



RT2630 Wireless Analog & Digital Sensor Input Concentrators

General Description

The Series 2000 RT2630 wireless remote Analog/Digital Sensor Input Concentrator accepts digital and analog sensor/control inputs and transmits wirelessly to the receiver.

It utilizes reliable Spread Spectrum Mesh Network Radio technology. It can be installed easily in minutes eliminating hundreds of feet of wire and saving installation cost while reducing installation labor risks.

The Series 2000 sensor Data-Link LED confirms the data transmission was received by the receiver for fast and reliable positioning of the sensor during installation. *There is no need for special wireless installation equipment or tool.*

Together with the ACI Series 2000 receivers and controllers, the ACI wireless digital transmitter can be used with any LON, BACnet, MODbus, or DDC control system or panel.

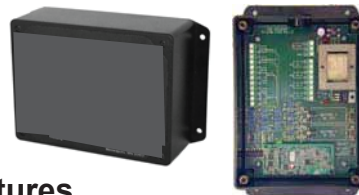
The maximum radio transmission distance is dependent on building type. In a typical commercial building with steel I-beam construction, concrete floors with reinforcing rod, and metal stud walls, it can be expected that transmissions will penetrate vertically through floors and horizontally through 200 to 500 feet of walls, furniture and air.

Ordering Information

Model	Description
RT2630	Input Concentrator with 4 Digital Inputs and Different Analog Inputs
	A 4 Resistance Inputs (20Kohms)
	B 4 Voltage Inputs (0-10VDC)
	C 4 Current Inputs (0-20 mA)
	Enclosure
	blank Standard Black Case
	E NEMA4 Enclosure
	Power Options
	-DC 24VDC or Battery
	-AC 24VAC or Battery
RT2630	A E -AC (-K)

Example: RT2630A-AC Input Concentrator with 4 resistance inputs (20Kohm), 24VAC and a minimum transmission interval of 1 minute

Note 1: Less than 4-5 year battery life due to more frequent transmissions. Use external power for the 5 & 30 second models



Features

- Battery powered or 24 VAC/DC powered remote wireless sensor input modules
- Up to 4 analog inputs (20KOhm, 0-10VDC & 0-20mA types) and 4 digital inputs (relay contact)
- No calibration required
- Wireless – easy to install & relocate
- Long battery life (4 to 5 years)
- Low battery LED + remote low battery alarm notification
- Optional 24VAC or 24VDC power
- Reliable Spread Spectrum Mesh Network wireless technology

Specifications

Input Voltage:

- Battery Option - Size:2/3A, Type: Lithium 3.0V 1400 mAh (e.g. Duracell DL123A)
- 24 VAC 60 Hz or 24VDC Option

Operating Conditions:

- 15 F to 125 F
- 5 to 95% RH non-condensing

Open Field Range:

- One mile line of sight

Digital Inputs (4)

- Contact Closure

Analog Inputs (4):

- Resolution – 12 bits
- Four 20 Kohm or
- Four 0 to 10 VDC or
- Four 0 to 20 mA

Case:

- Dimensions - 7.3" x 4.7" x 2.25"
- Flame Retardant ABS Plastic (Black)
- UL Flame Rating – 94-5VA

Transmitter Characteristics

- Center Transmit Frequency
 - 923.58 MHz
- Transmitter Power – 11 dB

Approvals

- FCC certified

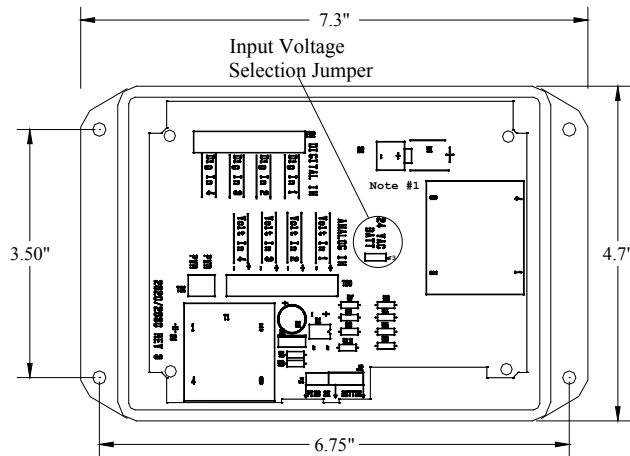


Figure #1

Wireless digital transmitters should be installed within 200 to 500 feet of the receiver. RR2552 signal repeaters can be installed as needed to increase transmission distance between sensors and receivers.

Sensor Location

To select the proper sensor location first install and power the receiver. Observing polarity insert the battery into the sensor to activate it (For battery operation, move the voltage selection jumper to battery mode before inserting the battery). The mesh networked Series 2000 system does not require any additional wireless equipment to determine the proper location of the sensors.

While the sensor is attempting to connect to the receiver the Data-Link LED will blink rapidly 8-10 times every 10 seconds. Once a connection has been established the Data-Link LED will blink once to indicate the data transmission has been received successfully. The Data-Link LED will continue to blink once for every data transmission. The data transmission rate is programmed into the sensor (normally 1 minute intervals). To manually initiate a data transmission press the push button switch located by the negative terminal of the battery.



CAUTION

Sensors, Repeaters and receivers should NOT be installed in the following areas:

- Inside metal enclosure/panel
- Inside or immediately next to elevator shaft/elevator banks
- In front of or immediately next to large trees or a large body of water

Transmission distance and performance will be drastically reduced.



CAUTION

Do not use this product in any safety related applications where human life may be affected.

The ACI Wireless Series is covered by ACI's Two (2) Year Limited Warranty, which is located in the front of ACI's Sensors & Transmitters catalog or can be found on ACI's web site, which is: www.workaci.com.

Installation

Once the location has been determined, mount the RT2630 remote transmitter on a wall using four #8 screws (mounting dimensions see Figure 1). Determine if the RT2630 remote transmitter will be powered by 24 VAC or by batteries on a permanent basis.

For 24 V Operation

If the device is to be powered by 24 V (AC or DC), connect 24 V to the input terminals using 18 AWG wire.

For Battery Operation

If the device is to be powered using the optional DL123A batteries – remove the voltage selection jumper (see Figure 1) and reposition it for battery operation.

NOTE: The device is shipped with the voltage selection jumper installed in the 24 V position. For proper operation it is important to use the correct type of battery. Size:2/3A, Lithium 3.0V 1400 mAh (e.g. Duracell DL123A) batteries.

Installing the battery or applying 24 VAC will activate the transmitter.



CAUTION

Observe battery polarity when installing battery. Do not use 3.6V LiSOCl₂ batteries With 3.0V LiMNO₂ batteries in the same device.

Sensor Inputs

Wire the sensor inputs to the appropriate terminals using 18 AWG wire.

Attach the cover using the four screws.