

DDC4000e (Software 1.12.2)**BACnet™ Protocol Implementation Conformance Statement (PICS)**

| | |
|-------------------------------|--|
| Date: | 2014-12-10 |
| Vendor Name: | Kieback&Peter GmbH & Co. KG |
| Product Name: | DDC4000e |
| Product Model Number: | DDC4200e, DDC4400e, DDC4002e |
| Application Software Version: | 1.12.2 |
| Firmware Revision: | B1.12#3 |
| BACnet Protocol Revision: | 1.12 (BACnet ANSI/ASHRAE 135-2010 Rev. 12) |

Product Description:

The Kieback&Peter DDC4000e is a BACnet Building Controller.

BACnet Standardized Device Profile (Annex L):

- BACnet Advanced Operator Workstation (B-AWS)
- BACnet Operator Workstation (B-OWS)
- 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)

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Änderungen vorbehalten - Contents subject to change - Sous réserve de modifications - Reservado el derecho a modificación - Wijzigingen voorbehouden - Con riserva di modifiche - Innehåll som skall ändras - Změny vyhrazeny - Zmiany zastrzeżone - Возможны изменения - A változtatások jogát fenntartjuk - 保留未经通知而改动的权力

BACnet Interoperability Building Blocks (BIBBs)

Data Sharing BIBBs

| | |
|-----------|--------------------------------------|
| 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-COVP-B | Data Sharing-COVP-B |
| DS-COVU-A | Data Sharing-COV-Unsolicited-A |
| DS-COVU-B | Data Sharing-COV-Unsolicited-B |

Alarm and Event Management BIBBs

| | |
|-----------|---|
| AE-N-A | Alarm and Event-Notification-A |
| AE-N-I-B | Alarm and Event-Notification Internal-B |
| AE-N-E-B | Alarm and Event-Notification External-B |
| AE-ACK-B | Alarm and Event-ACK-B |
| AE-ASUM-B | Alarm and Event-Alarm Summary-B |
| AE-ESUM-B | Alarm and Event-Enrollment Summary-B |
| AE-INFO-B | Alarm and Event-Information-B |
| AE-EL-I-B | Alarm and Event-Event Log-Internal-B |
| AE-EL-E-B | Alarm and Event-Event Log-External-B |

Scheduling BIBBs

| | |
|-----------|-----------------------|
| SCHED-I-B | Scheduling-Internal-B |
| SCHED-E-B | Scheduling-External-B |

Trending BIBBs

| | |
|------------|---|
| T-VMT-I-B | Trending-Viewing and Modifying Trends Internal-B |
| T-VMT-E-B | Trending-Viewing and Modifying Trends External-B |
| T-VMMV-I-B | Trending-Viewing and Modifying Multiple Values-Internal-B |
| T-VMMV-E-B | Trending-Viewing and Modifying Multiple Values-External-B |
| T-AMVR-B | Trending-Automated Multiple Value Retrieval-B |
| T-ATR-B | Trending-Automated Trend Retrieval-B |

Device and Network Management BIBBs

| | |
|----------|--|
| DM-DDB-A | Device Management-Dynamic Device Binding-A |
| DM-DDB-B | Device Management-Dynamic Device Binding-B |
| DM-DOB-B | Device Management-Dynamic Object Binding-B |
| DM-DCC-B | Device Management-DeviceCommunicationControl-B |
| DM-TS-A | Device Management-TimeSynchronization-A |
| DM-TS-B | Device Management-TimeSynchronization-B |
| DM-UTC-A | Device Management-UTCTimeSynchronization-A |
| DM-UTC-B | Device Management-UTCTimeSynchronization-B |
| DM-RD-B | Device Management-ReinitializeDevice-B |

| | |
|----------|--|
| DM-BR-B | Device Management-Backup and Restore-B |
| DM-R-A | Device Management-Restart-A |
| DM-R-B | Device Management-Restart-B |
| DM-LM-A | Device Management-List Manipulation-A |
| DM-LM-B | Device Management-List Manipulation-B |
| DM-OCD-B | Device Management-Object Creation and Deletion-B |
| DM-ATS-A | Device Management-Automatic Time Synchronization-A |
| NM-CE-A | Network Management-Connection Establishment-A |
| NM-CE-B | Network Management-Connection Establishment-B |
| NM-RC-A | Network Management-Router Configuration-A |
| NM-RC-B | Network Management-Router Configuration-B |

Segmentation Capability:

- Segmented requests supported; Window Size: **32**
- Segmented responses supported; Window Size: **32**

