Falcon Wi-MGR-INT Wireless Sensor Network Manager

RLE's wireless sensor network manager receives and aggregates signals from wireless transmitters. It then displays this data on its integrated web interface, which provides a centralized view of the sensors and their current readings, as well as direct alarm notification from any smartphone or web browser.

Since the Wi-MGR-INT can relay the gathered information to facility monitoring systems, it streamlines communications and allows an unlimited variety of wireless equipment to communicate directly with a BMS or NMS. Newly added to the Wi-MGR-INT – four hardwired digital inputs and two hardwired relay outputs. This expands the device's capabilities and allows the Wi-MGR-INT to relay signals from traditional wired sensors and equipment.

While it can operate as a stand-alone device, the Wi-MGR-INT can easily integrate into larger systems via SNMP, or building management systems through BACnet. Modbus protocols can serve as a network repeater to convey alarm status information to a centralized location.

The convenient wireless design reduces installation and system expansion costs frequently associated with hard-wired sensors and systems, and allows users to complete installation without the aid of an electrician.

Features

- Wireless design
- Wireless receivers & antennas are included for indoor open air transmission:
  - 433MHz antenna - receives transmissions up to 100 feet (30.5m)
  - 2.4GHz antenna - receives transmissions up to 600 feet (182m)
- Additional wired inputs and outputs provides expanded functionality

Benefits

- Easy, low cost installation
- Output readings as Modbus, BACnet, and SNMP for integration with building management systems (BMS) and network management systems (NMS)
- Web interface enables direct alarm notification and stand-alone operation

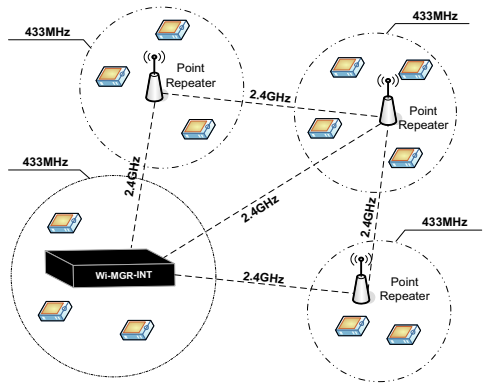
Use the Wi-MGR-INT and RLE's Sensors to Monitor:

- Temperature
- Temperature/Humidity
- Power
- Equipment Status
- Third-party Devices

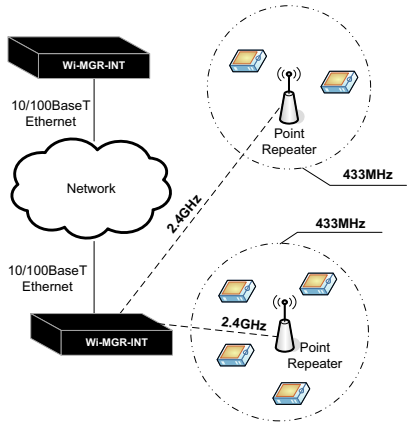
Monitoring & Notification

Suggested Wireless Sensor Network Manager Applications

The Wi-MGR-INT operates as part of a wireless mesh network.



The Wi-MGR-INT can also be used as a network repeater.



Wi-MGR-INT Specifications

Power	24VAC @ 600mA max, 50/60Hz, 24VDC @ 600mA max.
Included Accessories	PSWA-DC-24 power supply (Type A blade) with Type C, G, and I blades included, (1) 433MHz antenna and (1) 2.4GHz antenna, Cat 6 crossover cable, rack mount brackets
Wired Digital Inputs	Four (4) 24V, 10mA max. per channel
Wired Relay Outputs	Two (2) Dry Contact, Form C, 1A @ 24VDC resistive, 0.5A @ 120VAC
Maximum Number of Wireless Ports	400 - RLE strongly recommends not exceeding 150 sensors per Wi-MGR-INT; point repeaters may be necessary
Communication Ports	
Ethernet	10/100 BASE-T, RJ45 connector; 500VAC RMS isolation
EIA-232	DB9 female connector; 9600 baud; No parity, 8 data bits, 1 stop bit
EIA-485	1200, 2400, 9600 or 19200 baud (selectable); Parity: none, even or odd, 8 data bits, 1 stop bit
Protocols	
TCP/IP, HTML, TFTP, SNMP	V1: V2C MIB-2 compliant; NMS Manageable with Get
Modbus (EIA-485)	Modbus Slave; RTU mode; Supports function codes 03
Modbus TCP/IP UDP/IP	Modbus Slave; TCP/IP transmission protocol
BACnet/IP	ASHRAE STD 135-2004 Annex J
BACnet/MSTP	EIA-485
Terminal Emulation (EIA-232)(	VT100 compatible
Indicators	
Network	2 Green - Active & Speed
Status	1 Red LED
EIA-485 Status	2 Green - Transmit & Receive
Wireless Interface	433MHz & 2.4GHz receivers, RP/SMA connectors for 433MHz & 2.4GHz antennas
Login Security	Web Browser Access (Ethernet): 1 Web password Read Only; 1 Web password Read/Write
Data Trending	
Temperature	Records temperature data at 5 minute intervals; daily records; retains 30 days of information
Temperature/Humidity	Records temperature and humidity data at 10 minute intervals; daily records; retains 30 days of information
Operating Environment	
Operating Temperature	32ºF to 122ºF (0ºC - 50ºC)
Humidity	5% to 95% RH (Non-condensing)
Altitude	15,000 ft (4572m) max.
Storage Temperature	-4ºF to 185ºF (-20ºC - 85ºC)
Mounting	Desktop, rack mount (brackets included), wall mount (brackets available, sold separately)
Dimensions and Weight	9.7”W x 4.8”D x 1.6”H (24.6cmW x 12.2cmD x 4.1cmH), 2.3lb (1.04kg)
Certifications	CE, ETL listed; conforms to UL 61010-1, EN 61010; certified to CSA C22.2 NO, 61010.1; RoHS compliant

Falcon

RLE Technologies

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