

BACnet Protocol Implementation Conformance Statement (PICS) Encelium BACnet

Date: August 4, 2021

Vendor Name: Digital Lumens Inc.

Product Name: Encelium BACnet

Product Model Number: SWBACNET

Application Software Version: 5.0

Firmware Revision: 5.0

BACnet Protocol Revision: 12



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Product Description:

The Encelium BACnet® Interface enables the integration with any BACnet compatible building automation system. The BACnet interface resides in the Encelium SSU operates autonomously providing access to lighting and sensor statuses as well as control via BACnet. The connection between the two systems is established via BACnet/IP.

Key Features & Benefits:

- Built-in capability that requires no additional hardware for integration
- Enables BACnet switching and dimming control
- Reports occupancy sensor status
- Reports daylight readings obtained by photosensors
- Allows a load shedding demand response to be triggered via BACnet
- Works with:
 - Encelium X
 - Encelium Extend

BACnet Standardized Device Profiles Supported (Annex L):

BACnet Application Specific Controller (B-ASC)

BACnet Interoperability Building Blocks Supported (Annex K):

Data Sharing	ReadProperty-B (DS-RP-B)
Data Sharing	ReadPropertyMultiple-B (DS-RPM-B)
Data Sharing	WriteProperty-B (DS-WP-B)
Data Sharing	WritePropertyMultiple-B (DS-WPM-B)
Data Sharing	COV-B (DS-COV-B)
Device Management	DynamicDeviceBinding-B (DM-DDB-B)
Device Management	DynamicDeviceBinding-B (DM-DOB-B)
Device Management	DeviceCommunicationControl-B (DM-DCC-B)
Device Management	Time Synchronization-B (DM-TS-B)

Segmentation Capability:

- Able to transmit segmented messages **Window Size: 16**
- Able to receive segmented messages **Window Size: 16**

Standard Object Types Supported:

Device

1. Dynamically creatable? **No**
2. Dynamically deletable? **No**
3. Optional Properties: Description, Max_Segments_Accepted, APDU_Segment_Timeout, Active_COV_Subscriptions.
4. Properties writeable not required by standard: **None**
5. Proprietary properties: **None**
6. Property range restrictions: **None**

Analog Value

1. Dynamically creatable? **No**
2. Dynamically deletable? **No**
3. Optional Properties: COV_Increment
4. Properties writeable not required by standard: **None**
5. Proprietary properties: **None**
6. Property range restrictions: **None**

Analog Output

1. Dynamically creatable? **No**
2. Dynamically deletable? **No**
3. Optional Properties: Priority Array, Relinquish_Default, COV_Increment
4. Properties writeable not required by standard: **None**
5. Proprietary properties: **None**
6. Property range restrictions: **None**

Analog Input

1. Dynamically creatable? **No**
2. Dynamically deletable? **No**
3. Optional Properties: COV_Increment
4. Properties writeable not required by standard: **None**
5. Proprietary properties: **None**
6. Property range restrictions: **None**

Binary Value

1. Dynamically creatable? **No**
2. Dynamically deletable? **No**
3. Optional Properties: **None**
4. Properties writeable not required by standard: **None**
5. Proprietary properties: **None**
6. Property range restrictions: **None**

Multi-state Value

1. Dynamically creatable? **No**
2. Dynamically deletable? **No**
3. Optional Properties: State_Text
4. Properties writeable not required by standard: **None**
5. Proprietary properties: **None**
6. Property range restrictions: **None**

BACnet Data Link Layer Options:

BACnet IP, (ANNEX J) Encelium BACnet is able to register as a foreign device.

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:

N/A

Character Sets Supported:

ISO 10646 (UTF-8)

Gateway Options:

N/A