Supported Object Types

- Accumulator Object
- Analog Input Object
- Analog Output Object
- Analog Value Object
- Averaging Object
- Binary Input Object
- Binary Output Object
- Binary Value Object
- Calendar Object
- Command Object
- Device Object
- Event Enrollment Object
- Event Log Object
- File Object
- Global Group Object
- Group Object
- Life Safety Point Object
- Life Safety Zone Object
- Loop Object
- Multi-state Input Object
- Multi-state Output Object
- Multi-state Value Object
- Notification Class Object
- Program Object
- Pulse Converter Object
- Schedule Object
- Trend Log Object
- Trend Log Multiple Object
- Load Control Object
- Structured View Object
- Network Security Object
- BitString Value Object
- CharacterString Value Object
- Date Pattern Value Object
- Date Value Object
- DateTime Pattern Value Object
- DateTime Value Object
- Integer Value Object
- Large Analog Value Object
- OctetString Value Object
- Positive Integer Value Object
- Time Pattern Value Object

Time Value Object

Analog Input Object

| Property Identifier | BACnet Standard | | | DDC4000e | | |
|---------------------|-----------------|----------|----------|-----------|----------|----------------|
| | Required | Optional | Writable | Supported | Writable | Notes |
| Object_Identifier | x | | | x | | |
| Object_Name | x | | | x | x | 184 characters |
| Object_Type | x | | | x | | |
| Present_Value | x | | | x | | |
| Description | | x | | x | x | 184 characters |
| Device_Type | | x | | x | | |
| Status_Flags | x | | | x | | |
| Event_State | x | | | x | | |
| Reliability | | x | | x | | |
| Out_Of_Service | x | | | x | x | |
| Update_Interval | | x | | x | | |
| Units | x | | | x | | |
| Min_Pres_Value | | x | | x | | |
| Max_Pres_Value | | x | | x | | |
| Resolution | | x | | x | | |
| COV_Increment | | x | | x | x | |
| Time_Delay | | x | | x | x | [0..3600] |
| Notification_Class | | x | | x | x | |
| High_Limit | | x | | x | x | |
| Low_Limit | | x | | x | x | |
| Deadband | | x | | x | x | |
| Limit_Enable | | x | | x | x | |
| Event_Enable | | x | | x | x | |
| Acked_Transitions | | x | | x | | |
| Notify_Type | | x | | x | x | |
| Event_Time_Stamps | | x | | x | | |
| Profile_Name | | x | | x | | |
| Event_Message_Texts | | x | | | | |

Analog Output Object

| Property Identifier | BACnet Standard | | | DDC4000e | | |
|---------------------|-----------------|----------|----------|-----------|----------|----------------|
| | Required | Optional | Writable | Supported | Writable | Notes |
| Object_Identifier | x | | | x | | |
| Object_Name | x | | | x | x | 184 characters |
| Object_Type | x | | | x | | |
| Present_Value | x | | x | x | x | |
| Description | | x | | x | x | 184 characters |
| Device_Type | | x | | x | | |
| Status_Flags | x | | | x | | |
| Event_State | x | | | x | | |
| Reliability | | x | | x | | |
| Out_Of_Service | x | | | x | x | |
| Units | x | | | x | | |
| Min_Pres_Value | | x | | x | | |
| Max_Pres_Value | | x | | x | | |
| Resolution | | x | | x | | |
| Priority_Array | x | | | x | | |
| Relinquish_Default | x | | | x | | |
| COV_Increment | | x | | x | x | |
| Time_Delay | | x | | x | x | [0..3600] |
| Notification_Class | | x | | x | x | |
| High_Limit | | x | | x | x | |
| Low_Limit | | x | | x | x | |
| Deadband | | x | | x | x | |
| Limit_Enable | | x | | x | x | |
| Event_Enable | | x | | x | x | |
| Acked_Transitions | | x | | x | | |
| Notify_Type | | x | | x | x | |
| Event_Time_Stamps | | x | | x | | |
| Profile_Name | | x | | x | | |
| Event_Message_Texts | | x | | | | |

Analog Value Object

| Property Identifier | BACnet Standard | | | DDC4000e | | |
|---------------------|-----------------|----------|----------|-----------|----------|----------------|
| | Required | Optional | Writable | Supported | Writable | Notes |
| Object_Identifier | x | | | x | | |
| Object_Name | x | | | x | x | 184 characters |
| Object_Type | x | | | x | | |
| Present_Value | x | | | x | x | |
| Description | | x | | x | x | 184 characters |
| Status_Flags | x | | | x | | |
| Event_State | x | | | x | | |
| Reliability | | x | | x | | |
| Out_Of_Service | x | | | x | x | |
| Units | x | | | x | | |
| Priority_Array | | x | | x | | |
| Relinquish_Default | | x | | x | | |
| COV_Increment | | x | | x | x | |
| Time_Delay | | x | | x | x | [0..3600] |
| Notification_Class | | x | | x | x | |
| High_Limit | | x | | x | x | |
| Low_Limit | | x | | x | x | |
| Deadband | | x | | x | x | |
| Limit_Enable | | x | | x | x | |
| Event_Enable | | x | | x | x | |
| Acked_Transitions | | x | | x | | |
| Notify_Type | | x | | x | x | |
| Event_Time_Stamps | | x | | x | | |
| Profile_Name | | x | | x | | |
| Event_Message_Texts | | x | | | | |

