

# Product Implementation Conformance Statement EM4800

Date: October 10, 2012

Vendor Name: Schneider Electric

Product Name: EM4800 Multi Circuit Power Meter

Product Model Number: *The following table states all of the product Model numbers and descriptions.*

Mkg. Part No.	Description
METSQEM488016	POWERLOGIC METSQEM488016 MULTI-CIRCUIT METER 120V 60HZ
METSQEM480516	POWERLOGIC METSQEM480516 MULTI-CIRCUIT METER 120V 60HZ
METSQEM483316	POWERLOGIC METSQEM483316 MULTI-CIRCUIT METER 120V 60HZ
METSEEM488016	POWERLOGIC METSEEM488016 MULTI-CIRCUIT METER 120V 60HZ
METSEEM488026	POWERLOGIC METSEEM488026 MULTI-CIRCUIT METER 240V 60HZ
METSEEM488025	POWERLOGIC METSEEM488025 MULTI-CIRCUIT METER 230V-240V 50HZ
METSEEM480516	POWERLOGIC METSEEM480516 MULTI-CIRCUIT METER 120V 60HZ
METSEEM480526	POWERLOGIC METSEEM480526 MULTI-CIRCUIT METER 240V 60HZ
METSEEM480525	POWERLOGIC METSEEM480525 MULTI-CIRCUIT METER 230V-240V 50HZ
METSEEM483316	POWERLOGIC METSEEM483316 MULTI-CIRCUIT METER 120V 60HZ
METSEEM483326	POWERLOGIC METSEEM483326 MULTI-CIRCUIT METER 240V 60HZ
METSEEM483325	POWERLOGIC METSEEM483325 MULTI-CIRCUIT METER 230V-240V 50HZ
E488010SQD	POWERLOGIC E488010SQD MULTI-CIRCUIT METER 120V
E488030SQD	POWERLOGIC E488030SQD MULTI-CIRCUIT METER 240V 60HZ
488020SQD	POWERLOGIC E488020SQD MULTI-CIRCUIT METER 230V 50HZ
E480510SQD	POWERLOGIC E480510SQD MULTI-CIRCUIT METER 120V
E480530SQD	POWERLOGIC E480530SQD MULTI-CIRCUIT METER 240V 60HZ
E480520SQD	POWERLOGIC E480520SQD MULTI-CIRCUIT METER 230V 50HZ
483310SQD	POWERLOGIC E483310SQD MULTI-CIRCUIT METER 120V
E483330SQD	POWERLOGIC E483330SQD MULTI-CIRCUIT METER 240V 60HZ
E483320SQD	POWERLOGIC E483320SQD MULTI-CIRCUIT METER 230V 50HZ

Application Software Version: N/A

Firmware Revision: 1.46

BACnet Protocol Version: 1

BACnet Protocol Revision: 10

## Product Description

The EM4800 meter is a high density metering product designed for multi-tenant billing and cost allocation purposes. It is configurable to support 24 single element, 12 two element or 8 three phase elements. It measures active, reactive and apparent energy, delivered and received. Multiple hardware variants support 120V L-N, 208-240V L-N, 416-480V L-L using a selection of 80mA secondary output transformers or 333mV secondary output transducers. The units and associated CTs are typically installed in an electrical room or a multi-tenant environment. The CTs are typically installed in an electrical panel.

### BACnet Standardized Device Profile (Annex L)

	BACnet Operator Workstation (B-OWS)
	BACnet Advanced Operator Workstation (B-AWS)
	BACnet Operator Display (B-OD)
	BACnet Building Controller (B-BC)
	BACnet Advanced Application Controller (B-AAC)
	BACnet Application Specific Controller (B-ASC)
X	BACnet Smart Actuator (B-SA)
	BACnet Smart Sensor (B-SS)

### BACnet Interoperability Building Blocks (BIBBs) Supported

BIBB	Name	BACnet Service	Init	Exec
DS-RP-A	Data Sharing - ReadProperty-A	ReadProperty		
DS-RP-B	Data Sharing - ReadProperty-B	ReadProperty		X
DS-RPM-A	Data Sharing - ReadPropertyMultiple-A	ReadPropertyMultiple		
DS-RPM-B	Data Sharing - ReadPropertyMultiple-B	ReadPropertyMultiple		X
DS-RPC-B	Data Sharing - ReadPropertyConditional-B	ReadPropertyConditional		
DS-WP-A	Data Sharing - WriteProperty-A	WriteProperty		
DS-WP-B	Data Sharing - WriteProperty-B	WriteProperty		X
DS-WPM-B	Data Sharing - WritePropertyMultiple-B	WritePropertyMultiple		
DS-COV-A	Data Sharing - COV-A	SubscribeCOV ConfirmedCOVNotification UnconfirmedCOVNotification		
DS-COV-B	Data Sharing - COV-B	SubscribeCOV ConfirmedCOVNotification UnconfirmedCOVNotification		
AE-N-A	Alarm and Event-Notification-A	ConfirmedEventNotification UnconfirmedEventNotification		
AE-N-I-B	Alarm and Event-Notification-B	ConfirmedEventNotification UnconfirmedEventNotification		
AE-ACK-B	Alarm and Event-ACK-B	AcknowledgeAlarm		
AE-ESUM-B	Alarm and Event-Enrollment Summary-B	GetEnrollmentSummary		
AE-INFO-B	Alarm and Event-Information-B	GetEventInformation		
SCHED-I-B	Scheduling-Internal-B			
SCHED-E-B	Scheduling-External-B			
T-VMT-I-B	Trending - Viewing and Modifying Trends Internal-B	ReadRange		
T-VMT-E-B	Trending - Viewing and Modifying Trends External-B			
T-ATR-B	Trending – Automated Trend Retrieval-B	ConfirmedEventNotification ReadRange		

