

Power Modular Equipment Controller for BACnet Networks



Power Modular Equipment Controller.

BACnet Protocol Implementation Conformance Statement

Products

Product	Model Number	Protocol Revision	Software Version	Firmware Version
Power BACnet Modular Equipment Controller	1200-EFB 1210-EFB 1200-ELB 1210-ELB 1100-EB 1110-EB 1200-EB 1210-EB	135-2004	N/A	3.0

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Vendor Information

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Product Description

An integral member of the APOGEE product family, the Power MEC for BACnet Networks is a high performance, modular Direct Digital Control (DDC) supervisory equipment and primary building controller. The Power MEC operates stand-alone or networked to perform complex control, monitoring and energy management functions without relying on a higher-level processor. The Power MEC communicates on a 10/100 MB Ethernet BACnet/IP network. It can optionally provide central monitoring and control for distributed Field Level Network (FLN) devices.

BACnet Standardized Device Profile (Annex L)

Supported	Device Profile
	BACnet Operator Workstation (B-OWS)
•	BACnet Building Controller (B-BC)
	BACnet Advanced Application Controller (B-AAC)
	BACnet Application Specific Controller (B-ASC)
	BACnet Smart Actuator (B-SA)
	BACnet Smart Sensor (B-SS)

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Supported BACnet Interoperability Building Blocks (BIBBs)

BIBB	Name	Initiate	Execute
DS-RP-A	Data Sharing-ReadProperty-A	•	
DS-RP-B	Data Sharing-ReadProperty-B		•
DS-RPM-A	Data Sharing-ReadPropertyMultiple-A	•	
DS-RPM-B	Data Sharing-ReadPropertyMultiple-B		•
DS-WP-A	Data Sharing-WriteProperty-A	•	
DS-WP-B	Data Sharing-WriteProperty-B		•
DS-WPM-B	Data Sharing-WritePropertyMultiple-B		•
DS-COV-A	Data Sharing-COV-A	•	
DS-COV-B	Data Sharing-COV-B		•
DS-COVU-A	Data Sharing-COV-Unsolicited-A	•	
DS-COVU-B	Data Sharing-COV-Unsolicited-B		•
Scheduling			
SCHED-I-B	Scheduling-Internal-B		•
SCHED-E-B	Scheduling-External-B		•
Alarm and Event Management			
AE-N-A	Alarm and Event-Notification-A	•	
AE-N-I-B	Alarm and Event-Notification Internal-B		•
AE-ACK-A	Alarm and Event-ACK-A	•	
AE-ACK-B	Alarm and Event-ACK-B		•
AE-ASUM-B	Alarm and Event-Alarm Summary-B		•
AE-ESUM-A	Alarm and Event-Enrollment Summary-A	•	
AE-ESUM-B	Alarm and Event-Enrollment Summary-B		•
AE-INFO-A	Alarm and Event-Information-A	•	
AE-INFO-B	Alarm and Event-Information-B		•
Trending			
T-VMT-A	Trending-Viewing and Modifying Trends-A	•	
T-VMT-I-B	Trending-Viewing and Modifying Trends-Internal-B		•
T-ATR-B	Trending-Automated Trend Retrieval-B		•
Network Management			
NM-CE-A	Network Management-Connection Establishment-A	•	
Device Management			
DM-DDB-A	Device Management-Dynamic Device Binding-A	•	
DM-DDB-B	Device Management-Dynamic Device Binding-B		•
DM-DOB-A	Device Management-Dynamic Object Binding-A	•	
DM-DOB-B	Device Management-Dynamic Object Binding-B		•
DM-DCC-B	Device Management-DeviceCommunicationControl-B		•
DM-PT-A	Device Management-Private Transfer-A	•	
DM-PT-B	Device Management-Private Transfer-B		•

BIBB	Name	Initiate	Execute
DM-TM-A	Device Management-Text Message-A	•	
DM-TM-B	Device Management-Text Message-B		•
DM-TS-B	Device Management-TimeSynchronization-B		•
DM-RD-B	Device Management-ReinitializeDevice-B		•
DM-BR-B	Device Management-Backup and Restore-B		•
DM-LM-B	Device Management-List Manipulation-B		•
DM-OCD-B	Device Management-Object Creation and Deletion-B		•

Standard Object Types Supported

Object Type	Creatable	Deletable
Analog Input		
Analog Output		
Analog Value		
Binary Input		
Binary Output		
Binary Value		
Calendar	•	•
Command	•	•
Device		
File		
Multi-state Output		
Multi-state Value		
Notification Class	•	•
Schedule	•	•
Trend Log		

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Data Link Layer Options

•	BACnet IP, (Annex J)
•	BACnet IP, (Annex J), Foreign Device
	ISO 8802-3, Ethernet (Clause 7)
	ANSI/ATA 878.1, 2.5 Mb. ARCNET (Clause 8)
	ANSI/ATA 878.1, RS-485 ARCNET (Clause 8), baud rate(s) _____
	MS/TP master (Clause 9), baud rate(s): _____
	MS/TP slave (Clause 9), baud rate(s): _____
	Point-To-Point, EIA 232 (Clause 10), baud rate(s): _____
	Point-To-Point, modem, (Clause 10), baud rate(s): _____
	LonTalk, (Clause 11), medium: _____
	Other: _____

Segmentation Capability

Able to transmit segmented messages	Yes	Window Size: 32
Able to receive segmented messages	Yes	Window Size: 32

Device Address Binding

Is Static Device Binding supported?	Yes
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Networking Options

	Router, Clause 6
	Annex H.3, BACnet Tunneling Router over UDP/IP
•	BACnet/IP Broadcast Management Device (BBMD)
Yes	Does the BBMD support registrations by Foreign Devices?

Character Sets

•	ANSI X3.4
	ISO 10646 (UCS-2)
	IBM™/Microsoft™ DBCS
	ISO 10646 (ICS-4)
	ISO 8859-1
	JIS C 6226