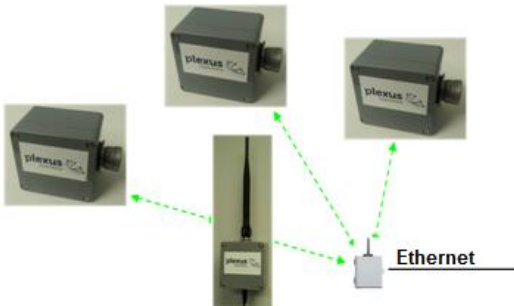




Intelligent Wireless SCADA Distributed Control System



IWS-R-025D



R-025D Series Ruggedized Industrial Differential Pressure Remote Wireless System

Features and Benefits

- Next generation distributed, intelligent wireless SCADA system
- Differential pressure input (barbed ports)
- 0.57psi/1.45psi/7.25psi ranges available
- Integrated or external long range antenna
- Battery powered (2 x C) no plant wiring or external power required
- Auto calibration and battery optimizer
- Reliable & scalable auto mesh wireless
- Full monitoring, control and back office support
- MODBUS TCP supported at Hub

DESCRIPTION

The Intelligent Wireless System (IWS) nodes comprise of a range of distributed wireless products from Plexus Controls providing advanced supervisory, control and data acquisition (SCADA) functionality for commercial and industrial applications.

With 'out the box' auto mesh wireless functionality, IWS nodes can be easily installed at a remote location and connected to standard sensors, supporting 4-20mA, 0-5V, 0-10V, HART, temperature, pressure and many other interfaces. Either through a direct wireless connection or automatically hopping through a series of repeater IWS nodes, the sensor data is relayed back to the IWS Hub for termination over Ethernet to the IWS Management Server application for display, logging and alarm management.

The Remote Termination Unit R-025D is a fully integrated self contained radio and interface package supporting a differential pressure input connection provided by 2 barb connectors. The R-025D is powered using 2 x Alkaline dry batteries or 2 c C primary lithium batteries (3.6V) (specify when ordering) that can be easily changed by the user. The frequency of readings can be user changed and values logged and plotted on Plexus controls Network Management System (NMS) software. Plexus also provided an SQL database package that allows more sophisticated packages to access the data for detailed analysis.

The R-025D is powered by internal 2 x C Alkaline batteries (not supplied). Battery life is expected to be 5 years + depending on the frequency of the reading cycles (programmable through the hub web pages).



Intelligent Wireless SCADA Distributed Control System

SPECIFICATIONS

Radio Specifications

Wireless Topology	Auto Mesh with dynamic configuration
Frequency	2.4 GHz ISM Band
Channels	16
Hops	30 max.
Power Output	+18dBm EIRP with internal antenna
RX Sens	-102 @ 10-6 BER
RF Data Rate	2Mb/s
Indoor Range	up to 200ft (-M version), up to 500ft (-L version)
Outdoor Range	up to 1000ft (-M version), up to 2 miles (-L version)

Power (with current loop power)

IWS-R-025D

Supply Voltage	3V DC (internal 2 x C primary batteries, alkaline recommended)
Max. Power (Transmit Active)	400mW
Max. Power (Idle/Receive)	70mW
Sleep Mode	10uA @ 3V DC

I/O

IWS-R-025V5

1 Input:
Differential pressure input, 3 ranges available:
0-0.57psi
0-1.45psi
0-7.25psi
Accuracy approx.. $\pm 2\%$ of full scale output
Maximum Pressure: 10.8psi

Security

Data Encryption	AES 128bit
-----------------	------------

Management

Stand alone local or remote graphic display with SMS & email alarms. Supported on Windows 7/8
Modbus TCP support through Ethernet Hub

Physical, Electrical & Environmental

Mounting Bracket	Mounting holes at the edges of the enclosure
System Operating Temperature	-20C to +55C
Relative Humidity	0-100% (non condensing)
Wireless Certifications	802.15.4 (2.4GHz) FCC &, IC
Enclosure	Polycarbonate (grey) 3-1/4" (w) x 3-1/4" (h) x 2" (d) (85mm x 85mm x 50mm) NEMA 4X (UV protected)
Weight	1.2lb (0.5kg) (approx) with batteries



Intelligent Wireless SCADA Distributed Control System

ORDERING INFORMATION

Part Number	Description
IWS-R-025D-057-M	Remote Terminal Unit, internal antenna 0-0.57psi full scale pressure range
IWS-R-025D-057-L	Remote Terminal Unit, external antenna 0-0.57psi full scale pressure range
IWS-R-025D-145-M	Remote Terminal Unit, internal antenna 0-1.45psi full scale pressure range
IWS-R-025D-145-L	Remote Terminal Unit, external antenna 0-1.45psi full scale pressure range
IWS-R-025D-725-M	Remote Terminal Unit, internal antenna 0-7.25psi full scale pressure range
IWS-R-025D-725-L	Remote Terminal Unit, external antenna 0-7.25psi full scale pressure range



Copyright© 2015 Plexus Controls Inc.

To find out more, contact Plexus Controls:

Tel: 1-613-963-0751

Email: info@plexus-controls.com

www.plexus-controls.com