Binary Input Object

| Property Identifier | BACnet Standard | | | DDC4000e | | |
|---------------------------|-----------------|----------|----------|-----------|----------|-------------------|
| | Required | Optional | Writable | Supported | Writable | Notes |
| Object_Identifier | x | | | x | | |
| Object_Name | x | | | x | x | 184 characters |
| Object_Type | x | | | x | | |
| Present_Value | x | | | x | | |
| Description | | x | | x | x | 184 characters |
| Device_Type | | x | | x | | |
| Status_Flags | x | | | x | | |
| Event_State | x | | | x | | |
| Reliability | | x | | x | | |
| Out_Of_Service | x | | | x | x | |
| Polarity | x | | | x | x | |
| Inactive_Text | | x | | x | x | [1;64] characters |
| Active_Text | | x | | x | x | [1;64] characters |
| Change_Of_State_Time | | x | | x | | |
| Change_Of_State_Count | | x | | x | x | |
| Time_Of_State_Count_Reset | | x | | x | | |
| Elapsed_Active_Time | | x | | x | x | |
| Time_Of_Active_Time_Reset | | x | | x | | |
| Time_Delay | | x | | x | x | [0..3600] |
| Notification_Class | | x | | x | x | |
| Alarm_Value | | x | | x | x | |
| Event_Enable | | x | | x | x | |
| Acked_Transitions | | x | | x | | |
| Notify_Type | | x | | x | x | |
| Event_Time_Stamps | | x | | x | | |
| Profile_Name | | x | | x | | |
| Event_Message_Texts | | x | | | | |

Binary Output Object

| Property Identifier | BACnet Standard | | | DDC4000e | | |
|---------------------------|-----------------|----------|----------|-----------|----------|-------------------|
| | Required | Optional | Writable | Supported | Writable | Notes |
| Object_Identifier | x | | | x | | |
| Object_Name | x | | | x | x | 184 characters |
| Object_Type | x | | | x | | |
| Present_Value | x | | x | x | x | |
| Description | | x | | x | x | 184 characters |
| Device_Type | | x | | x | | |
| Status_Flags | x | | | x | | |
| Event_State | x | | | x | | |
| Reliability | | x | | x | | |
| Out_Of_Service | x | | | x | x | |
| Polarity | x | | | x | | |
| Inactive_Text | | x | | x | x | [1;64] characters |
| Active_Text | | x | | x | x | [1;64] characters |
| Change_Of_State_Time | | x | | x | | |
| Change_Of_State_Count | | x | | x | x | |
| Time_Of_State_Count_Reset | | x | | x | | |
| Elapsed_Active_Time | | x | | x | x | |
| Time_Of_Active_Time_Reset | | x | | x | | |
| Minimum_Off_Time | | x | | x | x | |
| Minimum_On_Time | | x | | x | x | |
| Priority_Array | x | | | x | | |
| Relinquish_Default | x | | | x | | |
| Time_Delay | | x | | x | x | [0..3600] |
| Notification_Class | | x | | x | x | |
| Feedback_Value | | x | | x | | |
| Event_Enable | | x | | x | x | |
| Acked_Transitions | | x | | x | | |
| Notify_Type | | x | | x | x | |
| Event_Time_Stamps | | x | | x | | |
| Profile_Name | | x | | x | | |
| Event_Message_Texts | | x | | | | |

Binary Value Object

| Property Identifier | BACnet Standard | | | DDC4000e | | |
|---------------------------|-----------------|----------|----------|-----------|----------|-------------------|
| | Required | Optional | Writable | Supported | Writable | Notes |
| Object_Identifier | x | | | x | | |
| Object_Name | x | | | x | x | 184 characters |
| Object_Type | x | | | x | | |
| Present_Value | x | | | x | x | |
| Description | | x | | x | x | 184 characters |
| Status_Flags | x | | | x | | |
| Event_State | x | | | x | | |
| Reliability | | x | | x | | |
| Out_Of_Service | x | | | x | x | |
| Inactive_Text | | x | | x | x | [1;64] characters |
| Active_Text | | x | | x | x | [1;64] characters |
| Change_Of_State_Time | | x | | x | | |
| Change_Of_State_Count | | x | | x | x | |
| Time_Of_State_Count_Reset | | x | | x | | |
| Elapsed_Active_Time | | x | | x | x | |
| Time_Of_Active_Time_Reset | | x | | x | | |
| Minimum_Off_Time | | x | | x | x | |
| Minimum_On_Time | | x | | x | x | |
| Priority_Array | | x | | x | | |
| Relinquish_Default | | x | | x | | |
| Time_Delay | | x | | x | x | [0..3600] |
| Notification_Class | | x | | x | x | |
| Alarm_Value | | x | | x | x | |
| Event_Enable | | x | | x | x | |
| Acked_Transitions | | x | | x | | |
| Notify_Type | | x | | x | x | |
| Event_Time_Stamps | | x | | x | | |
| Profile_Name | | x | | x | | |
| Event_Message_Texts | | x | | | | |

