

# WIRELESS

## MESHNET900™ GATEWAY TRANSCIEVERS MOD9200

### DESCRIPTION

The **ACI MOD9200 Meshnet900™ network transceiver** utilizes reliable Spread Spectrum Mesh Network Radio technology. Together with other Meshnet900™ sensors and controls, the system can be used to wirelessly transmit remote sensor readings, status/alarm indications, control signals and outputs. It is compatible with any control panels or Automation systems that utilize BACnet MSTP (**MOD9200BNT**) or LonWorks® (**MOD9200LON**).

Up to 50 separate physical wireless sensor transmitters and/or wireless remote output (analog & digital) modules can be used with (1) **MOD9200** transceiver. Up to 100 data points can be monitored and controlled.

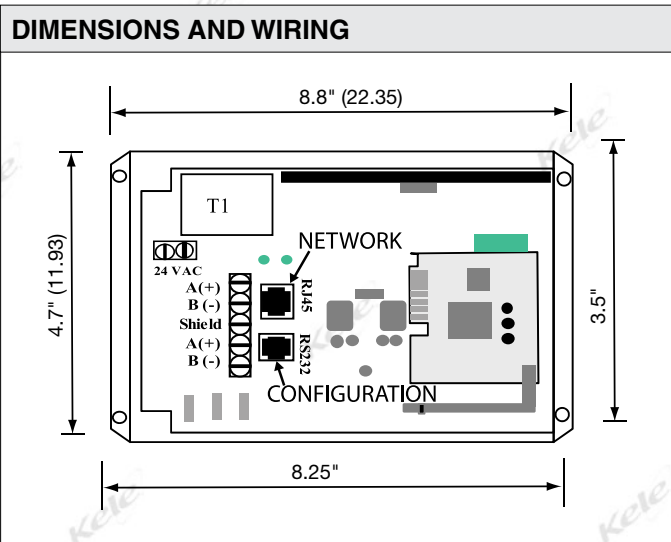
The maximum radio transmission distance is dependent on building type. The maximum open-air transmission distance is 200 to 500 feet open air.

### FEATURES

- **Supports LonWorks? Protocol (MOD9200LON)**
- **Supports BACnet MSTP Protocol (MOD9200BNT)**
- **100 data points per gateway**
- **Multiple MOD9200 Transceivers can be used for large systems**
- **Low battery and lost sensor alarm indications**
- **Mesh Network - easy to install and relocate sensors without additional wireless installation tools**



MOD9200



### SPECIFICATIONS

#### DEVICE OPERATION

Supply Voltage	24 VAC (±20%), 300mA
Transmitted Range Value	Transmits to RM24xx contacts open/closed Transmits to RM24xx 0-10V analog signal Transmits to RM24xx 0-20MA analog signal
Output	None
Protocols	BACnet, MSTP Modbus, RTU LonWorks®, FTT-10
Accuracy	No degradation of accuracy
Indication	2 LEDs for data link and active operation
A/D resolution	12 bit (4095 counts)
Mounting	Direct to wall w/tabs using four #8 screws
Wiring	
<b>MOD9200BNT</b>	BACnet, 5 terminals RS485, 2 Power terminals
<b>MOD9200M</b>	Modbus, 5 terminals RS485, 2 Power terminals
<b>MOD9200LON</b>	LON, 5 terminals FTT-10, 2 Power terminals
Operating Temperature	32° to 150°F (0° to 65°C)
Operating Humidity	5 to 95% RH (non-condensing)
Construction	ABS (NEMA 1)
Enclosure Rating	NEMA 1 (UL 94 HB)
Dimensions	8.7"W x 5.7"H x 3.0"D (22.1 x 14.6 x 7.5 cm)
Weight	1.2 lb (0.54 Kg)
Warranty	1 year

#### RADIO RECEIVER

Protocol	Proprietary (ACI), IEEE 802.15.4-2003/2006 Data-Link LED confirms receiver reception
Frequency	902-928 MHz
Channel Network	1 of 64 network addresses
Modulation	Direct Sequence Spread Spectrum (DSSS)
Transmit Power	11.2 mW (11 dBm)
Receiver Sensitivity	-110db
Open Air Range	5,280 ft (1,600m) Open air 200' - 500' (61-152 m) in building
Low Battery Indication	No
Transmission time	20ms
Antenna	Internal
Channels	1 of 63 network addresses
Device Addresses	Limited to, 50 physical transmitter addresses Limited to 100 data PT's & 100 output PT's
Programming	Program via FTP w/RJ45 X-over cable (provided buy user)
Repeater Capable	Yes, (can receive from any channel repeater)
Compliance	FCC ID# T4F061213RSO, RoHS



### INSTALLATION

**CAUTION:**

Units should NOT be installed in the following areas transmission distance and performance will be drastically reduced:

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

Refer to the configuration setup instruction manual for configuration of the **MOD9200BNT** registers and BACnet variables setup. A PC is required for the setup of the Transceiver.

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

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

Mount the gateway on the wall using four #8 screws.

24 VAC Input - Connect 24VAC 60 Hz to the input terminals using 18-20 AWG wire.

MSTP (RS485) - Use 20 or 22 gauge shielded twisted pair wire to connect the Transceiver (Terminals A+ & B-) to the MSTP network.

FTT-10 (LonWorks) - Use 20 or 22 gauge shielded twisted pair wire to connect the Transceiver (Terminals A+ & B-) to the LON network. Must be Echelon approved cable.

### ORDERING INFORMATION

MODEL	DESCRIPTION
<b>MOD9200BNT</b>	BACnet MSTP network transceiver (100 points per gateway)
<b>MOD9200D</b>	Modbus network transceiver (100 points per gateway)
<b>MOD9200LON-A</b>	Up to 30 wireless wall temp sensors with setpoint adjustments and/or push button override switches, up to 6 humidity sensors, up to 50 wireless digital outputs & up to 50 wireless analog out.
<b>MOD9200LON-B</b>	Up to 50 wireless temperature only sensors (50 wall, duct or immersion types), up to 50 wireless digital outputs & up to 50 wireless analog out.
<b>MOD9200LON-C</b>	Up to 50 wireless sensors (up to 50 temperature points and up to 50 humidity points), up to 50 wireless digital outputs & up to 50 wireless analog out.
<b>MOD9200LON-D</b>	Up to 50 wireless devices (40 0-10VDC point types, 40 discrete inputs, 10 temperature, 10 humidity point types), up to 50 wireless digital outputs & up to 50 wireless analog out.
<b>MOD9200LON-E</b>	Up to 50 wireless sensors/transmitters (26 temperature points, 26 setpoint adjustments, 26 push button override switches, 12 CO2 PPM inputs, 6 humidity points, 4 digital status inputs), up to 50 wireless digital outputs & up to 50 wireless analog out.
<b>MOD9200LON-F</b>	Up to 50 wireless sensors (up to 40 temperature points, up to 20 humidity points & 40 discrete inputs), up to 50 wireless digital outputs & up to 50 wireless analog out.

	ACCESSORIES
<b>CK2432-K</b>	Programming set-up cable

	RELATED PRODUCTS
<b>691-K0A</b>	Control transformer, 120:24 VAC, 40 VA, Class 2
<b>AM-24830A</b>	Plug-in Class 2 Transformer, 120 VAC to 24 VAC, 20 VA