



Collaborative Automation
Partner Program



CE Ex UL US Class 1, Division 2,
Groups A, B, C, and D Hazardous
Locations.

High Speed Wireless Communication Module

PTQ-WA-PWP

The ProTalk series of wireless products provides users more flexibility than ever before seen in wireless solutions. Use the PTQ-WA-PWP module to connect various field devices using different networks or protocols, and share data between these devices "over-the-air." This is accomplished by exchanging shared common database information wirelessly with ProSoft Technology's efficient but powerful wireless protocol, PWP.

How to Contact Us: Sales and Support

All ProSoft Technology® products are backed with unlimited technical support. Contact our worldwide Technical Support team directly by phone or email:

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In-Chassis High Speed Wireless Communication Module

PTQ-WA-PWP

The High Speed Wireless Communication Module creates a powerful wireless connection between devices located remotely, and the PTQ-WA-PWP in a Quantum / Unity rack.

Features and Benefits

ProSoft Wireless Protocol (PWP) offers versatility where a mix of control devices requires cooperation with each other. This involves sharing of information across the applications regardless of device or network type, often at high speed. Wireless bandwidth utilization is optimized by using efficient communication methods. The protocol supports Unicast, Broadcast and Multicast group messaging. The protocol is efficient because each device on the wireless network can produce these types of messages and each device determines which of these messages to consume.

General Specifications

- Single Slot - Quantum backplane compatible
- The module is recognized as an Options module and has access to PLC memory for data transfer
- Configuration data is stored in non-volatile memory in the ProTalk module
- Configuration software for Microsoft Windows XP, 2000 and NT is included with the module.
- Up to six modules can be placed in a rack
- Local rack - The module must be placed in the same rack as processor.
- Compatible with common Quantum / Unity programming tools.
 - UnityPro XL
 - Concept
 - ProWORX
- Quantum data types supported: 3x, 4x
- High speed data transfer across backplane provides quick data update times.
- Sample ladder file available.

Hardware Specifications

Specification	Value
Backplane Current Load	800 mA @ 5 V
Operating Temperature	0 to 60°C (32 to 140°F)
Storage Temperature	-40 to 85°C (-40 to 185°F)
Relative Humidity	5% to 95% (non-condensing)
Vibration	Sine vibration 4-100 Hz in each of the 3 orthogonal axes
Shock	30G, 11 mSec. in each of the 3 orthogonal axes
LED Indicators	Module Status Backplane Transfer Status Debug/Config Port Activity LED RF Link RF Data Four Level RF Signal Quality
Configuration Serial Port (Debug/ Config)	DB-9M PC Compatible RS-232 only No hardware handshaking

Functional Specifications

Includes ProSoft Configuration Builder (PSW-PCB) configuration software.

General Radio Specifications

Specification	Value
Frequency	2.4 GHz band (2400 to 2483.5 MHz)*
Wireless medium	DSSS - Direct Sequence Spread Spectrum (802.11 b)
Output power	32 mW (15 dBm)
Channel data rates	11, 5.5, 2, 1 Mbps
Channels - user selectable	11 - North America 13 - Europe** 14 - Japan
Security	PWP + WEP 64/128 Encryption with WEP key rollover management
Antenna Ports	Two RP-SMA connectors, automatic antenna diversity
Bit Error Rate (BER)	Better than 10 ⁻⁵
Range / Transmit Rate	High Speed 11 Mbps Medium Speed 5.5 Mbps Standard Speed 2 Mbps Low Speed 1 Mbps
Open Office Environment	160m (525 ft.) 270 m (885 ft.) 400 m (1300 ft.) 550 m (1750 ft.)
Semi-Open Office Environment	50 m (165 ft.) 70 m (230 ft.) 90 m (300 ft.) 115 m (375 ft.)
Closed Office	25 m (80 ft.) 35 m (115 ft.) 40 m (130 ft.) 50 m (165 ft.)
Receiver Sensitivity	-83 dBm -87 dBm -91 dBm -94 dBm

General range guidelines (actual results may vary)

* Varies with country regulation

** Some European countries such as France allow fewer channels

Additional Products

ProSoft Technology offers a full range of radio accessories, including antennas, cables, mounting adapters and lightning protection for this product. Refer to the RadioLinx section of the ProSoft Technology web site at <http://www.prosoft-technology.com>.

Ordering Information

To order this product, please use the following:

PTQ-WA-PWP High Speed Wireless
Communication Module

To place an order, please contact your local ProSoft Technology distributor. For a list of ProSoft distributors near you, go to <http://www.prosoft-technology.com>

Distributors:

Place your order by email or fax to:

North American / Latin American / Asia Pacific

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