Calendar Object

| Property Identifier | BACnet Standard | | | DDC4000e | | |
|---------------------|-----------------|----------|----------|-----------|----------|----------------|
| | Required | Optional | Writable | Supported | Writable | Notes |
| Object_Identifier | x | | | x | | |
| Object_Name | x | | | x | x | 184 characters |
| Object_Type | x | | | x | | |
| Description | | x | | x | x | 184 characters |
| Present_Value | x | | | x | | |
| Date_List | x | | | x | x | |
| Profile_Name | | x | | x | | |

Command Object

| Property Identifier | BACnet Standard | | | DDC4000e | | |
|-----------------------|-----------------|----------|----------|-----------|----------|----------------|
| | Required | Optional | Writable | Supported | Writable | Notes |
| Object_Identifier | x | | | x | | |
| Object_Name | x | | | x | x | 184 characters |
| Object_Type | x | | | x | | |
| Description | | x | | x | x | 184 characters |
| Present_Value | x | | x | x | x | |
| In_Process | x | | | x | | |
| All_Writes_Successful | x | | | x | | |
| Action | | x | | x | x | [0..37] |
| Action_Text | | x | | x | x | [0..37] |
| Profile_Name | | x | | x | | |

Device Object

| Property Identifier | BACnet Standard | | | DDC4000e | | |
|---------------------------------|-----------------|----------|----------|-----------|----------|----------------|
| | Required | Optional | Writable | Supported | Writable | Notes |
| Object_Identifier | x | | | x | | |
| Object_Name | x | | | x | x | 184 characters |
| Object_Type | x | | | x | | |
| System_Status | x | | | x | | |
| Vendor_Name | x | | | x | | |
| Vendor_Identifier | x | | | x | | |
| Model_Name | x | | | x | | |
| Firmware_Revision | x | | | x | | |
| Application_Software_Version | x | | | x | | |
| Location | | x | | x | x | |
| Description | | x | | x | x | 184 characters |
| Protocol_Version | x | | | x | | |
| Protocol_Revision | x | | | x | | |
| Protocol_Services_Supported | x | | | x | | |
| Protocol_Object_Types_Supported | x | | | x | | |
| Object_List | x | | | x | | |
| Structured_Object_List | | x | | | | |
| Max_APDU_Length_Accepted | x | | | x | | |
| Segmentation_Supported | x | | | x | | |
| Max_Segments_Accepted | | x | | x | | |
| VT_Classes_Supported | | x | | | | |
| Active_VT_Sessions | | x | | | | |
| Local_Time | | x | | x | | |
| Local_Date | | x | | x | | |
| UTC_Offset | | x | | x | | |
| Daylight_Savings_Status | | x | | x | | |
| APDU_Segment_Timeout | | x | | x | | |
| APDU_Timeout | x | | | x | | |
| Number_Of_APDU_Retries | x | | | x | | |
| List_Of_Session_Keys | | x | | | | |
| Time_Synchronization_Recipients | | x | | x | x | |
| Max_Master | | x | | x | x | |
| Max_Info_Frames | | x | | x | x | |
| Device_Address_Binding | x | | | x | | |
| Database_Revision | x | | | x | | |
| Configuration_Files | | x | | x | | |
| Last_Restore_Time | | x | | x | | |
| Backup_Failure_Timeout | | x | | x | x | |
| Backup_Preparation_Time | | x | | x | | |
| Restore_Preparation_Time | | x | | x | | |
| Restore_Completion_Time | | x | | x | | |

PICS

DDC4000e (Software 1.12.2)

| Property Identifier | BACnet Standard | | | DDC4000e | | |
|-------------------------------------|-----------------|----------|----------|-----------|----------|-------|
| | Required | Optional | Writable | Supported | Writable | Notes |
| Backup_And_Restore_State | | X | | X | | |
| Active_COV_Subscriptions | | X | | X | | |
| Slave_Proxy_Enable | | X | | | | |
| Manual_Slave_Address_Binding | | X | | | | |
| Auto_Slave_Discovery | | X | | | | |
| Slave_Address_Binding | | X | | | | |
| Last_Restart_Reason | | X | | X | | |
| Time_Of_Device_Restart | | X | | X | | |
| Restart_Notification_Recipients | | X | | X | X | |
| UTC_Time_Synchronization_Recipients | | X | | X | X | |
| Time_Synchronization_Interval | | X | | X | X | |
| Align_Intervals | | X | | X | X | |
| Interval_Offset | | X | | X | X | |
| Profile_Name | | X | | X | | |

