



# High Speed Wireless Communication Module MVI56-WA-PWP

The inRAx series of wireless products provides users more flexibility than ever before seen in wireless solutions. Use the MVI56-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<sup>®</sup> products are backed with unlimited technical support. Contact our worldwide Technical Support team directly by phone or email:

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## DISCONTINUED In-Chassis High Speed Wireless Communication Module

## **MVI56-WA-PWP**

The In-Chassis Wireless Communication Module creates a powerful wireless connection between devices located remotely, and the ControlLogix processor. The efficient but powerful PWP protocol allows data exchange in oneto-one or one-to-many wireless scenarios.

#### **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 1756 backplane compatible
- PC to processor communication (RSLinx version 2.51 or newer)
- Configuration data obtained from configuration text file downloaded to module. Sample configuration file included
- Reside in Local or Remote chassis and function as a bridge to a ControlLogix processor
- Supports ad-hoc or infrastructure modes.
- Supports up to 20 simultaneous connections.





#### Wireless extension of network Slaves



Allow communication between multiple and separate networks



Connect multiple wireless remote device networks to SCADA or any central system



#### **Hardware Specifications**

Hardware Specifications				
Specification	Description			
Backplane Current Load	800 mA @ 5 V DC;			
	3mA @ 24V DC			
Operating Temperature	0 to 60°C (32 to 140°F)			
Storage Temperature	-40 to 85°C (-40 to 185°F)			
Shock:	30g Operational			
	50g non-operational			
	Vibration: 5 g from 10 to 150 Hz			
Relative Humidity	5% to 95% (non-condensing)			
LED Indicators:	RF Signal Level			
	RF Data Status			
	RF Link Status			
	Serial Activity			
Debug/Configuration port (CFG)				
CFG Port (CFG)	RJ45 (DB-9M with supplied cable)			
	RS-232 only			
Shipped with Unit	RJ45 to DB-9M cables for each port			
	6-foot RS-232 configuration cable			
	5dbi Omni Articulating Antenna			

## **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	-83 dBm	-87 dBm	-91 dBm	-94 dBm

Sensitivity

General range guidelines (actual results may vary)

\* Varies with country regulation

\*\* Some European countries such as France allow fewer channels

## **Additional Products**

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

Visit our web site at http://www.prosoft-technology.com for a complete list of products.

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