



# MOD9200BNT

## BACnet™ Network Transceiver



The MOD9200BNT is a BACnet™ network transceiver that uses 900MHz spread spectrum technology and is compatible with any Building Automation System using BACnet™ MS/TP communication protocol. The MOD9200BNT works with any ACI wireless sensor, input concentrator, or output module. The MOD9200BNT can be programmed with inputs for a maximum of 50 physical wireless sensors or 100 data points (analog & digital), and 100 output points (50 analog and 50 digital) maximum using the configuration software (included), a laptop and a crossover cable. Transmission distance in a typical building is 200-300 feet horizontal depending on the layout and construction of the building, and one floor above and one floor below the transceiver. Sensor distance and reliability can be increased with the addition of a RR2552B(s) repeater.

ACI offers pre-programming of wireless systems for ease of installation, saving time and cost of field setup. Prior to purchase, it is recommended to contact ACI's Technical Service Department for product selection and system design/layout.

**Note:** For best results, no more than three (3) repeaters should be installed per wireless system, and no more than two (2) repeaters in series with the MOD9200BNT.

**Applications:** Museums, Churches, Historical Buildings & New Construction

**The MOD9200BNT is covered by ACI's Two (2) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's web site, [workaci.com](http://workaci.com).**

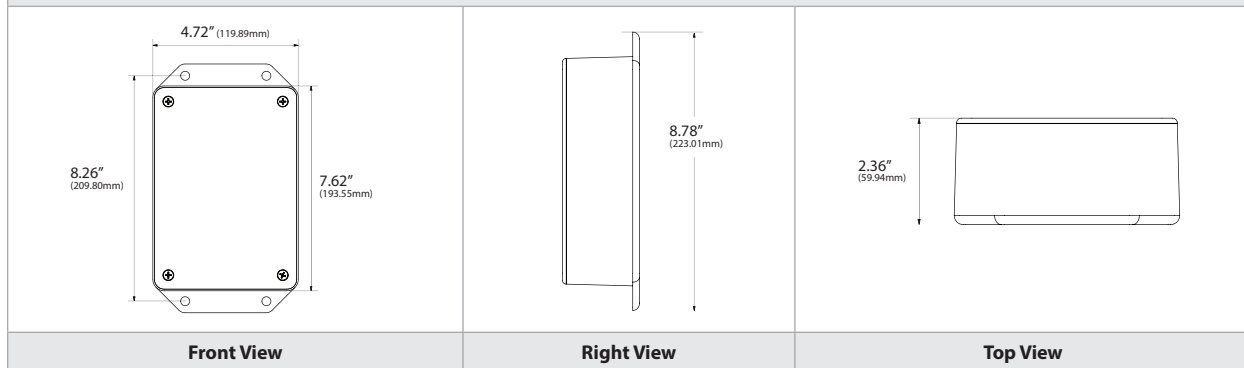
### PRODUCT SPECIFICATIONS

<b>Supply Voltage:</b>	24 VAC, 60Hz (Full wave rectified)
<b>Supply Current:</b>	0.5A Nominal
<b>Connections:</b>	Screw Terminal Blocks
<b>Wire Size:</b>	16 AWG (1.31 mm <sup>2</sup> ) to 26 AWG (0.129 mm <sup>2</sup> )
<b>Terminal Block Torque Rating:</b>	0.37 ft-lb (0.5 Nm) Nominal
<b>Operating Temperature Range:</b>	32 to 122°F (0 to 50°C)
<b>Operating Humidity Range:</b>	30 to 50% RH, Noncondensing
<b>Storage Temperature Range:</b>	-4 to 176°F (-20 to 80°C)
<b>Data Protocol:</b>	IEEE 802.15.4-2003/2006
<b>RF Characteristics:</b>	900 MHz, Operating Frequency 10 channels between 902 – 928 MHz <b>Transmitter Power:</b> 11 dBm   <b>Receiver Sensitivity:</b> -11 dBm
<b>Transmission Distance:</b>	200 – 300 ft horizontally depending on building type and constructions, and typically one floor above and below the transceiver vertically
<b>Transceiver Inputs:</b>	Maximum 100 Analog or Digital Inputs (Max. 50 sensors/modules per transceiver)
<b>Transceiver Outputs:</b>	50 Analog, 50 Digital points (100 total)
<b>Communication Protocol:</b>	BACnet™ MS/TP Physical Layer: RS-485 Twisted Pair
<b>Communication Wire:</b>	Belden 9841 or equivalent
<b>Termination Resistor:</b>	120Ω, Dip switch selectable
<b>Baud Rate:</b>	9600, 19.2K, 38.4K, 57.6K, 76.8K (default), and 115.2K (dip switch selectable)
<b>Node ID:</b>	1 to 127, dip switch selectable
<b>Configuration Software:</b>	Included; Data registers need to be configured prior to use • Laptop with Windows 98, XP, Vista, Windows 7 or Windows 10, Ethernet port, and 10 GB memory • Direct connection from PC to MOD9200BNT: RJ45 Crossover Cable (not provided by ACI) • IP Address of PC must have static address of 192.168.0.2 or above
<b>System Requirements:</b>	
<b>Enclosure Material   Flammability Rating:</b>	ABS Plastic   UL94-5VA
<b>Product Dimensions:</b>	(L) 8.78" (223.01 mm) x (W) 4.72" (119.89 mm) x (H) 2.36" (59.94 mm)
<b>Product Weight:</b>	2.20 lbs (1.00 kg)





**DIMENSIONAL DRAWING**



**STANDARD ORDERING**

Model # Example: **MOD9200BNT** -OR- **130658**

Model #	Item #	Description
MOD9200BNT	130658	Wireless Spread Spectrum Network BACnet™ Transceiver

**ADDITIONAL ORDERING**

Model # Example: **RR2552BE** -OR- **130694**

Model #	Item #	Description
RR2552B	130662	Two Way Repeater, Standard Enclosure
RR2552BE	130694	Two Way Repeater, NEMA 4X Enclosure
WIRELESS SETUP FEE	132618	Pre-programming Wireless System (One fee per each Transceiver ordered)

**SUPPORTED BACNET™ OBJECTS**

- AI (Analog Input) Objects – AI01 to AI200
- BV (Binary Value) Objects – BV01 to BV100
- AV (Analog Value) Objects – AV01 to AV100
- Present Values of AI01 to AI100 will correspond to MOD9200 data register 0 to 99
- All wireless sensor data (analog and discrete) will be displayed as numeric values
- All digital status/alarms will be stores as 1 or 0
- Thermistor 20K, RTD 1K, and Humidity data type inputs will be stored as real values with one decimal place (i.e. 82.5°F)
- Analog data type (Set point) will be stored in counts from 0 to 409.5
- The Present Value of Objects BV01 to BV50 will correspond to DO (Coil)
- Registers 0 to 49 | Objects BV01 to BV50 are used to command remote
- Wireless digital output (Relays) modules RD2402D or RD2432D
- The values will be 1=ON, 0=OFF
- BV51 to BV100 will automatically be assigned to display the status of BV01 to BV50 and to provide feedback for each object
- Present Values of Objects AV01 to AV50 will correspond to MOD9200
- AO (Holding) Registers 0 to 49. Objects AV01 to AV50 will command analog wireless outputs (0-5/10VDC) using RD2432D
- Value entered (or sent) is from 1.0 to 100.0% of full output range
- AV51 to AV100 will automatically be assigned to display the status of AV01 to AV50, and provide feedback for each object