Event Enrollment Object

| Property Identifier | BACnet Standard | | | DDC4000e | | |
|---------------------------|-----------------|----------|----------|-----------|----------|---|
| | Required | Optional | Writable | Supported | Writable | Notes |
| Object_Identifier | x | | | x | | |
| Object_Name | x | | | x | x | 184 characters |
| Object_Type | x | | | x | | |
| Description | | x | | x | x | 184 characters |
| Event_Type | x | | | x | | |
| Notify_Type | x | | | x | x | |
| Event_Parameters | x | | | x | x | |
| Object_Property_Reference | x | | | x | x | only writable for dynamically created objects |
| Event_State | x | | | x | | |
| Event_Enable | x | | | x | x | |
| Acked_Transitions | x | | | x | | |
| Notification_Class | x | | | x | x | |
| Event_Time_Stamps | x | | | x | | |
| Profile_Name | | x | | x | | |
| Event_Message_Texts | | x | | | | |

Event Log Object

| Property Identifier | BACnet Standard | | | DDC4000e | | |
|----------------------------|-----------------|----------|----------|-----------|----------|----------------|
| | Required | Optional | Writable | Supported | Writable | Notes |
| Object_Identifier | x | | | x | | |
| Object_Name | x | | | x | x | 184 characters |
| Object_Type | x | | | x | | |
| Description | | x | | x | x | 184 characters |
| Status_Flags | x | | | x | | |
| Event_State | x | | | x | | |
| Enable | x | | x | x | x | |
| Start_Time | | x | | x | x | |
| Stop_Time | | x | | x | x | |
| Stop_When_Full | x | | | x | x | |
| Buffer_Size | x | | | x | x | |
| Log_Buffer | x | | | x | | |
| Record_Count | x | | x | x | x | |
| Total_Record_Count | x | | | x | | |
| Notification_Threshold | | x | | x | x | |
| Records_Since_Notification | | x | | x | | |
| Last_Notify_Record | | x | | x | | |
| Notification_Class | | x | | x | x | |
| Event_Enable | | x | | x | x | |
| Acked_Transitions | | x | | x | | |
| Notify_Type | | x | | x | x | |
| Event_Time_Stamps | | x | | x | | |
| Profile_Name | | x | | x | | |
| Event_Message_Texts | | x | | | | |

File Object

| Property Identifier | BACnet Standard | | | DDC4000e | | |
|---------------------|-----------------|----------|----------|-----------|----------|----------------|
| | Required | Optional | Writable | Supported | Writable | Notes |
| Object_Identifier | x | | | x | | |
| Object_Name | x | | | x | x | 184 characters |
| Object_Type | x | | | x | | |
| Description | | x | | x | x | 184 characters |
| File_Type | x | | | x | | |
| File_Size | x | | | x | x | |
| Modification_Date | x | | | x | | |
| Archive | x | | x | x | x | |
| Read_Only | x | | | x | | |
| File_Access_Method | x | | | x | | |
| Record_Count | | x | | | | |
| Profile_Name | | x | | x | | |

Loop Object

| Property Identifier | BACnet Standard | | | DDC4000e | | |
|--------------------------------|-----------------|----------|----------|-----------|----------|----------------|
| | Required | Optional | Writable | Supported | Writable | Notes |
| Object_Identifier | x | | | x | | |
| Object_Name | x | | | x | x | 184 characters |
| Object_Type | x | | | x | | |
| Present_Value | x | | | x | | |
| Description | | x | | x | x | 184 characters |
| Status_Flags | x | | | x | | |
| Event_State | x | | | x | | |
| Reliability | | x | | x | | |
| Out_Of_Service | x | | | x | x | |
| Update_Interval | | x | | x | | |
| Output_Units | x | | | x | | |
| Manipulated_Variable_Reference | x | | | x | | |
| Controlled_Variable_Reference | x | | | x | | |
| Controlled_Variable_Value | x | | | x | | |
| Controlled_Variable_Units | x | | | x | | |
| Setpoint_Reference | x | | | x | | |
| Setpoint | x | | | x | | |
| Action | x | | | x | | |
| Proportional_Constant | | x | | x | x | |
| Proportional_Constant_Units | | x | | x | | |
| Integral_Constant | | x | | x | x | |
| Integral_Constant_Units | | x | | x | | |
| Derivative_Constant | | x | | x | x | |
| Derivative_Constant_Units | | x | | x | | |
| Bias | | x | | x | x | |
| Maximum_Output | | x | | x | x | |
| Minimum_Output | | x | | x | x | |
| Priority_For_Writing | x | | | x | | |
| COV_Increment | | x | | x | x | |
| Time_Delay | | x | | x | x | [0..3600] |
| Notification_Class | | x | | x | x | |
| Error_Limit | | x | | x | x | |
| Deadband | | x | | x | x | |
| Event_Enable | | x | | x | x | |
| Acked_Transitions | | x | | x | | |
| Notify_Type | | x | | x | x | |
| Event_Time_Stamps | | x | | x | | |
| Profile_Name | | x | | x | | |
| Event_Message_Texts | | x | | | | |

