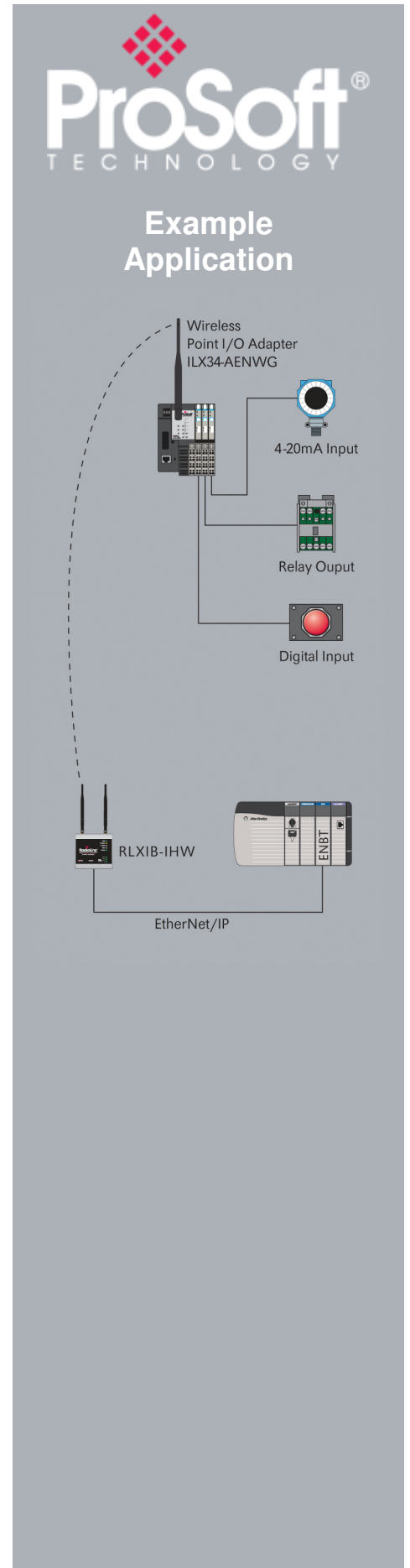
Input Voltage	24 Vdc nominal 10-28.8 Vdc range
Power Consumption	10.0 W max @ 28.8 Vdc
Input Protection	Reverse Polarity, Transients
Isolation Voltage	1800 Vdc for 60 sec

General

Indicators (RF status)	Link, Activity
POINTBus Output Current	300 mA maximum
Thermal Dissipation	9.5 BTU / hr maximum
Dimensions inches (mm)	3.0H x 2.16W x 5.25L (76.2H x 54.9W x 133.4L)
Mass	12 oz / 340 grams
EtherNet Connector	RJ-45, Category 5

Environmental

Operating Temperature	-4 °F to 135 °F (-20 °C to 55 °C) IEC 60068-2 -1 cold, -2 dry heat, -14 thermal shock
Storage Temp	-40 °F to 185 °F (-40 °C to 85 °C)
Relative Humidity	5% to 95% RH, with no condensation. IEC 60068-2-30
Shock	IEC 60068-2-27 30g operating 50g nonoperating
Vibration	IEC 60068-2-6 5g 10-500Hz
ESD Immunity	IEC 60068-4-2 6kV contact discharge 8kV air discharge
Radiated RF Immunity	IEC 60068-4-3 10V/m 1kHz sine AM Modulation 30MHz to 2GHz 10V/m 200 Hz AM Pulse 50% to 100 % frequencies
EFT/B Immunity	IEC 61000-4-5 4kV at 5kHz power ports, 2kV 5.0kHz communication ports



Surge Transient Immunity	IEC 61000-4-5 1kV line-line (DM) and 2kV line-earth (CM) on comm. Ports 1kV line-line (DM) and 2kV line-earth (CM) on power ports
Conducted RF Immunity	IEC 61000-4-6 10Vrms 1kHz sine 80% modulation AM 150kHz to 80MHz
Emissions	CISPR 11 Group 1 Class A
Enclosure rating	None (open style)
Radio / RF	
Communication standard	802.11g
Security	802.11i (WPA2)
Encryption	None, WEP, AES
RF Power	12 dBm (16 mW) without antenna gain – allows up to 6 dBi antenna for ETSI, 100 mW EIRP limited countries
Antenna connection	One RP-SMA connector
IGMP querying support	Use of WDS to support IGMP querying and multicast
Indoor distance	100 meters at 54 Mbps (use RadioLinx® Industrial Hotspots radios to extend range)
Outdoor distance	Up to 3 km with high gain, directional antennas and RF line-of-sight
Enclosure	
Cover	Molded plastic, integrated DIN rail clip
All other components	Supplied by Rockwell Automation® standard 1734-AENTR parts
Enclosure rating	None (open style)
LED Indicators	<ul style="list-style-type: none"> ◆ Link ◆ Activity ◆ System Power ◆ Field Power ◆ Module Status ◆ Network Status ◆ Network Activity ◆ POINTBus Status
Performance	
Wireless packets per second	Up to 1000
RSLogix I/O Configuration Requested Packet Interval, Typical for one adapter per single 802.11 network	Allow 20 ms per I/O connection Example: Set RPI = 100ms for 5 I/O connections (For recommended RPI using multiple adapters per single network, contact ProSoft Technical Support)



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Agency Approvals & Certifications

CE	EMC-EN61326-1:2006; EN61000-6-4:2007
CSA	C22.2 No. 213-1987
CSA CB Certified	IEC61010
ATEX	EN60079-0 Category 3, Zone 2 EN60079-15



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Wireless Approvals

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



Additional Products

ProSoft Technology® offers a full complement of hardware and software solutions for a wide variety of industrial communication platforms.

Compatible products in this product line include:

RLX-IHW
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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:

Wireless POINT I/O Adapter

ILX34-AENWG

To place an order, please contact your local ProSoft Technology distributor. For a list of ProSoft Technology distributors near you, go to:
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