

# SIEMENS



## PROCESS INSTRUMENTATION

# Siemens BACnet EtherNet/IP Gateway

[www.usa.siemens.com/mag](http://www.usa.siemens.com/mag)





### Overview

The Siemens ProtoAir gateway provides BACnet and EtherNet/IP communications for Siemens electromagnetic, Coriolis, and clamp-on ultrasonic flow meters. It is a cost effective interface available either as a stand-alone component for installation in a control panel or installed within a NEMA 4 enclosure with a power supply for field mounted applications.

The gateway has two (2) serial ports, one (1) Ethernet port, and a wireless access point. One serial port connects with the flow meters via an RS-485 network and communicates Modbus RTU. The second serial port is for connection with an Automation network via BACnet MS/TP. The Ethernet port also connects with an Automation network via BACnet/IP. The gateway also serves as an EtherNet/IP adapter.

The gateway supports a web server for setup and diagnostics. For setup, the user specifies the communication protocol and the flow meter profile. Profiles are pre-configured and map the instrument Modbus data to BACnet or EtherNet/IP communication objects. The profiles provide process variable, alarm, and instrument diagnostic data. The web server is accessible via the Ethernet port or via the wireless access point. The gateway supports network security.



SITRANS FM 6000 Electromagnetic Flow Meter	SITRANS FST020 Clamp-on Flow Meter	SITRANS FST030 Clamp-on Flow Meter	SITRANS FC410 Coriolis Flow Meter
			
<ul style="list-style-type: none"> <li>• BACnet/IP</li> <li>• BACnet MS/TP</li> <li>• Ethernet/IP</li> </ul>	<ul style="list-style-type: none"> <li>• BACnet/IP</li> <li>• BACnet MS/TP</li> </ul>	<ul style="list-style-type: none"> <li>• BACnet/IP</li> <li>• BACnet MS/TP</li> </ul>	<ul style="list-style-type: none"> <li>• Ethernet/IP</li> </ul>

#### Supported Protocols

### Communications Gateway

BACnet and EtherNet/IP communications for Siemens electromagnetic, Coriolis, and clamp-on ultrasonic flow meters

#### Protocols supported

- BACnet/IP
- BACnet MS/TP
- Ethernet/IP

#### Multiple Connections

- RS-485 serial ports (X2)
  - RS-485 port 1 communicates Modbus RTU with Siemens flow meters
  - RS-485 port 2 communicates BACnet MS/TP with BACnet master
- RJ-45 Ethernet port (10/100 BaseT)
  - BACnet/IP with BACnet master
  - EtherNet/IP with PLC
  - Setup and diagnostics via web server
- Wi-Fi access point
  - Ethernet IP (Internet Protocol)
  - Diagnostics via Wi-Fi client server

#### Security

- Administrator password protection
- Ethernet IP communications
  - TLS certificate
  - Payload encryption

#### Diagnostics

- Serial port diagnostics
- Ethernet IP port diagnostics
- Modbus RTU variable data





Local Wi-Fi access allows connection from a device without being on a LAN to access the gateway

#### Technical Specifications

#### Approvals

- BTL BACnet Testing Laboratory
- CE and FCC Class B & C Part 15
- UL 60950
- IC Canada
- RoHS



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#### EIP/BACnet network

#### Environment

**Operating Temperature:** -4 to 158°F

**Relative Humidity:** 10-95% RH non-condensing

#### Outdoor Enclosure Specifications

NEMA 4 Carbon steel-dipcoat primed powder-coated on outside  
Dimensions: 9.84"x7.87"x5.91"

#### EIP/BACnet Module Construction

**Dimensions (HxWxD)** 4 x 1.1 x 2.7 inches

**Weight:** 0.4 lbs (module only)

#### Power Requirements

**Input voltage:** 12-24 Vdc or 24 Vac

**Max Power:** 3 W

**Current draw:** 125 mA @ 24 Vdc, 250 mA @ 12 Vdc

#### Wi-Fi 802.11 b/g/n

**Frequency:** 2.4 GHz

**Channels:** 1 to 11 (inclusive)

**Antenna Type:** SMA

**Encryption:** TKIP, WPA & AES

#### Installation

DIN rail mount

#### Ordering Information

**Stand alone EIP Gateway P/N: A6X30151276**

Includes: DIN rail mounted module with antenna

**Field Mount Enclosure P/N: TGX:EY2ASEIP000001**

Includes: NEMA 4 Enclosure with power supply and (1) EIP Gateway

#### Legal Manufacturer

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