Multi-state Input Object

| Property Identifier | BACnet Standard | | | DDC4000e | | |
|---------------------|-----------------|----------|----------|-----------|----------|----------------|
| | Required | Optional | Writable | Supported | Writable | Notes |
| Object_Identifier | x | | | x | | |
| Object_Name | x | | | x | x | 184 characters |
| Object_Type | x | | | x | | |
| Present_Value | x | | | x | | |
| Description | | x | | x | x | 184 characters |
| Device_Type | | x | | x | | |
| Status_Flags | x | | | x | | |
| Event_State | x | | | x | | |
| Reliability | | x | | x | | |
| Out_Of_Service | x | | | x | x | |
| Number_Of_States | x | | | x | | |
| State_Text | | x | | x | | 64 characters |
| Time_Delay | | x | | x | x | [0..3600] |
| Notification_Class | | x | | x | x | |
| Alarm_Values | | x | | x | x | |
| Fault_Values | | x | | x | x | |
| Event_Enable | | x | | x | x | |
| Acked_Transitions | | x | | x | | |
| Notify_Type | | x | | x | x | |
| Event_Time_Stamps | | x | | x | | |
| Profile_Name | | x | | x | | |
| Event_Message_Texts | | x | | | | |

Multi-state Output Object

| Property Identifier | BACnet Standard | | | DDC4000e | | |
|---------------------|-----------------|----------|----------|-----------|----------|----------------|
| | Required | Optional | Writable | Supported | Writable | Notes |
| Object_Identifier | x | | | x | | |
| Object_Name | x | | | x | x | 184 characters |
| Object_Type | x | | | x | | |
| Present_Value | x | | x | x | x | |
| Description | | x | | x | x | 184 characters |
| Device_Type | | x | | x | | |
| Status_Flags | x | | | x | | |
| Event_State | x | | | x | | |
| Reliability | | x | | x | | |
| Out_Of_Service | x | | | x | x | |
| Number_Of_States | x | | | x | | |
| State_Text | | x | | x | | 64 characters |
| Priority_Array | x | | | x | | |
| Relinquish_Default | x | | | x | | |
| Time_Delay | | x | | x | x | [0..3600] |
| Notification_Class | | x | | x | x | |
| Feedback_Value | | x | | x | | |
| Event_Enable | | x | | x | x | |
| Acked_Transitions | | x | | x | | |
| Notify_Type | | x | | x | x | |
| Event_Time_Stamps | | x | | x | | |
| Profile_Name | | x | | x | | |
| Event_Message_Texts | | x | | | | |

Multi-state Value Object

| Property Identifier | BACnet Standard | | | DDC4000e | | |
|---------------------|-----------------|----------|----------|-----------|----------|----------------|
| | Required | Optional | Writable | Supported | Writable | Notes |
| Object_Identifier | x | | | x | | |
| Object_Name | x | | | x | x | 184 characters |
| Object_Type | x | | | x | | |
| Present_Value | x | | | x | x | |
| Description | | x | | x | x | 184 characters |
| Status_Flags | x | | | x | | |
| Event_State | x | | | x | | |
| Reliability | | x | | x | | |
| Out_Of_Service | x | | | x | x | |
| Number_Of_States | x | | | x | | |
| State_Text | | x | | x | | 64 characters |
| Priority_Array | | x | | x | | |
| Relinquish_Default | | x | | x | | |
| Time_Delay | | x | | x | x | [0..3600] |
| Notification_Class | | x | | x | x | |
| Alarm_Values | | x | | x | x | |
| Fault_Values | | x | | x | x | |
| Event_Enable | | x | | x | x | |
| Acked_Transitions | | x | | x | | |
| Notify_Type | | x | | x | x | |
| Event_Time_Stamps | | x | | x | | |
| Profile_Name | | x | | x | | |
| Event_Message_Texts | | x | | | | |

