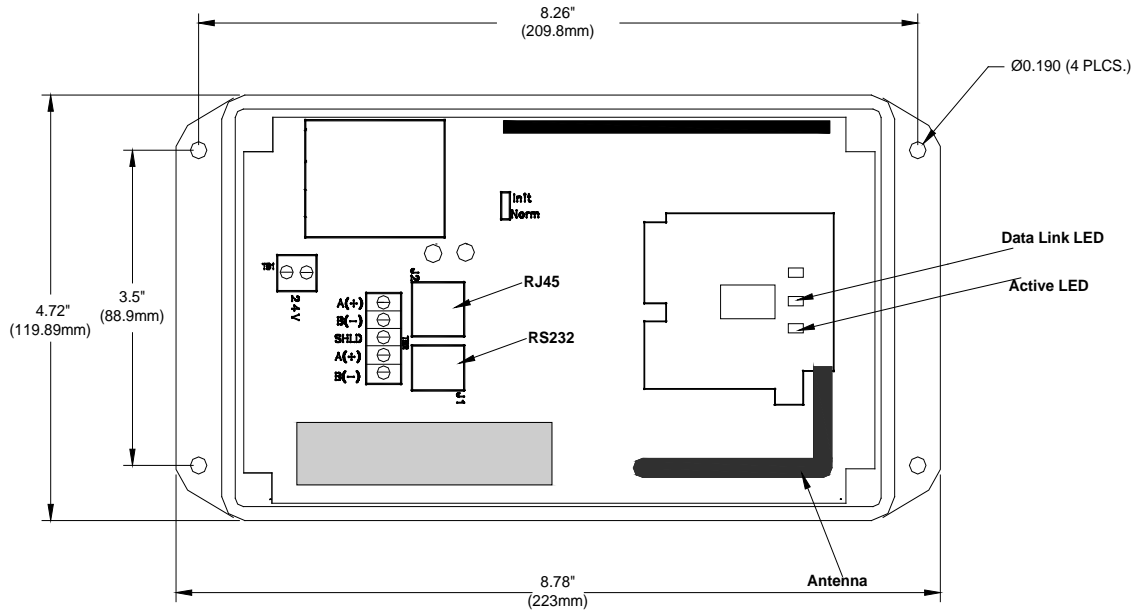
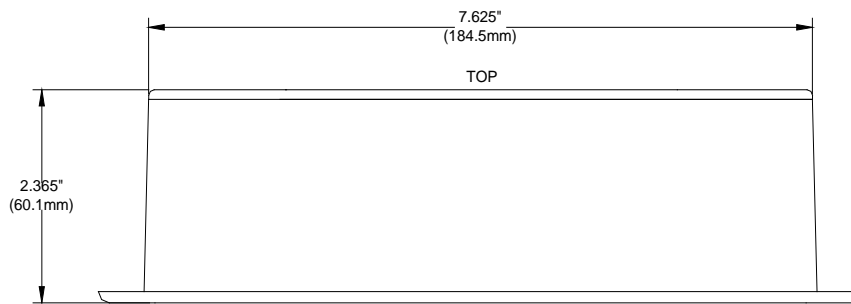




Installation and Operation Instructions MOD9200LON Spread Spectrum Wireless LonWorks® Network Transceiver



TOP VIEW



SIDE VIEW

Figure #1

General Description

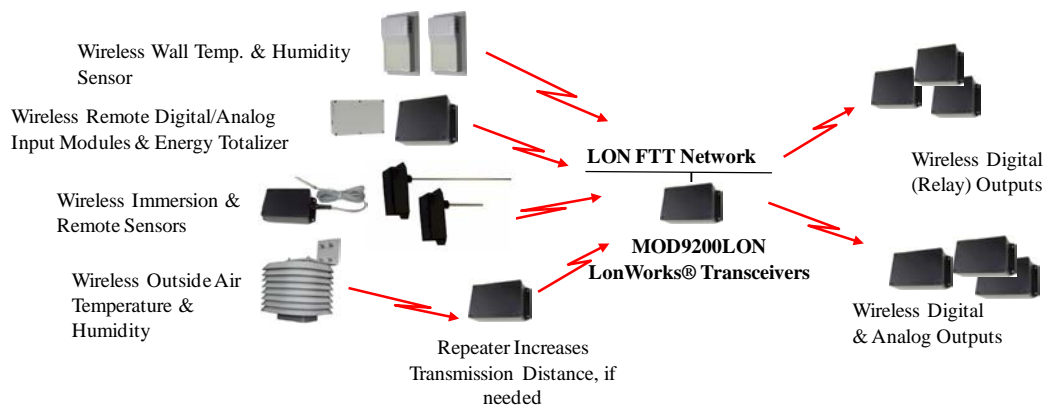
ACI's mesh network Series 2000 MOD9200LON network transceiver utilizes reliable Spread Spectrum Mesh Network Radio technology. Together with other wireless sensors and controls, the system can be used to transmit remote sensor readings, status/alarm indications, control signals and outputs wirelessly. It is compatible with control networks or automation systems that utilize LonWorks® communication protocol or interface. Up to 50 separate physical wireless sensor transmitters and/or wireless remote output (analog & digital) modules can be used with one MOD9200LON Transceiver, and up to 100 data points, and 100 wireless outputs can be monitored and controlled with one (1) MOD9200 Transceiver.

The maximum radio transmission distance is dependent on the building type. The maximum open air transmission distance is one mile. 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.

Generally a wireless system will cover at least three floors – one floor above, and one floor below the receiver location. In some buildings with favorable transmission characteristics the system may cover more floors.

Wireless sensor transmitters should be installed within 200 to 500 feet of the MOD9200 transceiver.

RR2552 signal repeaters can be installed as needed to increase transmission distance between sensors and receivers.



Sub-System Overview

Installation



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.

Refer to the configuration setup instruction manual for the configuration of the MOD9200LON registers and input variables setup. A PC is required for the setup of the Transceiver.

Choose a location close to the LonWorks® network connection and away from the ground.

Mount the MOD9200LON on the wall using four #8 screws (mounting dimensions see Figure #1).

24VAC Input – Connect 24VAC 60Hz to the input terminals using 20AWG wire (See Figure #1).

FTT-10 – Use 20 or 22AWG shielded twisted pair wire to connect the Transceiver(Terminals A+ & B-) to the LonWorks network (See Figure #1). The connection of the FTT-10 network is not polarity sensitive.



CAUTION

DO NOT USE THIS PRODUCT IN ANY SAFETY RELATED APPLICATIONS WHERE HUMAN LIFE MAY BE AFFECTED.

PRODUCT SPECIFICATIONS

Supply	Voltage	24VAC 60Hz, 500mA nominal
RF	Data Protocol	IEEE 802.15.4-2003/2006
	Operating Frequency	902-928 MHz
	Output Power	+11 dBm
	Receiver Sensitivity	-110 dBm
	Open Field Range	One mile (line of sight)
Network	Connections	Protocol – LonWorks® Physical Layer – FTT-10(Free Topology Twisted Pair) Data Rate – 78kbps
LonWorks®	SNVT's Supported	Temperature: SNVT_temp_p Override Push Button: SNVT_occupancy Setpoint Adjustment: SNVT_temp_p Humidity: SNVT_lev_percent Sensor Status/Alarms: SNVT_count PPM: SNVT_ppm Digital Output: SNVT_XXX Analog Output: SNVT_lev_percent
Enclosure	Material	ABS
	Rating	UL 94 5VA
Environment	Operating Temperature	32 to 150°F (0 to 65°C)
	Operating Humidity	0 to 95% RH (non-condensing)
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.