



**SYMRTU<sup>®</sup>**  
Intelligent Wireless SCADA System



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## DESCRIPTION

The Intelligent Wireless System (IWS) nodes comprise of a range of distributed wireless products from Symboticware 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 or 0-5V or using internal integrated pressure and depth measurements.

Either through a direct wireless connection or automatically hopping through a series of other 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.

## FEATURES AND BENEFITS

- Provides Network Interface, Data Logging and Protocol Conversion for Next generation distributed, intelligent wireless SCADA system.
- Ethernet with PoE for connection to wired or wireless networks.
- Internal time-stamped data logging.
- Web based GUI for Configuration and RTU status.
- Real time web based GUI for RTU monitoring and control.
- GUI accessible via browser on Smartphone, Tablet or PC.
- Full monitoring, control and back office support.

Real-time  
data access

The IWS Hub provides local data logging with time-stamps to ensure that no data is lost in case of communications failure on the WAN (e.g. Cell modem).

The data is securely stored on site on the IWS Hub and can be retrieved and archived using FTP. In addition, the hub continues to provide real-time data access.

Real-time data can also be accessed via a Web GUI over the Ethernet interface or over the WAN – e.g. over a cellular data connection to a smartphone or any Tablet, PC or other device that supports a standard web browser.

## SPECIFICATIONS

### RADIO SPECIFICATIONS

Wireless Topology	Auto Mesh with dynamic configuration
Channels	16
Power Output	+18dBm (antenna port), +23dBm max. EIRP with antenna supplied
Weight RX Sens	-102 @ 10-6 BER
RF Data Rate	250 kbps
Indoor Range	up to 100m
Outdoor Range	2km+

### POWER CONSUMPTION

Supply Voltage	16-24V DC (power adapter with PoE combiner) or 24v AC
Max. Power (Transmit Active)	2200mW
Max. Power (Idle/Receive)	1800mW

### SECURITY

Data Encryption	AES 128bit available (optional)
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### MANAGEMENT

Standalone Management via Web GUI
Manage from Plexus Controls NMS
Modbus and DNP3 support (* Planned – contact Plexus Controls for more information)

### DATA STORAGE

Real-Time Data Logging with Real-Time Clock
Real Time Clock supports NTP synchronization and multi-time zones
FTP Server built-in to allow standard FTP access and logging
Automatic file archival ( up to storage limit)
Standard CSV format file structure to allow post-processing

### ORDERING INFORMATION

With Real Time GUI	IWS-H - 100SRG
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### RADIO SPECIFICATIONS

Mounting Bracket	Pole (1-1/2" or 2") or direct wall mount
Operating Temperature	-40C to +55C
Relative Humidity	0-100% (non condensing)
Wireless Certifications	802.15.4 (2.4GHz) FCC &, IC
Enclosure	7-1/8' (w) x 10" (h) x 2-1/4" (d) (180mm x 254mm x 57mm)
Weight	50oz (1.5kg) (approx)

**Low Cost of  
installation**



**Symboticware:**  
Remote  
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