BACnet Protocol Implementation Conformance Statement

Date: <u>2024-12-16</u>
Vendor Name: <u>Domat Control System s.r.o.</u>
Product Name: <u>mark... PLCs with Domat runtime</u>
Product Model Number: <u>markMX.3, mark220, mark320, mark125, ICIO205.2, IMIO110.2, wMX..., wCIO..., w750...</u>
Application Software Version: 2.7.0.3 BACnet Protocol Revision: ISO/FDIS 16484-5:2016(E)

Product Description:
Mark PLCs are freely programmable controllers for use in HVAC automation, building and process control, and data integration.

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)**

List all BACnet Interoperability Building Blocks Supported (Annex K):

None

Segmentation Capability:

☒ Able to transmit segmented messages   Window Size <u>1476</u>
☒ Able to receive segmented messages   Window Size <u>1476</u>

Standard Object Types Supported:

If not stated otherwise,
- Creating or deleting of dynamic objects is not supported
- No additional writable properties (other than the ones required by this standard) are supported
- No proprietary properties are implemented
- No range restrictions on properties exist

Device

Required properties supported:
Object_Identifier
Object_Name
Object_Type
System_Status
Vendor_Name

Vendor_Identifier
Model_Name
Firmware_Revision
Application_Software_Version
Protocol_Version
Protocol_Revision
Protocol_Services_Supported
Protocol_Object_Types_Supported
Object_List
Max_APDU_Length_Accepted
Segmentation_Supported
APDU_Timeout
Number_Of_APDU_Retries
Device_Address_Binding
Database_Revision
Property_List

Optional properties supported:
Description
Local_Time
Local_Date
Max_Segments_Accepted
UTC_Offset
Daylight_Savings_Status

AI - Analog Input

Required properties supported:
Object_Identifier
Object_Name
Object_Type
Present_Value
Status_Flags
Event_State
Out_Of_Service
Units
Property_List

Optional properties supported:
Description
Min_Pres_Value
Max_Pres_Value

AO - Analog Output

Required properties supported:
Object_Identifier
Object_Name
Object_Type
Present_Value
Status_Flags
Event_State
Out_Of_Service
Units
Property_List

Optional properties supported:
Description
Min_Pres_Value
Max_Pres_Value

Not supported properties:
 Priority_Array, Relinquish_Default, Current_Command_Priority

AV - Analog Value

Required properties supported:
Object_Identifier
Object_Name
Object_Type
Present_Value
Status_Flags
Event_State
Out_Of_Service
Units
Property_List

Optional properties supported:
Description
Min_Pres_Value
Max_Pres_Value

Not supported properties:
Priority_Array, Relinquish_Default, Current_Command_Priority

BI - Binary Input

Required properties supported:
Object_Identifier
Object_Name
Object_Type
Present_Value
Status_Flags
Event_State
Out_Of_Service
Polarity
Property_List

Optional properties supported:
Description
Active_Text
Inactive_Text

BO - Binary Output

Required properties supported:
Object_Identifier
Object_Name
Object_Type
Present_Value
Status_Flags
Event_State

Out_Of_Service
Polarity
Property_List

Optional properties supported:
Description
Active_Text
Inactive_Text

Not supported properties:
Priority_Array, Relinquish_Default, Current_Command_Priority

BV - Binary Value

Required properties supported:
Object_Identifier
Object_Name
Object_Type
Present_Value
Status_Flags
Event_State
Out_Of_Service
Property_List

Optional properties supported:
Description
Active_Text
Inactive_Text

Not supported properties:
Priority_Array, Relinquish_Default, Current_Command_Priority

MI - Multistate Input

Required properties supported:
Object_Identifier
Object_Name
Object_Type
Present_Value
Status_Flags
Event_State
Out_Of_Service
Number_Of_States
Property_List

Optional properties supported:
Description
State_Text

MO - Multistate Output

Required properties supported:
Object_Identifier
Object_Name
Object_Type
Present_Value

Status_Flags
Event_State
Out_Of_Service
Number_Of_States
Property_List

Optional properties supported:
Description
State_Text

Not supported properties:
Priority_Array, Relinquish_Default, Current_Command_Priority

MV - Multistate Value

Required properties supported:
Object_Identifier
Object_Name
Object_Type
Present_Value
Status_Flags
Event_State
Out_Of_Service
Number_Of_States
Property_List

Optional properties supported:
Description
State_Text

Not supported properties:
Priority_Array, Relinquish_Default, Current_Command_Priority

Schedule

Required properties supported:
Present_Value
Schedule_Default
Status_Flags
Reliability
Out_Of_Service
Number_Of_States
Property_List

Optional properties supported:
Weekly_Schedule
Description
State_Text
Event_State

Not supported properties:
Object_Identifier, Object_Name, Object_Type, Effective_Period, Priority_For_Writing,
List_Of_Object_Property_References

Real, Boolean, and Integer value types are supported in schedules, depending on the schedule type engineered in the PLC. Weekly_Schedule is supported.

Event Enrollment

Required properties supported:
Object_Identifier
Object_Name
Object_Type
Event_Type
Notify_Type
Event_Parameters
Object_Property_Reference
Event_State
Event_Enable
Acked_Transitions
Notification_Class
Event_Time_Stamps
Event_Detection_Enable
Status_Flags
Reliability
Property_List

Optional properties supported:
Description

Notification Class

Required properties supported:
Object_Identifier
Object_Name
Object_Type
Notification_Class
Priority
Ack_Required
Recipient_list
Property_List

Optional properties supported:
Description
Event_State
Status_Flags

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), 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: _____
☐ 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

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

Other protocols supported are Modbus RTU (server / client), Modbus TCP (server / client), M-Bus, IEC 62056-21, IEC 60870-5-104, SSCP (Domat Control System proprietary protocol), SoftPLC Link (Domat Control System proprietary protocol).

Further information can be found at www.domat.cz, or contact technical support at support@domat.cz.