



Installation and Operation Instructions RM2107 Series

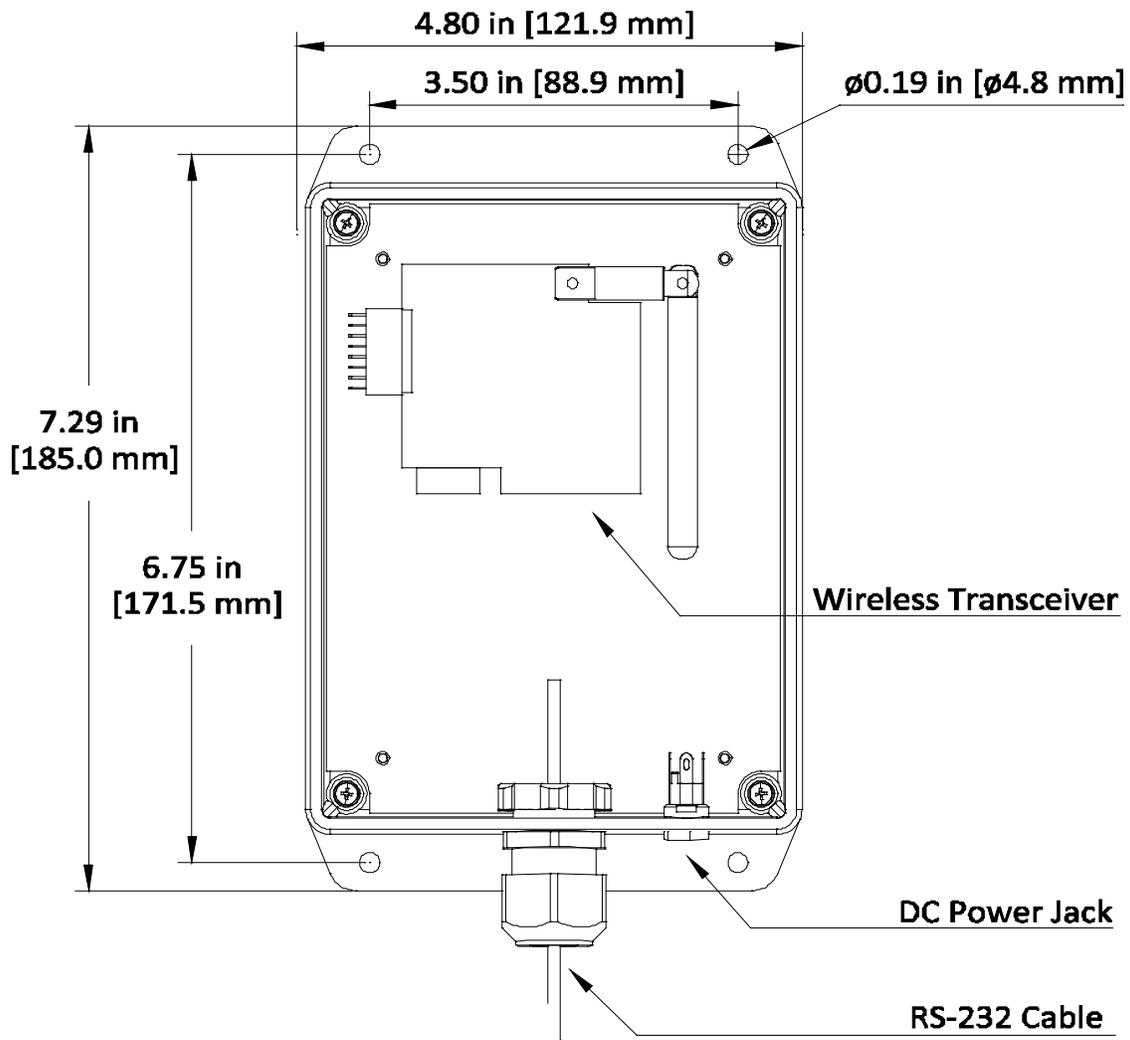


Figure #1

General Description

ACI's mesh network Series 2000 RM2107 is a wireless receiver capable of monitoring any ACI MESHNET900™ wireless space, duct, immersion and outside air sensors. Wireless repeaters can be used to extend the range of the system. When used with ACI's MESHNET900™ Monitor software and a computer running the Windows® operating system, the standalone system can be used for:

- Energy monitoring and auditing applications
- Building performance analysis
- High temperature building treatment applications
- Many others

Parts Included

- RM2107 Base Receiver with 8 ½ foot RS232 serial cable (DB-9 female)
- 120VAC to 9VDC Wall Wart
- MESHNET900™ Monitor Software Package

Installation / Setup

1. Mount the RM2107 base receiver vertically to a wall using four #8 screws(See Figure #1 for mounting dimensions). The RM2107 should be located within 200 to 500 feet of the sensors, however this range can be extended with additional repeaters.
2. Connect the 9-pin serial cable to an unused, Windows® PC serial port.
3. Plug the included AC/DC power adapter into the DC power jack located on the front side of the RM2107 base receiver.
4. Plug the AC/DC power adapter into a 120VAC wall outlet.
5. Follow the included MESHNET900™ Monitor software installation instructions and the system is ready to connect to MESHNET900™ sensors.



PRECAUTIONS

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 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.**

PRODUCT SPECIFICATIONS

Power Supply	
Form	Wall Mount (2 Prong)
Input	100-132VAC, 50-60Hz
Output	9VDC, 660mA minimum
Polarity	Positive Center
Barrel Jack	2.1mm I.D. x 5.5mm O.D. x 12mm Female
Radio	
Data Protocol	IEEE 802.15.4-2003/2006
Data Rate	19.4 kbs/sec nominal
Operating Frequency	North American ISM Band, 902-928 MHz, 10 Channels
Transmitter Output Power	+10 dBm
Receiver Sensitivity	-110 dBm
Open Field Range	One mile line of sight
Communication	
Data Protocol	RS-232 serial communication
Data Rate	9600 baud fixed
Environmental	
Operating Temperature	32 to 104°F (0 to 40°C)
Storage Temperature	14 to 158°F (-10 to 70°C)
Operating Humidity Range	20 to 80% relative humidity, non-condensing
Enclosure	
Construction Material	Flame Retardant ABS Plastic
Flame Rating	UL94-5VA
Approvals	
	FCC

WARRANTY SPECIFICATION

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: www.workaci.com.