

DDC4200 (Firmware 1.0.20)**BACnet™ Protocol Implementation Conformance Statement (PICS)**

Date: 2011-05-17
 Vendor Name: Kieback&Peter GmbH & Co. KG
 Product Name: DDC4000
 Product Model Number: DDC4200
 Application Software Version: 1.9.3
 Firmware Revision: 1.0.20
 BACnet Protocol Revision: 1.10 (BACnet ANSI/ASHRAE 135-2008 Rev. 10)

Product Description:

The Kieback&Peter DDC4200 is a BACnet Building Controller.

BACnet Standardized Device Profile (Annex L):

- ☐ BACnet Operator Workstation (B-OWS)
- ☒ 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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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-I-B	Alarm and Event-Notification Internal-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

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-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-B	Device Management-TimeSynchronization-B
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-B	Device Management-List Manipulation-B
DM-OCD-B	Device Management-Object Creation and Deletion-B
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

Analog Input Object

Property Identifier	BACnet Standard			DDC4200		
	Required	Optional	Writable	Supported	Writable	Notes
Object_Identifier	x			x		
Object_Name	x			x	x	
Object_Type	x			x		
Present_Value	x			x		
Description		x		x		
Device_Type		x		x		
Status_Flags	x			x		
Event_State	x			x		
Reliability		x		x		
Out_Of_Service	x			x	x	
Update_Interval		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		

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Analog Output Object

Property Identifier	BACnet Standard			DDC4200		
	Required	Optional	Writable	Supported	Writable	Notes
Object_Identifier	x			x		
Object_Name	x			x	x	
Object_Type	x			x		
Present_Value	x		x	x	x	
Description		x		x		
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		

Analog Value Object

Property Identifier	BACnet Standard			DDC4200		
	Required	Optional	Writable	Supported	Writable	Notes
Object_Identifier	x			x		
Object_Name	x			x	x	
Object_Type	x			x		
Present_Value	x			x	x	
Description		x		x		
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	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		

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Binary Input Object

Property Identifier	BACnet Standard			DDC4200		
	Required	Optional	Writable	Supported	Writable	Notes
Object_Identifier	x			x		
Object_Name	x			x	x	
Object_Type	x			x		
Present_Value	x			x		
Description		x		x		
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	
Active_Text		x		x	x	
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		

Binary Output Object

Property Identifier	BACnet Standard			DDC4200		
	Required	Optional	Writable	Supported	Writable	Notes
Object_Identifier	x			x		
Object_Name	x			x	x	
Object_Type	x			x		
Present_Value	x		x	x	x	
Description		x		x		
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	
Active_Text		x		x	x	
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		

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Binary Value Object

Property Identifier	BACnet Standard			DDC4200		
	Required	Optional	Writable	Supported	Writable	Notes
Object_Identifier	x			x		
Object_Name	x			x	x	
Object_Type	x			x		
Present_Value	x			x	x	
Description		x		x		
Status_Flags	x			x		
Event_State	x			x		
Reliability		x		x		
Out_Of_Service	x			x	x	
Inactive_Text		x		x	x	
Active_Text		x		x	x	
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	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		

Calendar Object

Property Identifier	BACnet Standard			DDC4200		
	Required	Optional	Writable	Supported	Writable	Notes
Object_Identifier	x			x		
Object_Name	x			x	x	
Object_Type	x			x		
Description		x		x		
Present_Value	x			x		
Date_List	x			x	x	
Profile_Name		x		x		

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Device Object

Property Identifier	BACnet Standard			DDC4200		
	Required	Optional	Writable	Supported	Writable	Notes
Object_Identifier	x			x		
Object_Name	x			x	x	
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		
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				
Max_Master		x				
Max_Info_Frames		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		
Backup_And_Restore_State		x		x		
Active_COV_Subscriptions		x		x		

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Property Identifier	BACnet Standard			DDC4200		
	Required	Optional	Writable	Supported	Writable	Notes
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				
Time_Synchronization_Interval		x				
Align_Intervals		x				
Interval_Offset		x				
Profile_Name		x		x		

DDC4200**PICS****File Object**

Property Identifier	BACnet Standard			DDC4200		
	Required	Optional	Writable	Supported	Writable	Notes
Object_Identifier	x			x		
Object_Name	x			x	x	
Object_Type	x			x		
Description		x		x		
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			DDC4200		
	Required	Optional	Writable	Supported	Writable	Notes
Object_Identifier	x			x		
Object_Name	x			x	x	
Object_Type	x			x		
Present_Value	x			x		
Description		x		x		
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		
Maximum_Output		x		x		
Minimum_Output		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		

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Multi-state Input Object

Property Identifier	BACnet Standard			DDC4200		
	Required	Optional	Writable	Supported	Writable	Notes
Object_Identifier	x			x		
Object_Name	x			x	x	
Object_Type	x			x		
Present_Value	x			x		
Description		x		x		
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		
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		

Multi-state Output Object

Property Identifier	BACnet Standard			DDC4200		
	Required	Optional	Writable	Supported	Writable	Notes
Object_Identifier	x			x		
Object_Name	x			x	x	
Object_Type	x			x		
Present_Value	x		x	x	x	
Description		x		x		
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		
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		

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Multi-state Value Object

Property Identifier	BACnet Standard			DDC4200		
	Required	Optional	Writable	Supported	Writable	Notes
Object_Identifier	x			x		
Object_Name	x			x	x	
Object_Type	x			x		
Present_Value	x			x	x	
Description		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		
Priority_Array		x		x		
Relinquish_Default		x		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		

Notification Class Object

Property Identifier	BACnet Standard			DDC4200		
	Required	Optional	Writable	Supported	Writable	Notes
Object_Identifier	x			x		
Object_Name	x			x	x	
Object_Type	x			x		
Description		x		x		
Notification_Class	x			x		
Priority	x			x	x	
Ack_Required	x			x	x	
Recipient_List	x			x	x	
Profile_Name		x		x		

DDC4200**PICS****Schedule Object**

Property Identifier	BACnet Standard			DDC4200		
	Required	Optional	Writable	Supported	Writable	Notes
Object_Identifier	x			x		
Object_Name	x			x	x	
Object_Type	x			x		
Present_Value	x			x		Unsigned, BinaryPV, Boolean, Real, NULL
Description		x		x		
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			DDC4200		
	Required	Optional	Writable	Supported	Writable	Notes
Object_Identifier	x			x		
Object_Name	x			x	x	
Object_Type	x			x		
Description		x		x		
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	
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		

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): _____
- ☐ 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**
- ☐ 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: