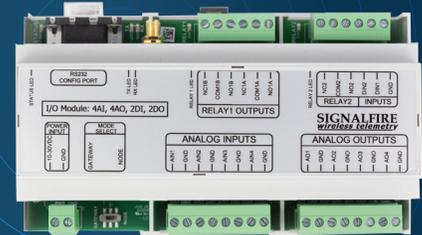# WIRELESS I/O MODULE

Din Mounted Node for Wireless Network.

- RUGGED OIL FIELD PROVEN

- INTEGRATED RADIO WITH ANTENNA KIT

- ANALOG AND DIGITAL SIGNAL REPLICATION
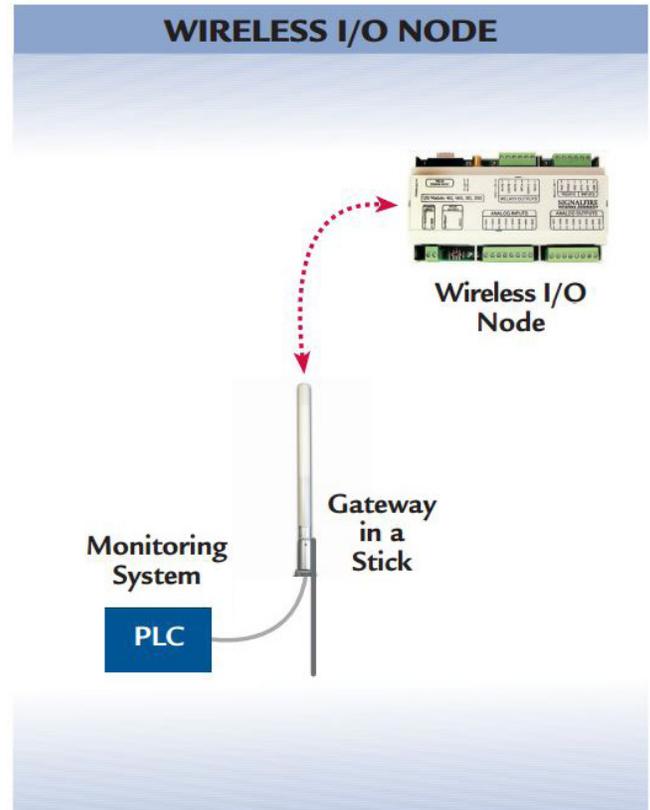
DESCRIPTION

The SignalFire Wireless I/O System can interface to analog (4-20mA/1-5V) inputs and outputs, digital inputs and has relay outputs. There are two modes of operation, the first utilizes two modules and acts as a wire replacement that replicates analog and digital signals over a wireless link between the pair of Wireless I/O Modules. The second mode of operation is as a standard node that sends the data (via the SignalFire wireless mesh network) to a SignalFire Gateway where the data is available via a Modbus RTU or Modbus-TCP interface. The modules are DIN rail mounted and designed to be easy to use.

Point to Point I/O Mirroring Configuration: the analog/digital inputs on one module are replicated on the other module (and vice ver-sa)-ideal for stand alone valve control or simple retrofit applications.

Standard SignalFire Configuration: Operates as a remote node with a standard SignalFire Gateway. All IO data is available at the Gateway as Modbus registers. Supports Modbus writes to control the analog and relay outputs. SignalFire node in a SignalFire network, providing longer-range as well as more sophisticated monitoring and control.

FEATURES

- 4 Analog Inputs (0-20mA or 0-5V)
- 4 Analog Outputs (0-20mA or 0-5V)
- 2 Digital Inputs
- 2 Relay Outputs (1 DPDT, 1 SPST)
- Acts as a repeater for other SignalFire wireless devices
- Wide Range DC Power Input (10-30VDC)
- Low Power Consumption
- DIN Rail Mount with pluggable screw terminal blocks
- Status LEDs

WIRELESS I/O NODE

Wireless I/O Node

Gateway in a Stick

Monitoring System

PLC

SIGNALFIRE
— WIRELESS TELEMETRY —

WIRELESS I/O MODULE

Din Mounted Node for Wireless Network.

TECHNICAL SPECIFICATIONS

Operating Temp
-40°C to 65°C

Power
10-30 VDC (25mA average @12V no relays energized, additional 15mA max for each energized relay, plus any analog output current)

Analog Ouputs
0-20 mA, 0-5 Volts

Digital Inputs
Dry contact or 30 volts max (push-pull)

Radio Frequency
902-928 MHz ISM band, FHSS radio, RP-SMA connector

Relay Outputs
2A, 60W

Networks
Up to 65,520 separate networks

Safety Rating
Class 1 Division 2 Certified, Groups C&D, Temperature Code T5. Certified to CSA C22.2 No. 213, Conforms to ISA 12.12.01

Radio Power
300 mW

Range
Up to 3 miles line of sight (depending on antenna)

Internal Diagnostics
Supply voltage, signal strength, error conditions

STANDARD CONFIGURATION ORDER CODES

I/O MODULE TYPE	ORDER CODE
Wireless IO System with 300 mW Radio and RP-SMA whip antenna. For use with plastic or fiberglass enclosures.	Wireless IO-IA
Wireless IO System with 300 mW Radio with external enclosure mount antenna kit.	Wireless IO-EXA