

# A2 LONG RANGE

Long-range, multiple-input modules for sophisticated data transmission over distances of up to three miles between nodes.

POWERS SENSOR AND RADIO FOR YEARS WITH A BATTERY

RUGGED DESIGN FOR DEMANDING OUTDOOR ENVIRONMENTS

UP TO A 3-MILE RANGE

AUTOMATICALLY CONFIGURES AS A STAR OR MESH NETWORK

SIMPLE TO INSTALL AND MAINTAIN



## FEATURES

- Powers sensor and radio for years with an internal battery
- Optional solar power package
- Costs less than 60ft of installed conduit
- Rugged design for demanding outdoor environments
- Up to 3-mile range
- Sensor independent
- 1/2" NPT conduit interface
- Automatically configures as a star or mesh network
- Simple to install and Maintain



## MODELS

### A2

Monitor two analog sensors and one digital input:

- 4-20 mA current loop sensor
- 1-5 V sensor
- Digital input/counter

### HART

Monitor one HART® loop and one digital input:

- HART (1-4 sensors)
- Digital input/counter

### Modbus

Monitor one or more Modbus sensors

### Thermocouple/Digital Input

Monitor one thermocouple and one digital input

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## TECHNICAL SPECIFICATIONS

### Operating Temp

-40°C to 85°C

### Humidity

0% – 100% condensing

### Power

3 X D Lithium battery pack. Field replaceable.

### Sensor Power

12.5 or 18V Jumper selectable for 4-20mA current loop, 1-5V, or HART sensors. Sensor power is provided from the system, no need for external sensor power

### Battery Life

1-10 years depending on the type of sensor and reporting frequency

### Data Interface

Wireless – available as Modbus registers at Gateway

### Data Update Rates

User Selectable Rotary Switch from 5 sec to 2 hours

### Supported Sensor Interfaces

Analog (4-20mA/1-5V)  
Digital input  
HART  
RS485 Modbus RTU  
K-Type Thermocouple

### Radio Power

300 mW

### Antenna Type

External Weather Resistant, Omnidirectional

### Receive Sensitivity

-105 dB

### Frequency

902-928 MHz License Free ISM Band  
Compliant with FCC Part 15

### Range

Up to 3 Miles (Line of Sight)

### Networks

Up to 65,520 separate networks

### Enclosure

Aluminum, NEMA 4X Rated

### Internal Diagnostics

Battery voltage, signal strength, error conditions

## STANDARD CONFIGURATION ORDER CODES

SENSOR TYPE	POWER SOURCE	ORDER CODE
2 Analog (1-5V or 4-20 mA)	Battery	A2-A2D1-3B
HART	Battery	A2-HART-3B
RS-485/Modbus	Battery	A2-485-3B
K Type Thermocouple	Battery	A2-KTHERM-3B