## **BACnet Protocol Implementation Conformance Statement (PICS)**





T3-8o T3-22i

Date:Aug 20, 2018Vendor Name:TemcoControls.com

Product Name: Bacnet and modbus I/O modules

Product Model Num: T3-80 T3-22i

Application Software Ver: N/A Firmware Revision: 6.8

BACnet Protocol Rev: 12

Product Description:

The T3 general purpose modules add input/output expansion space for building automation systems. Integrators regularly tell us they are winning more projects because of the excellent price point and features of these devices. Works well with Seimens, Reliable, Delta, KMD, Tridium, etc.T3-22i and T3-80 support both Bacnet and Modbus over both RS485 and the ethernet ports. All settings are available as Bacnet objects and Modbus registers.

BACnet Standardized Device Profile (Annex L):
☐ BACnet Operator Workstation (B-OWS)
☐ BACnet Advanced Operator Workstation (B-AWS)
☐ BACnet Operator Display (B-OD)
☐ 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):

**BACnet B-ASC BIBBs Support** 

Required for B-ASC Profile	Function	Designation	Support
Data Sharing - Read Property - B	Read Objects	DS-RP-B	$\overline{\checkmark}$
Data Sharing - Write Property - B	Write Objects	DS-WP-B	<b>V</b>
Device Management - Dynamic Device Binding - B	Whois/lam	DM-DDB-B	<b>V</b>
Device Management - Dynamic Object Binding - B	Whohas/Ihave	DM-DOB-B	<b>V</b>
Device Communication Control - B	Silence a device	DM-DCC-B	$\overline{\checkmark}$
Not Required for B-ASC Profile	Function	Designation	Support
Data Sharing-ReadPropertyMultiple-B	Read Multi	DS-RPM-B	<b>✓</b>
Data Sharing-WritePropertyMultiple-B	Write Multi	DS-WPM-B	*
Data Sharing-COV-B	Change of value	DS-COV-B	×
Data Sharing-COVP-B	COVProperty	DS-COVP-B	*
Device Management-TimeSynchronization-B	Time Sync	DM-TS-B	✓
Device Management-UTCTimeSynchronization-B	UTC Sync	DM-UTC-B	✓
Device Management-ReinitializeDevice-B	Reset	DM-RD-B	✓

## **Segmentation Capability:**

•		• •	
	×	Able to transmit segmented messages	Windo
	×	Able to receive segmented messages	Windo

Windows Size	1
Window Size	1

## Standard Object Types Supported:

The following is a list of the standard object types as defined by ASHRAE. The objects checked are currently supported by this product. See the next section in this document for the supported object type details.

Supported	Bacnet Obejct
×	Accumulator
✓	Analog Input
✓	Analog Output
✓	Analog Value
×	Averaging
×	Binary Input
✓	Binary Output
×	Binary Value
✓	Calendar
×	Command
✓	Device
×	Event Enrollment

Supported	Bacnet Obejct
×	File
×	Group
*	Life Safety Point
*	Life Safety Zone
*	Loop
*	Multistate Input
*	Multistate Output
*	MultiState Value
*	Notification Class
*	Program
*	Pulse Converter
<b>√</b>	Schedule
*	Trend Log

## **Standard Object Type Details**

	Device		Binary Output	Analog Input	Analog Output	Analog Value	Sched	Calendar
Object Identifier	✓		✓	✓	✓	√arue	✓	✓
Object Name	<b>√</b>	8char	✓	✓	✓	✓	<b>√</b>	✓
Object Type	<b>✓</b>		✓	✓	✓	✓	✓	✓
System Status				1				
Vendor Name	<b>√</b>							
Vendor Identifier	<b>→</b>			1				
Model Name	· ·			1				
	✓							
Firmware Revision	✓							
App Software Revision								
Location								
Description	✓	21char	✓	✓	✓	✓		
Protocol Version	✓							
Protocol Revision	✓							
Protocol Object Types								
Supported								
Services Supported								
Object List	✓							
Max APDU Length								
Segmentation Support								
Local Time	✓							
Local Date	✓							
APDU Timeout								
Number APDU Retries								
Max Masters	X							
Max Info Frames								
Device Address Binding								
Database Revision				1				
Present Value			✓	✓	✓	✓	X	X
Status Flags								
Event State				1				
Reliability				1				
Out-of-Service			✓	✓	✓	✓	✓	✓
Number of States								
State text								
Units				✓	✓	✓	1	
Priority Array			✓	X	✓	X	X	X
Relinquish Default	<del> </del>		<b>√</b>	†	✓			<del> </del>
Polarity			X	1				
Active Text				†				
Inactive Text	1			1	1			1

Data Link Layer Options:		
<ul><li>☑ BACnet IP, (Annex J)</li><li>☐ BACnet IP, (Annex J), Forei</li></ul>	an Dovico	
☐ ISO 8802-3, Ethernet (Claus	<del>-</del>	
☐ ATA 878.1, 2.5 Mb. ARCNE☐ ATA 878.1, EIA-485 ARCNE	T (Clause 8) ET (Clause 8), baud rate(s)	
_	aud rate(s): Auto (default)	
■MS/TP slave (Clause 9), ba	• • • • • • • • • • • • • • • • • • • •	
•	ause 10), baud rate(s):	<del></del>
☐ LonTalk, (Clause 11), media	ause 10), baud rate(s):	-
☐ BACnet/ZigBee (ANNEX O		
□Other:		
Device Address Binding:		
Is static device binding support MS/TP slaves and certain other	`	for two-way communication with
where the BACnet product is ins	olatile value that is chosen and catalled. The Device ID is used for addresses, commonly referred to	
Networking Options: ☐ Router, Clause 6 - List all etc.	routing configurations, e.g., AR	CNET-Ethernet, Ethernet-MS/TP
☐ Annex H, BACnet Tunneling	Router over IP	
☐ BACnet/IP Broadcast Mana	• • • • • • • • • • • • • • • • • • • •	
	ort registrations by Foreign Device	
Does the BBMD suppo	ort network address translation?	☐ Yes ☐ No
Network Security Options:		
·	ble of operating without BACnet N	•
☐ Multiple Application-Specific	f using BACnet Network Security Kevs	(IA2-2D RIRR)
☐ Supports encryption (NS-ED	•	
☐ Key Server (NS-KS BIBB)		
Character Sets Supported:		
Indicating support for multiple simultaneously.	character sets does not imply	that they can all be supported
<b>⊠</b> ISO 10646 (UTF-8)	☐ IBM /Microsoft DBCS	☐ ISO 8859-1
☐ ISO 10646 (UCS-2)	☐ ISO 10646 (UCS-4)	☐ JIS X 0208
If this product is a communication equipment/networks(s) that the	on gateway, describe the types of gateway supports: <u>None.</u>	f non-BACnet