Notification Class Object

| Property Identifier | BACnet Standard | | | DDC4000e | | |
|---------------------|-----------------|----------|----------|-----------|----------|----------------|
| | Required | Optional | Writable | Supported | Writable | Notes |
| Object_Identifier | x | | | x | | |
| Object_Name | x | | | x | x | 184 characters |
| Object_Type | x | | | x | | |
| Description | | x | | x | x | 184 characters |
| Notification_Class | x | | | x | | |
| Priority | x | | | x | x | |
| Ack_Required | x | | | x | x | |
| Recipient_List | x | | | x | x | |
| Profile_Name | | x | | x | | |

Pulse Converter Object

| Property Identifier | BACnet Standard | | | DDC4000e | | |
|---------------------|-----------------|----------|----------|-----------|----------|----------------------|
| | Required | Optional | Writable | Supported | Writable | Notes |
| Object_Identifier | x | | | x | | |
| Object_Name | x | | | x | x | 184 characters |
| Object_Type | x | | | x | | |
| Description | | x | | x | x | 184 characters |
| Present_Value | x | | | x | | |
| Input_Reference | | x | | x | x | |
| Status_Flags | x | | | x | | |
| Event_State | x | | | x | | |
| Reliability | x | | | x | | |
| Out_Of_Service | x | | | x | x | |
| Units | x | | | x | | |
| Scale_Factor | x | | x | x | x | |
| Adjust_Value | x | | | x | x | |
| Count | x | | | x | | |
| Update_Time | x | | | x | | |
| Count_Change_Time | x | | | x | | |
| Count_Before_Change | | x | | x | | |
| COV_Increment | | x | | x | x | [0.1..3.40282347E38] |
| COV_Period | | x | | x | x | [0..2147483647] |
| Notification_Class | | x | | x | x | |
| Time_Delay | | x | | x | x | [0..3600] |
| High_Limit | | x | | x | x | |
| Low_Limit | | x | | x | x | |
| Deadband | | x | | x | x | |
| Limit_Enable | | x | | x | x | |
| Event_Enable | | x | | x | x | |
| Acked_Transitions | | x | | x | | |
| Notify_Type | | x | | x | x | |
| Event_Time_Stamps | | x | | x | | |
| Profile_Name | | x | | x | | |
| Event_Message_Texts | | x | | | | |

Schedule Object

| Property Identifier | BACnet Standard | | | DDC4000e | | |
|------------------------------------|-----------------|----------|----------|-----------|----------|---|
| | Required | Optional | Writable | Supported | Writable | Notes |
| Object_Identifier | x | | | x | | |
| Object_Name | x | | | x | x | 184 characters |
| Object_Type | x | | | x | | |
| Present_Value | x | | | x | | Unsigned, BinaryPV, Boolean, Real, NULL |
| Description | | x | | x | x | 184 characters |
| Effective_Period | x | | | x | x | |
| Weekly_Schedule | | x | | x | x | |
| Exception_Schedule | | x | | x | x | |
| Schedule_Default | x | | | x | x | Unsigned, BinaryPV, Boolean, Real, NULL |
| List_Of_Object_Property_References | x | | | x | x | |
| Priority_For_Writing | x | | | x | x | |
| Status_Flags | x | | | x | | |
| Reliability | x | | | x | | |
| Out_Of_Service | x | | | x | x | |
| Profile_Name | | x | | x | | |

Trend Log Object

| Property Identifier | BACnet Standard | | | DDC4000e | | |
|-----------------------------|-----------------|----------|----------|-----------|----------|----------------|
| | Required | Optional | Writable | Supported | Writable | Notes |
| Object_Identifier | x | | | x | | |
| Object_Name | x | | | x | x | 184 characters |
| Object_Type | x | | | x | | |
| Description | | x | | x | x | 184 characters |
| Enable | x | | x | x | x | |
| Start_Time | | x | | x | x | |
| Stop_Time | | x | | x | x | |
| Log_DeviceObjectProperty | | x | | x | | |
| Log_Interval | | x | | x | x | |
| COV_Resubscription_Interval | | x | | x | x | [10..86400] |
| Client_COV_Increment | | x | | x | x | |
| Stop_When_Full | x | | | x | x | |
| Buffer_Size | x | | | x | x | |
| Log_Buffer | x | | | x | | |
| Record_Count | x | | x | x | x | |
| Total_Record_Count | x | | | x | | |
| Notification_Threshold | | x | | x | x | |
| Records_Since_Notification | | x | | x | | |
| Last_Notify_Record | | x | | x | | |
| Event_State | x | | | x | | |
| Notification_Class | | x | | x | x | |
| Event_Enable | | x | | x | x | |
| Acked_Transitions | | x | | x | | |
| Notify_Type | | x | | x | x | |
| Event_Time_Stamps | | x | | x | | |
| Profile_Name | | x | | x | | |
| Logging_Type | | x | | x | x | |
| Align_Intervals | | x | | x | x | |
| Interval_Offset | | x | | x | x | |
| Trigger | | x | | x | x | |
| Status_Flags | | x | | x | | |
| Reliability | | x | | x | | |
| Event_Message_Texts | | x | | | | |

