

RS-485 Network Bridge with Configurable Display and Alarm Capability

OVERVIEW



- Analog Input to RS-485 Bridge
- Make any Sensor a Network Sensor
- Accurate Voltage Measurement
- Scalable Signal Conversion
- Display Custom Units of Measure
- RS-485 BACnet/Modbus Connection
- Substitute BACnet AI for Analog Voltage
- Alarm Capability
- Dry Contact Relay
- 1-year Warranty

The BRG-N100 functions as an analog input to RS-485 network bridge. It supports both BACnet MS/TP and Modbus RTU. In addition, it can bind to a remote BACnet object (AO, AI or AV) to read BACnet devices without a dedicated B.A.S. network.

Typical Applications

- ◆ Analog Signal to RS-485 Network Bridge
- ◆ Remote Display for RS-485 or Analog Signal Device
- ◆ Low/High Setpoint Alarm

Benefits

- ◆ Convert any Analog Output Sensor to an RS-485 Network Sensor
- ◆ Display any BACnet MS/TP Device without a B.A.S. Network
- ◆ Satisfy Alarming Requirements of Codes and Standards

Product Highlights

- ◆ Stand-alone Bridge
- ◆ Fixed or % Tolerance Alarming
- ◆ Simple Pushbutton Interface
- ◆ No Additional Devices Required for Setup

General

User Interface: 16-character LCD display and 4 button interface
Input

Type: Analog Input (AI1)

Ranges:

Voltage: 0-10 VDC

Current: 4-20mA (from 4 wire source, no excitation voltage)

B.A.S. Connectivity Options

BRG-N100 Bridge: One field selectable (BACnet MS/TP or Modbus RTU) and non-isolated RS-485 network connection for the scaled network value of AI1, including units of measure - A remote BACnet network object (AO, AI or AV) may be substituted for the physical analog input (AI1) in applications that require an RS-485 BACnet device be read without a B.A.S. network. Note: this functionality is not available for Modbus devices. Provide individual 24 VAC transformers at each BRG-N100 bridge for applications requiring isolated RS-485.

Relay

Type: Dry contact w/ onboard jumper to drive a remote LED (R1=alarm)

Status: N.O. or N.C. via user setup configuration

Rating: 30 VDC or 24 VAC @ 3 amp. Max.

Analog Input (AI1) Alarm

Type: Low and/or high user defined setpoint alarm

Tolerance: User defined % of setpoint or fixed value setpoint

Delay: User defined

Reset Method: Manual or automatic

Visual Indication: Yes, LCD display and red indicating LED

Network Indication: Yes

Contact Closure Relay Assignment: Yes, R1

Listings and Compliance

FCC: This device complies with Part 15 of the FCC rules

RoHS: This device is RoHS2 compliant

Environmental Limits

Temperature: -20 to 120 °F [-28.9 to 48.9 °C]

Humidity: 5 to 95% (non-condensing)

Power Requirement: 24 VAC (22.8 to 26.4 under load) @2.5V-A

Dimensions: 3.57H x 6.00W x 1.58D in. [90.7 x 152.4 x 40.1 mm]