

## BACnet Protocol Implementation Conformance Statement

Date: August 01, 2009  
 Vendor Name: DEOS control systems GmbH (Vendor ID: 142)  
 Product Name: COSMOS OPEN Native BACnet Controller  
 Product Model Number: DS-4000 OPEN, DS-800 OPEN,  
 Applications Software Version: n.a.  
 Firmware Revision: 1.042  
 BACnet Protocol Revision: 1.4

### Product Description:

COSMOS OPEN Native BACnet Controller are freely programmable building automation 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)

### Data Sharing

Data Sharing-ReadProperty-A	DS-RP-A
Data Sharing-ReadProperty-B	DS-RP-B
Data Sharing-ReadPropertyMultiple-A	DS-RPM-A
Data Sharing-ReadPropertyMultiple-B	DS-RPM-B
Data Sharing-WriteProperty-A	DS-WP-A
Data Sharing-WriteProperty-B	DS-WP-B
Data Sharing-WritePropertyMultiple-B	DS-WPM-B
Data Sharing-COV-B	DS-COV-B
Data Sharing-COV-Unsolicited-A	DS-COVU-A
Data Sharing-COV-Unsolicited-B	DS-COVU-B

### Alarm / Event

Alarm and Event-Notification Internal-B	AE-N-I-B
Alarm and Event-ACK-B	AE-ACK-B
Alarm and Event-Information-B	AE-INFO-B
Alarm and Event-Alarm Summary-B	AE-ASUM-B
Alarm and Event EnrollmentSummary-B	AE-ESUM-B

### Scheduling

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

### Trending

Trending-Viewing and Modifying Trends Internal-B	T-VMT-I-B
Trending-Viewing and Modifying Trends External-B	T-VMT-E-B
Trending-Automated Trend Retrieval-B	T-ATR-B

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### Device Management

Device Management-Dynamic Device Binding-A	DM-DDB-A
Device Management-Dynamic Device Binding-B	DM-DDB-B
Device Management-Dynamic Object Binding-B	DM-DOB-B
Device Management-DeviceCommunicationControl-B	DM-DCC-B
Device Management-TimeSynchronization-B	DM-TS-B
Device Management-UTCTimeSynchronization-B	DM-UTC-B
Device Management-ReinitializeDevice-B	DM-RD-B
Device Management-Backup and Restore-B	DM-BR-B
Device Management-List Manipulation-B	DM-LM-B
Device Management-Object Creation and Deletion-B	DM-OCD-B

### Network Management

Network Management-Connection Establishment-A	NM-CE-A
Network Management-Connection Establishment-B	NM-CE-B
Network Management-Router Configuration-A	NM-RC-A
Network Management-Router Configuration-B	NM-RC-B

### Segmentation Capability:

<input checked="" type="checkbox"/> Segmented requests	supported Window Size:	5
<input checked="" type="checkbox"/> Segmented responses	supported Window Size:	5

### Standard Object Types Supported:

The following object types are supported and present in the device. Each standard Object Type is supported with following data:

Object-Type	Dynamically Creatable Deleteable	Optional Properties Supported	Writable Properties
Analog Input	<input type="checkbox"/>	Description Device_Type Reliability Update_Interval Min_Pres_Value Max_Pres_Value Resolution COV_Increment Time_Delay Notification_Class High_Limit Low_Limit Deadband Limit_Enable Event_Enable Acked_Transitions Notify_Type Event_Time_Stamps	OutOfService COV_Increment Time_Delay High_Limit Low_Limit Deadband Limit_Enable Event_Enable Notification_Class Notify_Type
Analog Output	<input type="checkbox"/>	Description Device_Type Reliability Min_Pres_Value Max_Pres_Value Resolution COV_Increment Time_Delay Notification_Class High_Limit Low_Limit Deadband Limit_Enable Event_Enable Acked_Transitions Notify_Type Event_Time_Stamps	OutOfService Present_Value COV_Increment Time_Delay Notification_Class High_Limit Low_Limit Deadband Limit_Enable Event_Enable Notify_Type
Analog Value	<input type="checkbox"/>	Description Reliability Priority_Array Relinquish_Default COV_Increment Time_Delay Notification_Class High_Limit Low_Limit Deadband Limit_Enable Event_Enable Acked_Transitions Notify_Type Event_Time_Stamps	OutOfService Present_Value COV_Increment Time_Delay Notification_Class High_Limit Low_Limit Deadband Limit_Enable Event_Enable Notify_Type

