

BACnet Protocol Implementation Conformance Statement

Date	19 th July 2016
Vendor Name	Mitsubishi Electric Europe B.V. UK Branch
Product Name	Procon MelcoBEMS MINI (A1M)
Product Model Number	Procon MelcoBEMS MINI (A1M)
Application Software	
Version	3.0.11
Firmware Revision	3.0.11
BACnet Protocol Revision	12

Product Description

BACnet MS/TP and Modbus RTU interface for remote monitoring and control of Mitsubishi Electric M-, S- and P-series split air conditioning systems.

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)
- BACnet Smart Sensor (B-SS)
- BACnet Smart Actuator (B-SA)

BACnet Interoperability Building Blocks Supported (Annex K)

DS-RP-B (Read Property Execute)
DS-WP-B (Write Property Execute)
DM-DDB-B (Dynamic Device Binding)
DM-DOB-B (Dynamic Object Binding)
DM-DCC-B (Device Communication Control)

Segmentation Capability

- Able to transmit segmented messages
- Able to receive segmented messages

Standard Object Types and Properties Supported

Property	Object Type						
	Device	Analogue Value	Binary Input	Binary Output	Multi State Input	Multi State Output	Analogue Input
Object Identifier	R	R	R	R	R	R	R
Object Name	R/W	R	R	R	R	R	R
Object Type	R	R	R	R	R	R	R
Present Value		R/W	R ¹	R/W	R ¹	R/W	R ¹
Status Flags		R	R	R	R	R	R
Event State		R	R	R	R	R	R
Out Of Service		R	R	R	R	R	R
Number Of States					R	R	
State Text					R	R	
Units		R					R
Polarity			R	R			
Priority Array		R		R		R	
Relinquish Default		R		R	R	R	
System Status	R						
Vendor Name	R						
Vendor Identifier	R						
Model Name	R						
Firmware Revision	R						
Application Software Version	R						
Location	R						
Description	R						
Protocol Version	R						
Protocol Revision	R						
Protocol Services Supported	R						
Protocol Object Types Supported	R						
Object List	R						
Max APDU Length Accepted	R						
Segmentation Supported	R						
APDU Timeout	R						
Number Of ADPU Retries	R						
Max Master	R						
Max Info Frames	R						
Device Address Binding	R						
Database Revision	R						

R = Read accessible only.

R¹ = Read accessible only but writable when the Out Of Service property is TRUE.

R/W = Read and write accessible.

Data Link Layer Options

- BACnet IP, (Annex J)
- BACnet IP, (Annex J), Foreign Device
- ISO 8802-3, Ethernet (Clause 7)
- ATA 878.1, 2.5 Mb. ARCNET (Clause 8)
- ATA 878.1, EIA-485 ARCNET (Clause 8)
- MS/TP master (Clause 9), baud rate(s): **9600, 19200, 38400, 57600**
- MS/TP slave (Clause 9)
- Point-To-Point, EIA 232 (Clause 10)
- Point-To-Point, modem, (Clause 10)
- LonTalk, (Clause 11)
- BACnet/ZigBee (ANNEX O)
- Other

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
- BACnet/IP Broadcast Management Device (BBMD)
 - Does the BBMD support registrations by Foreign Devices? Yes No
 - Does the BBMD support network address translation? Yes No

Network Security Options

- Non-secure Device - is capable of operating without BACnet Network Security
- Secure Device - is capable of using BACnet Network Security (NS-SD BIBB)
 - Multiple Application-Specific Keys:
 - Supports encryption (NS-ED BIBB)
 - Key Server (NS-KS BIBB)

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