DM-DDB-A	Device Management-Dynamic Device Binding-A	Who-Is I-Am		
DM-DDB-B	Device Management-Dynamic Device Binding-B	Who-Is I-Am	X	X
DM-DOB-A	Device Management-Dynamic Object Binding-A	Who-Has I-Have		
DM-DOB-B	Device Management-Dynamic Object Binding-B	Who-Has I-Have	X	X
DM-DCC-B	Device Management-DeviceCommunicationControl-B	DeviceCommunicationControl		

**BACnet Interoperability Building Blocks (BIBBs) Supported – Cont.**

BIBB	Name	BACnet Service	Init	Exec
DM-TS-A	Device Management-TimeSynchronization-A	TimeSynchronization		
DM-TS-B	Device Management-TimeSynchronization-B	TimeSynchronization		X
DM-UTC-B	Device Management-UTCTimeSynchronization-B	UTCTimeSynchronization		X
DM-RD-B	Device Management-ReinitializeDevice-B	ReinitializeDevice		
DM-BR-B	Device Management-Backup and Restore-B	AtomicReadFile AtomicWriteFile ReinitializeDevice		
DM-OCD-B	Device Management-Object Creation and Deletion-B	CreateObject DeleteObject		
NM-CE-A	Network Management – Connection Establishment-A	Establish-Connection-To-Network Disconnect-Connection-To-Network		
NM-RC-B	Network Management-Router Configuration-B	Who-Is-Router-To-Network I-Am-Router-To-Network Initialize-Routing-Table Initialize-Routing-Table-Ack		

**Segmentation Capability**

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

## Standard Object Types Supported

Properties that are Writable and Optional are indicated.

Accumulator		
Property	W	O
Description		X
Event_State		
Max_Pres_Value		
Object_Identifier		
Object_Name		
Object_Type		
Out_Of_Service		
Present_Value		
Scale		
Status_Flags		
Units		

Analog Input		
Property	W	O
Description		X
Event_State		
Object_Identifier		
Object_Name		
Object_Type		
Out_Of_Service		
Present_Value		
Status_Flags		
Units		

Device		
Property	W	O
APDU_Timeout	X	
Application_Software_Version		
Database_Revision		
Daylight_Savings_Status	X	
Description	X	X
Device_Address_Binding		
Firmware_Revision		
Local_Date		X
Local_Time		X
Location	X	X
Max_APDU_Length_Accepted		
Model_Name		
Number_Of_APDU_Retries	X	
Object_Identifier	X	
Object_List		
Object_Name	X	
Object_Type		
Profile_Name		X
Protocol_Object_Types_Supported		
Protocol_Revision		
Protocol_Services_Supported		
Protocol_Version		
Segmentation_Supported		
System_Status		
UTC_Offset	X	X
Vendor_Identifier		
Vendor_Name		

### Data Link Layer Options

X	BACnet IP
X	BACnet IP, Foreign Device  ISO 8802_3, Ethernet  ANSI/ATA 878.1, 2.5 MB ARCNET  ANSI/ATA 878.1, EIA_485 ARCNET, baud rate(s) _____  MS/TP master, baud rate(s) _____  MS/TP slave, baud rate(s) _____  Point-To-Point, EIA 232, baud rate(s) _____  Point-To-Point, modem, baud rate(s) _____  LonTalk, medium: _____  BACnet/Zigbee _____  Other

### Device Address Binding

Static Device Binding Supported  Yes  No

## Networking Options

<input type="checkbox"/>	Router	List all routing configurations _____
<input type="checkbox"/>	Annex H, BACnet Tunneling Router over IP	
<input type="checkbox"/>	BACnet/IP Broadcast Management Device (BBMD)	
<input type="checkbox"/>	Support registrations by foreign devices	
<input type="checkbox"/>	Support network address translation	

## Character Sets Supported

<input checked="" type="checkbox"/>	ISO 10646 (UTF-8)	<input type="checkbox"/>	ISO 8859-1
<input type="checkbox"/>	ISO 10646 (UCS-2)	<input type="checkbox"/>	ISO 10646 (UCS-4)
<input type="checkbox"/>	IBM /Microsoft DBCS	<input type="checkbox"/>	JIS C 6626

## Network Security Options

<input checked="" type="checkbox"/>	Non-secure Device
<input type="checkbox"/>	Secure Device
<input type="checkbox"/>	Multiple Application-Specific Keys
<input type="checkbox"/>	Supports encryption (NS-ED BIBB)
<input type="checkbox"/>	Key Server (NS-KS BIBB)

**Proprietary Properties**

Property Name	Property ID	Object Type	DataType	Description
Peak Demand	1500	Analog-Input	Unsigned	Returns the Peak value over the measured interval
Peak Demand Reset	1501	Device	CharacterString	Write the password to this property to reset the Peak Demand value for all applicable objects.