



ROOM

BACnet™ MS/TP | Modbus RTU Communicating

The BN Series Room Temperature and Humidity networked sensors are a cost effective, single or dual point native BACnet™ or Modbus sensing solution designed to reduce the need for additional input modules or building management controllers when a limited number of input points are available. The BN series offers both BACnet™ and Modbus protocols in one device, providing great flexibility with various systems. The BTL Certification provides confidence that these sensors may be used in any new or retrofit installation using a BACnet™ MS/TP controller

with third party BACnet™ devices. Please contact ACI for more information regarding the BN Series communicating sensors.

Applications: Ambient Air Temperature/Humidity Sensing, Office Buildings, Schools, Clean Rooms, Pharmaceutical Labs, Hospitals, Data Centers & Retail Stores

The ACI BN Series BACnet™ sensors are covered by ACI's Five (5) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's website, www.workaci.com

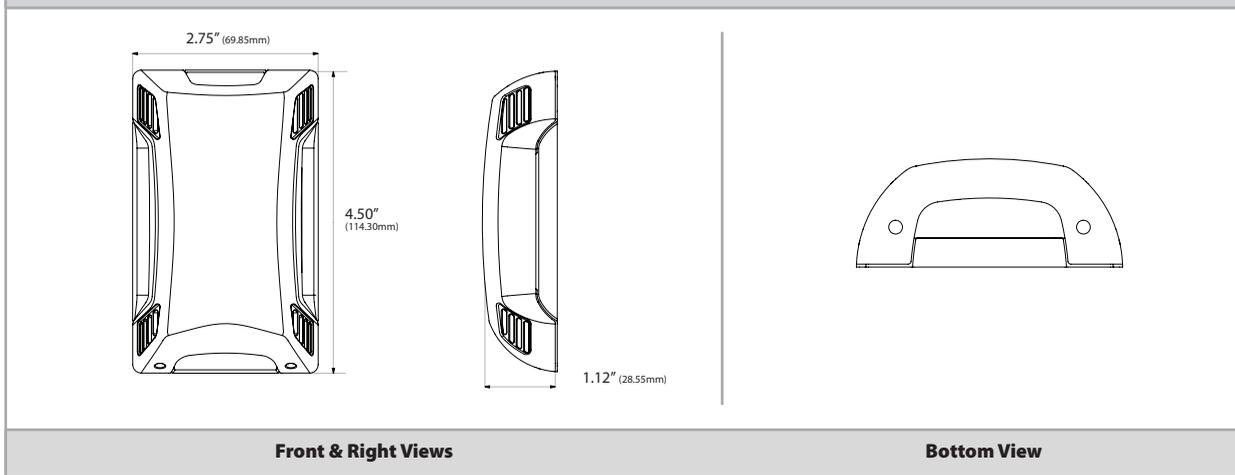
PRODUCT SPECIFICATIONS

Supply Voltage:	12 to 36 VDC 24 VAC +/- 10%, 50/60 Hz (Reverse Polarity Protected)
Current Consumption:	25 mA maximum (0.67 VA)
Temperature Measurement Range:	35 to 122°F (1.5 to 50°C)
Temperature Measurement Accuracy @ 77°F (25°C):	+/- 1.0°F (+/- 0.5°C)
Temperature Calibration Offset:	+/- 9°F (+/- 5°C) (Field Configurable)
Temperature Units:	°F (Factory Default), °C, °K (Field Configurable)
RH Measurement Range:	0 to 100%
RH Measurement Accuracy 77°F (25°C):	+/- 2% from 10 to 90% RH
RH Calibration Offset:	+/- 10% RH (Field Configurable)
Resolution:	+/- 0.1° +/- 0.1%
Temperature / RH Update Rate:	4 seconds
Communication Protocol:	BACnet™ MS/TP or Modbus RTU = Field Selectable; EIA RS-485
Sensor Addresses:	0 = Factory Default 1-127 = Field Selectable
Supported Baud Rates:	Auto Baud (Factory Default) 9600, 19200, 38400, 57600, 76800, 115200 (Field Selectable)
Parity (Modbus RTU):	None/Even/Odd = Field Selectable
Stop Bits (Modbus RTU):	1 or 2 = Field Selectable
Databits (Modbus RTU):	8
Maximum Distance:	4000 ft (1219 m)
End of Line Termination Resistance:	120 Ohms Termination Resistance (Field Selectable)
Tri-Color Status LED:	Connection Status
Connections Wire Size:	Screw Terminal Blocks 16 AWG (1.31 mm ²) to 22 AWG (0.33 mm ²)
Transmitter Operating Temperature Range:	35 to 122°F (1.5 to 50°C)
Storage Temperature Range:	-40 to 185°F (-40 to 85°C)
Operating Humidity Range:	10 to 95% RH, non-condensing
Enclosure Color:	White
Enclosure Material UL Flammability Rating:	ABS Plastic UL94-HB
Product Dimensions (L x W x D):	4.50" (114.3 mm) x 2.78" (70.6 mm) x 1.40" (35.6 mm)
Product Weight:	0.21 lbs. (0.095 kg)
Recommended Mounting Height:	4 to 5 ft (1.2 to 1.5 m) above floor
Agency Approvals:	BTL Certified, CE, RoHS2, WEEE, China RoHS





DIMENSIONAL DRAWING



STANDARD ORDERING

Model # Example: **BN2110-R2** -OR- **146511**

Model #	Item #	Description
BN2110-R2	146511	BACnet™ MS/TP, Modbus RTU, Temperature, Room (R2)
BN2120-R2	146604	BACnet™ MS/TP, Modbus RTU, Relative Humidity, Room (R2)
BN2130-R2	146522	BACnet™ MS/TP, Modbus RTU, Relative Humidity and Temperature, Room (R2)

ACCESSORIES ORDERING

Model # Example: **A/LOCKING COVER** -OR- **107370**

Model #	Item #	Description
A/MOUNTING PLATE WHITE R2	143369	Plastic Wall Plate, White (R2)
A/LOCKING COVER	107370	Clear Thermostat Guard Locking Cover (Low Profile)
A/ROOM-FOAM-PAD	125690	1/8" Foam Insulation Pad with Adhesive, 3" x 2", Black



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