Object_Type	Dynamically Creatable Deleteable	Optional Properties Supported	Writable Properties
Binary Input	<input type="checkbox"/>	Description Device_Type Reliability Inactive_Text Active_Text ChangeOfStateTime ChangeOfStateCount TimeOfStateCountReset ElapsedActiveTime TimeOfActiveTimeReset Time_Delay Notification_Class Alarm_Value Event_Enable Acked_Transitions Notify_Type Event_Time_Stamps	OutOfService ChangeOfStateCount ElapsedActiveTime Time_Delay Notification_Class Alarm_Value Event_Enable Notify_Type
Binary Output	<input type="checkbox"/>	Description Device_Type Reliability Inactive_Text Active_Text ChangeOfStateTime ChangeOfStateCount TimeOfStateCountReset ElapsedActiveTime TimeOfActiveTimeReset Time_Delay Notification_Class Feedback_Value Event_Enable Acked_Transitions Notify_Type Event_Time_Stamps	Present_Value OutOfService ChangeOfStateCount ElapsedActiveTime Time_Delay Notification_Class Feedback_Value Event_Enable Notify_Type
Binary Value	<input type="checkbox"/>	Description Reliability Inactive_Text Active_Text ChangeOfStateTime ChangeOfStateCount TimeOfStateCountReset ElapsedActiveTime TimeOfActiveTimeReset Priority_Array Relinquish_Default Time_Delay Notification_Class Alarm_Value Event_Enable Acked_Transitions Notify_Type Event_Time_Stamps	Present_Value OutOfService ChangeOfStateCount ElapsedActiveTime Time_Delay Notification_Class Alarm_Value Event_Enable Notify_Type

Object_Type	Dynamically Creatable Deleteable	Optional Properties Supported	Writable Properties
Calendar	<input checked="" type="checkbox"/>	Description	Date_List
Device	<input type="checkbox"/>	Location Description Max_Segments_Accepted Local_Time Local_Date UTC_Offset Daylight_Saving_Status APDU_Segment_Timeout Configuration_Files Last_Restore_Time Backup_Failure_Timeout Active_COV_Subscription	Max_Master Max_Info_Frames Backup_Failure_Timeout
File	<input type="checkbox"/>	Description	Archive

Object_Type	Dynamically Creatable Deleteable	Optional Properties Supported	Writable Properties
Multistate Input	<input type="checkbox"/>	Description Device_Type Reliability State_Text Time_Delay Notification_Class Alarm_Values Fault_Values Event_Enable Acked_Transitions Notify_Type Event_Time_Stamps	OutOfService Time_Delay Notification_Class Alarm_Values Fault_Values Event_Enable Notify_Type
Multistate Output	<input type="checkbox"/>	Description Device_Type Reliability State_Text Time_Delay Notification_Class Feedback_Value Event_Enable Acked_Transitions Notify_Type Event_Time_Stamps	Present_Value OutOfService Time_Delay Notification_Class Feedback_Value Event_Enable Notify_Type
Multistate Value	<input type="checkbox"/>	Description Reliability State_Text Priority_Array Relinquish_Default Time_Delay Notification_Class Alarm_Values Fault_Values Event_Enable Acked_Transitions Notify_Type Event_Time_Stamps	Present_Value OutOfService Time_Delay Notification_Class Alarm_Values Fault_Values Event_Enable Notify_Type

Object_Type	Dynamically Creatable Deleteable	Optional Properties Supported	Writable Properties
Notification Class	<input checked="" type="checkbox"/>	Description	Priority Ack_Required Recipient_List
Schedule	<input checked="" type="checkbox"/>	Description Weekly_Schedule Exception_Schedule	OutOfService Schedule_Default Effective_Period List_of_Object_Property_Reference Priority_For_Writing Weekly_Schedule Exception_Schedule
Trendlog	<input checked="" type="checkbox"/>	Description Start_Time Stop_Time Log_DeviceObjectList Log_Intervall Notification_Threshold Records_Since_Notification Last_Notify_Record Notification_Class Event_Enable Acked_Transitions Notify_Type Event_Time_Stamps	Log_Enable Start_Time Stop_Time Log_DeviceObjectList Log_Intervall RecordCount Notifivation_Threshold Event_Enable Notify_Type

**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): 9600,19200,38400,57600,115200
- MS/TP slave (Clause 9), baud rate(s): 9600,19200,38400,57600,115200
- Point-To-Point, EIA 232 (Clause 10), baud rate(s): 9600,19200,38400,57600,115200
- Point-To-Point, modem, (Clause 10), baud rate(s): 9600,19200,38400,57600,115200
- 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     No

**Networking Options:**

- Router (Clause 6) between BACnet/IP network, MS/TP networks and PTP networks
- Annex H, BACnet Tunneling Router over IP
- BACnet/IP Broadcast Management Device (BBMD)  
Does the BBMD support registrations by Foreign Devices?       Yes     No

**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

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