Trend Log Multiple Object

| Property Identifier | BACnet Standard | | | DDC4000e | | |
|----------------------------|-----------------|----------|----------|-----------|----------|----------------|
| | Required | Optional | Writable | Supported | Writable | Notes |
| Object_Identifier | x | | | x | | |
| Object_Name | x | | | x | x | 184 characters |
| Object_Type | x | | | x | | |
| Description | | x | | x | x | 184 characters |
| Status_Flags | x | | | x | | |
| Event_State | x | | | x | | |
| Reliability | x | | | x | | |
| Enable | x | | x | x | x | |
| Log_DeviceObjectProperty | x | | | x | x | [0..16] |
| Logging_Type | x | | | x | x | |
| Log_Interval | x | | x | x | x | |
| Align_Intervals | | x | | x | x | |
| Interval_Offset | | x | | x | x | |
| Stop_When_Full | x | | | x | x | |
| Buffer_Size | x | | | x | x | [10..5000] |
| Log_Buffer | x | | | x | | |
| Record_Count | x | | x | x | x | |
| Total_Record_Count | x | | | x | | |
| Notification_Threshold | | x | | x | x | [10..5000] |
| Records_Since_Notification | | x | | x | | |
| Last_Notify_Record | | x | | x | | |
| Notification_Class | | x | | x | x | |
| Event_Enable | | x | | x | x | |
| Acked_Transitions | | x | | x | | |
| Notify_Type | | x | | x | x | |
| Event_Time_Stamps | | x | | x | | |
| Profile_Name | | x | | x | | |
| Start_Time | | x | x | x | x | |
| Stop_Time | | x | x | x | x | |
| Trigger | | x | | x | x | |
| Event_Message_Texts | | x | | | | |

Load Control Object

| Property Identifier | BACnet Standard | | | DDC4000e | | |
|--------------------------|-----------------|----------|----------|-----------|----------|-----------------|
| | Required | Optional | Writable | Supported | Writable | Notes |
| Object_Identifier | x | | | x | | |
| Object_Name | x | | | x | x | 184 characters |
| Object_Type | x | | | x | | |
| Description | | x | | x | x | 184 characters |
| Present_Value | x | | | x | | |
| State_Description | | x | | x | | |
| Status_Flags | x | | | x | | |
| Event_State | x | | | x | | |
| Reliability | | x | | x | | |
| Requested_Shed_Level | | | x | x | x | |
| Start_Time | | | x | x | x | |
| Shed_Duration | | | x | x | x | [0..2147483647] |
| Duty_Window | | | x | x | x | [0..2147483647] |
| Enable | | | x | x | x | |
| Full_Duty_Baseline | | x | | x | | |
| Expected_Shed_Level | x | | | x | | |
| Actual_Shed_Level | x | | | x | | |
| Shed_Levels | | | x | x | x | not resizable |
| Shed_Levels_Descriptions | x | | | x | x | not resizable |
| Notification_Class | | x | | x | x | |
| Time_Delay | | x | | x | x | [0..3600] |
| Event_Enable | | x | | x | x | |
| Acked_Transitions | | x | | x | | |
| Notify_Type | | x | | x | x | |
| Event_Time_Stamps | | x | | x | | |
| Profile_Name | | x | | x | | |
| Event_Message_Texts | | x | | | | |

Data Link Layer Options:

- BACnet IP, (Annex J)
- BACnet IP, (Annex J), Foreign Device
- ISO 8802-3, Ethernet (Clause 7)
- ASTM 878.1, 2.5 Mb. ARCNET (Clause 8)
- ASTM 878.1, RS-485 ARCNET (Clause 8) baud rate(s) _____
- MS/TP master (Clause 9), baud rate(s): **9600, 19200, 38400, 57600, 76800, 115200**
- MS/TP slave (Clause 9), baud rate(s): _____
- Point-To-Point, EIA 232 (Clause 10), baud rate(s): **115200**
- Point-To-Point, modem, (Clause 10), baud rate(s): **115200**
- LonTalk, (Clause 11), medium: _____
- 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**

Networking Options:

- Router, Clause 6 - List all routing configurations: **BACnet/IP to Point-To-Point, BACnet/IP to MS/TP**
- Annex H, BACnet Tunneling Router over IP
- BACnet Broadcast Management Device (BBMD)
- Does the BBMD support registrations by Foreign Devices? **Yes**

Character Sets Supported:

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

- ANSI X3.4
- IBM/Microsoft DBCS
- ISO 8859-1
- ISO 10646 (UCS-2)
- ISO 10646 (UCS-4)
- JIS C 6226
- ISO 10646 (UTF-8)

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

