CONTEMPORARY CONTROLS

Providing Solutions to Your Automation Needs

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BASgatewaySX

BASgatewaySX — Modbus to BACnet Gateway with SSL

Modbus remains a popular network interface. It is commonly found on jobs such as boiler control, variable speed drives, and metering applications, but these devices lack BACnet compliance. To make Modbus devices appear as individual BACnet devices, a BASgatewaySX is used. This device has one 10/100 Mbps Modbus TCP or BACnet/IP Ethernet port and an opto-isolated Modbus EIA-485 serial port for Modbus RTU or Modbus ASCII devices.

Up to 200 Modbus serial devices represented by up to 2,000 polled points can share the BASgatewaySX's single Modbus EIA-485 port. BACnet COV notification is supported on 200 points (100 Analog and 100 Binary points). The virtual routing feature in the BASgatewaySX allows each connected Modbus device to appear as an individual BACnet-compliant device. A device profile is needed for each Modbus type device. Contemporary Controls maintains a library of freely-available device profiles available







We have more than 200 custom pre-built device profiles available for free on our website.

for download. If the device profile is not available, Contemporary Controls will provide it upon request. Custom Modbus device profiles can also be uploaded to the BASgatewaySX using the webpage. Using HTTPS webpages and a resident database of common Modbus device profiles, Modbus data points from Modbus Serial or Modbus TCP devices can be mapped to BACnet objects.

Simplify Modbus Serial to Modbus TCP/IP Integration

- Step 1: Select your Modbus baud rate and parity.
- Step 2: Select your Modbus device profile from our library of more that 200 profiles.
- Step 3: Click-off the registers to be scanned in each device or accept our defaults.

Step 4: Save.

Gateway Functionality Between...

- Modbus Serial (RTU or ASCII) and BACnet/IP
- Modbus TCP and BACnet/IP

Routing Functionality Between...

 Modbus Serial (RTU and ASCII) and Modbus TCP

Flexible Communication Ports

- 10/100 Mbps Ethernet with auto-negotiation and Auto-MDIX
- Modbus EIA-485 port can support up to 200 Modbus serial devices (up to 2,000 polled points)

- Opto-isolated serial port supports either 2-wire or 3-wire EIA-485
- Half-wave rectified power supply allows power sharing with other half-wave devices.
- EIA-485 bias and DIP switches
- Baud rates from 2.4–115.2 kbps

Convenient Installation

- 24 VAC/VDC powered
- DIN-rail and panel mounting options available

Fast & Easy Modbus Commissioning

- More than 200 field-proven, pre-built Modbus device profiles available for free download
- Custom device profiles can be uploaded to the BASgatewaySX using its web page
- If you don't see your required Modbus device profile, we will gladly create it for you

Specifications

Power Requirements 24 VAC ±10% 3 VA 47-63 Hz or 24 VDC ±10% 2 W

Operating Temperature -40°C to +75°C

Storage Temperature -40°C to 85°C

Relative Humidity 10-95%, non-condensing

Protection IP30

Communication Ethernet IEEE 802.3 Compliance

> Protocols supported Modbus TCP BACnet/IP

10 Mbps, 100 Mbps Data rate 10BASE-T, 100BASE-TX Physical layer

Cable length (max) 100 m

Port connector Shielded RJ-45

LEDs L (Link) S (Speed)

> Green = LinkGreen = 100 Mbps Flash = activity Yellow = 10 Mbps

Regulatory Compliance CE Mark; CFR 47, Part 15 Class A; RoHS

UL: C22.2 No. 142-M1987

EIA-485

Modbus V1.02 **RTU Master ASCII Master**

2.4, 4.8, 9.6, 19.2, 38.4, 57.6, 115.2 kbps

EIA-485, 3-wire isolated

1200 m (or 1000 m if using 115.2 kbps)

5-pin removable terminal

Green = activity Green = activity







Ordering Information

Model

BASGSX-M1 BASGSX-M1/P

RoHS

Description

BASgatewaySX Modbus to BACnet Gateway DIN rail Mount with SSL BASgatewaySX Modbus to BACnet Gateway Panel Mount with SSL

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