



CETCI BACnet® Module for the FCS-B Flexible Control System Controller QCC-B Quad Channel Controller LPT-B BACnet® Transmitter

2018.03

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Critical Environment Technologies Canada Inc. (CETCI) has been granted the BACnet® Testing Laboratories (BTL) certification for the CETCI BACnet® Module upon passing the BTL requirements for the BACnet® Smart Actuator (B-SA) designation.

This document contains the BACnet® Protocol Implementation Conformance Statement (PICS) information that can also be found on the BACnet® International website at <http://www.bacnetinternational.org>

If you have any questions or required assistance, please do not hesitate to contact our service department for technical support.

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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 FCS Flexible Control System Controller, QCC Quad Channel Controller and the LPT-B BACnet® Transmitter to facilitate BACnet® communications protocol 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)

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

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

Segment Capability:

Segment requests supported

Window Size 480

Segment requests 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:

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

Note: none of the object types listed in this section is dynamically creatable or dynamically deletable.

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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

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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	O	R/W
Description	O	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

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Max_APDU_Length_Accepted	R	R/O=480
Segmentation_Supported	R	R/O="none"
Local_Time	O	R/O
Local_Date	O	R/O
UTC_Offset	O	R/W
Daylight_Savings_Status	O	R/O
APDU_Timeout	R	R/W=7000
Number_Of_APDU_Retries	R	R/W=1
Max_Master	O	R/O=127
Device_Address_Binding	R	R/O=empty list
Data_Base_Revision	R	R/O
Max-Info-Frames	O	R/O=1

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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

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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

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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

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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 Node (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): _____
- Point-To-Point, modem, (Clause 10), baud rate(s): _____
- 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

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Networking Options:

- Router, Clause 6 - List all routing configurations, e.g., ARCNET-Ethernet, Ethernet-MS/TP, etc.
- 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 (UTF-8)
- JIS C 6226
- ISO 10646 (UCS-2)
- ISO 10646 (UCS-4)

Network Security Options:

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

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FCS-B, QCC-B and LPT-B WAN BACnet® Communications Defaults:

- Baud rate = 78,600 (default, configurable)
- Base address = 270 (default, configurable)
- MAC address = 100 (default, configurable)
- Parity = no parity
- Stop bits = 1
- Data bits = 8

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