BACnet Protocol Implementation Conformance Statement

Date: Aug 06, 2024
Vendor Name: Schneider Electric
Product Name: EM3570 Series DIN Ethernet Energy Meter
Product Model Number:

Model	Coil & Power supply
METSEEM3570	Schneider energy meter, LVCT input with power supply module
METSEEM3570A	Schneider energy meter, Rogowski CT input with power supply module
METSEEM3570X	Schneider energy meter , LVCT input, LVDC only, no external power supply
METSEEM3570AX	Schneider energy meter, Rogowski CT input, LVDC only, no external power supply

Application Software Version: 111.241.298
Firmware Revision: 1.9.0
BACnet Protocol Revision: 15

Product Description: 3-Phase Electrical Energy Meter

The EM70 Series is a compact DIN mounted meter that combines performance with affordability. The EM70 is compatible with Schneider LVCTs and includes a 24Vdc power supply supporting up to 600Vac. The meter provides accurate three phase electrical monitoring to meet 0.5S accuracy standards.

BACnet/IP, Modbus TCP/IP and SNMP come native on all models, with BTL certification and industry standard Modbus registers. Dual Ethernet ports allow Ethernet daisy chains, adding flexibility for simplified installations. Two digital inputs support status monitoring, pulse counting, multi tariff and partial resets, along with one relay output for alarm notification.

BACnet Standardized Device Profiles Supported (Annex L):

☑ BACnet Application Specific Controller (B-ASC)

BACnet Interoperability Building Blocks Supported (Annex K):

DS-RP-B, DS-RPM-B, DS-WP-B, DS-COV-B, DM-DDB-B, DM-DOB-B, DM-DCC-B, DM-TS-B

Segmentation Capability:

☐ Able to transmit segmented messages Window Size N/A
☐ Able to receive segmented messages Window Size N/A

Standard Object Types Supported:
Dynamic creation and deletion of objects are not supported for any object type.

Device Object:

Optional Properties Supported: Description, Location, Active_COV_Subscriptions, Local_Date, Local_Time

Writable Properties: Object_Identifier, Object_Name, Location

Analog Input:

Optional Properties Supported: Description, Reliability

Writable Properties: Out_Of_Service, COV_Increment

Object Identifier	Object Name
ANALOG_INPUT,3000	Current - Ph A
ANALOG_INPUT,3002	Current - Ph B
ANALOG_INPUT,3004	Current - Ph C
ANALOG_INPUT,3010	Current - Avg
ANALOG_INPUT,3020	Voltage - A-B
ANALOG_INPUT,3022	Voltage - B-C
ANALOG_INPUT,3024	Voltage - C-A
ANALOG_INPUT,3026	Voltage - Avg L-L
ANALOG_INPUT,3028	Voltage A-N
ANALOG_INPUT,3030	Voltage B-N
ANALOG_INPUT,3032	Voltage C-N
ANALOG_INPUT,3036	Voltage - Avg L-N
ANALOG_INPUT,3054	Active Power - Ph A
ANALOG_INPUT,3056	Active Power - Ph B
ANALOG_INPUT,3058	Active Power - Ph C
ANALOG_INPUT,3060	Active Power - Total
ANALOG_INPUT,3062	Reactive Power - Ph A
ANALOG_INPUT,3064	Reactive Power - Ph B
ANALOG_INPUT,3066	Reactive Power - Ph C
ANALOG_INPUT,3068	Reactive Power - Total
ANALOG_INPUT,3070	Apparent Power - Ph A
ANALOG_INPUT,3072	Apparent Power - Ph B
ANALOG_INPUT,3074	Apparent Power - Ph C
ANALOG_INPUT,3076	Apparent Power - Total
ANALOG_INPUT,3078	Power Factor - Ph A
ANALOG_INPUT,3080	Power Factor - Ph B
ANALOG_INPUT,3082	Power Factor - Ph C
ANALOG_INPUT,3084	Power Factor - Total
ANALOG_INPUT,3110	Frequency
ANALOG_INPUT,3204	Active Energy Delvd
ANALOG_INPUT,3208	Active Energy Rcvd
ANALOG_INPUT,3220	Reactive Energy Delvd
ANALOG_INPUT,3224	Reactive Energy Rcvd
ANALOG_INPUT,3236	Apparent Energy Delvd
ANALOG_INPUT,3240	Apparent Energy Rcvd
ANALOG_INPUT,3766	Dmd - Active Power Present
ANALOG_INPUT,3770	Dmd - Active Power Peak
ANALOG_INPUT,3782	Dmd - Reactive Power Present
ANALOG_INPUT,3786	Dmd - Reactive Power Peak
ANALOG_INPUT,3798	Dmd - Apparent Power Present

ANALOG_INPUT,3802	Dmd - Apparent Power Peak
ANALOG_INPUT,3814	Dmd - Current Ph A Present
ANALOG_INPUT,3818	Dmd - Active Current Ph A Peak
ANALOG_INPUT,3830	Dmd - Current Ph B Present
ANALOG_INPUT,3834	Dmd - Active Current Ph B Peak
ANALOG_INPUT,3846	Dmd - Current Ph C Present
ANALOG_INPUT,3850	Dmd - Active Current Ph C Peak
ANALOG_INPUT,3862	Dmd - Current Neutral Present

Binary Input:

Optional Properties Supported: Description**,** Reliability

Writable Properties: Out_Of_Service

Object Identifier	Object Name
BINARY_INPUT,38416	Status Input 1
BINARY_INPUT,38417	Status Input 2
BINARY_INPUT,38448	Relay Output

BACnet Data Link Layer Options:

☑ BACnet IP, (Annex J)

Device Address Binding:

Is static device binding supported? (This is currently necessary for two-way communication with MS/TP slaves and certain other devices.) ☐ Yes ☑ No

Networking Options:

☐ Router, Clause 6 - List all routing configurations, e.g., ARCNET-Ethernet, Ethernet-MS/TP, etc.
☐ Annex H, BACnet Tunneling Router over IP

Character Sets Supported:

Indicating support for multiple character sets does not imply that they can all be supported simultaneously.

☑ ISO 10646 (UTF-8) ☐ IBM™/Microsoft™ DBCS ☐ ISO 8859-1
☐ ISO 10646 (UCS-2) ☐ ISO 10646 (UCS-4) ☐ JIS X 0208

Gateway Options:

If this product is a communication gateway, describe the types of non-BACnet equipment/networks(s) that the gateway supports:

N/A