# Critical Environment Technologies™

#### **Critical Environment Technologies Canada Inc.**

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Listing on BACnet International website

# **BACnet Protocol Implementation Conformance Statement**

**Date:** June 2016

Vendor Name: Critical Environment Technologies Canada Inc.

Product Name: CETCI BACnet Module for QCC-B, FCS-B, LPT-P-B and LPT-B

Product Model Numbers: QCC-B, FCS-B, LPT-P-B, LPT-B

**Application Software Version:** 1.12 **Firmware Revision:** 1.00.81 **BACnet Protocol Version/Revision:** 14

#### **Product Description:**

The CETCI BACnet Module is a microprocessor intended to plug into CETCI's QCC or FCS controllers or LPT-P-B or LPT-B gas detectors to facilitate BACnet communications between the device and a building automation system commonly used in HVACr applications.

### **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)

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

BIBB	Service	Initiates	Responds to
DS-RP-B	ReadProperty-B		Χ
DS-WP-B	WriteProperty-B		Χ
DM-DDB-B	Dynamic Object Device Binding-B		Χ
DM-DOB-B	Dynamic Object Binding-B		Χ
DM-DCC-B	DeviceCommunicationControl-B		Χ
DM-RD-B	ReinitializeDevice-B		Χ

#### **Segmentation Capability:**

Segmented requests supported	Window Size	480
Segmented responses supported	Window Size	480

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#### **Standard Object Types Supported:**

An object type is supported if it may be present in the device. For each standard Object Type supported provide the following data:

- 1) Whether objects of this type are dynamically creatable using the CreateObject service
- 2) Whether objects of this type are dynamically deletable using the DeleteObject service
- 3) List of the optional properties supported
- 4) List of all properties that are writable where not otherwise required by this standard
- 5) List of proprietary properties and for each its property identifier, datatype, and meaning
- 6) List of any property range restrictions

Note: none of the object types listed in this section is dynamically creatable or dynamically deletable. Note: the BACnet conformance codes are as follows:

- O Optional (may be required under some conditions)
- R Required, but not required to be writable (may be required to be writable under some conditions)
- W Not only required, but also required to be writable

The following codes are used in this document to describe how the properties are implemented:

R/W - Read/write R/O - Read-only

R/O=value - Implemented as a read-only with the indicated value

#### **Device Object**

Property	BACnet Conf Code	Implementation
Object_Identifier	R	R/W
Object_Name	R	R/W
Object_Type	R	R/O="device"
System_Status	R	R/O="operational"
Vendor_Name	R	R/O
Vendor_Identifier	R	R/O
Model_Name	R	R/O
Firmware_Revision	R	R/O
Application_Software_Version	R	R/O
Location	0	R/W
Description	0	R/W
Protocol_Version	R	R/O=1
Protocol_Revision	R	R/O=14
Protocol_Services_Supported	R	R/O
Protocol_Object_Types_Supported	R	R/O
Object_List	R	R/O
Max_APDU_Length_Accepted	R	R/O=480
Segmentation_Supported	R	R/O="none"
Local_Time	0	R/O
Local_Date	0	R/O
UTC Offset	О	R/W



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Daylight_Savings_Status	0	R/O
APDU_Timeout	R	R/W=7000
Number_Of_APDU_Retries	R	R/W=1
Max_Master	0	R/O=127
Device_Address_Binding	R	R/O=empty list
Data_Base_Revision	R	R/O
Max_Info_Frames	0	R/O=1

**Analog Input** 

Property	BACnet Conf Code	Implementation
Object_Identifier	R	R/O
Object_Name	R	R/O
Object_Type	R	R/O="analog-input"
Present_Value	R	R/O
Status_Flags	R	R/O
Event_State	R	R/O="normal"
Out_Of_Service	R	R/O=FALSE
Units	R	R/O
Property_List	R	R/O

**Analog Output** 

Property	BACnet Conf Code	Implementation
Object_Identifier	R	R/O
Object_Name	R	R/O
Object_Type	R	R/O="analog-output"
Present_Value	W	R/W
Status_Flags	R	R/O="all normal"
Event_State	R	R/O="normal"
Out_Of_Service	R	R/O=FALSE
Units	R	R/O
Priority_Array	R	R/O
Relinquish_Default	R	R/W
Property_List	R	R/O

**Binary Input** 

Property	BACnet Conf Code	Implementation
Object_Identifier	R	R/O
Object_Name	R	R/O
Object_Type	R	R/O="binary-input"
Present_Value	R	R/O
Status_Flags	R	R/O="all normal"
Event_State	R	R/O="normal"
Out_Of_Service	R	R/O=FALSE
Polarity	R	R/O
Property_List	R	R/O



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**Binary Output** 

Property	BACnet Conf Code	Implementation
Object_Identifier	R	R/O
Object_Name	R	R/O
Object_Type	R	R/O="binary-output"
Present_Value	W	R/W
Status_Flags	R	R/O="all normal"
Event_State	R	R/O="normal"
Out_Of_Service	R	R/O=FALSE
Polarity	R	R/O
Priority_Array	R	R/O
Relinquish_Default	R	R/W

Data Link Layer Options:			
	T (Clause 8) T (Clause 8), baud rate(s) baud rate(s): <u>9600, 19200, 38400, 55</u> te(s): 10), baud rate(s):		
Device Address Binding:			
Is static device binding supported? devices.) ☑Yes ☐ No	? (This is currently necessary for two-	way communication with I	MS/TP slaves and certain othe
Networking Options:			
☐ Annex H, BACnet Tunneling Roo ☐ BACnet/IP Broadcast Managem			
Character Sets Supported:			
Indicating support for multiple cha	aracter sets does not imply that they	can all be supported simul	taneously.
☐ ANSI X3.4 ☐ ISO 10646 (UCS-2)	☐ IBM <sup>™</sup> /Microsoft <sup>™</sup> DBCS ☐ ISO 10646 (UCS-4)	☐ ISO 8859-1 ☐ JIS C 6226	☑ ISO 10646 (UTF-8)



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

## **Network Security Options:**

☑ Non-secure Device - is capable of operating without BACnet Network Security