

**BACnet Protocol Implementation Conformance Statement
(BACnet Testing Laboratories Version)**

Date: September 10, 2008
Vendor Name: I-Controls, Inc.
Product Name: iDC701 General Purpose Controller
Product Model Number: iDC701
Applications Software Version: 1.0 **Firmware Revision:** 1.0
BACnet Protocol Revision: 3

Product Description:

iDC 701 is general purpose DDC for building control.
It has some Analog/Digital Input ports, and Analog/Digital Output ports.

List all BACnet Interoperability Building Blocks supported (see Annex K in BACnet 2004):

Data Sharing – Read Property-B DS-RP-B
Data Sharing – Read Property Multiple – B DS-RPM-B
Data Sharing – Write Property – B DS-WP-B
Data Sharing – Write Property Multiple-B DS-WPM-B
Device Management – Dynamic Device Binding – B
Device Management – Device Object Binding – B
Device Management – Device Communication Control – B
Device Management – Reinitialize Device – B
Device Management – Dynamic Time Synchronization - B

Which of the following device binding methods does the product support? (check one or more)

- Send Who-Is, receive I-Am (BIBB DM-DDB-A)
- Receive Who-Is, send I-Am (BIBB DM-DDB-B)
- Send Who-Has, receive I-Have (BIBB DM-DOB-A)
- Receive Who-Has, send I-Have (BIBB DM-DOB-B)
- Manual configuration of recipient device's network number and MAC address
- None of the above

Standard Object Types Supported:

On a separate page, please list each standard Object Type supported (i.e. an object of this type may be present in the product). For each standard Object Type supported provide the following data:

- 1) Whether objects of this type are dynamically creatable using BACnet's CreateObject service
- 2) Whether objects of this type are dynamically deletable using BACnet's 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 value range restrictions

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Data Link Layer Options (check all that are supported):

- BACnet IP, (Annex J)
 - Able to register as a 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, 76800
- 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: _____

Networking Options (check all that are supported):

- Router, Clause 6 - List all routing configurations, e.g., ARCNET-Ethernet, Ethernet-MS/TP, etc.:

- Annex H.3, BACnet Tunneling Router over UDP/IP
- BACnet/IP Broadcast Management Device (BBMD)
 - Does the BBMD support registrations by Foreign Devices? Yes No
- MS/TP Slave Proxy

Segmentation Capability (check all that apply): N/A

- Able to transmit segmented messages Window Size _____
- Able to receive segmented messages Window Size _____

Character Sets Supported (check all that apply):

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 (ICS-4) JIS C 6226

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

Include any addition information about the product's BACnet capabilities relevant to interoperability:

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Analog Input

Dynamic Creatable : No
Dynamic Deletable : No

Property Name	Required	Optional	Proprietary	Writable	Range	Property ID	Data Type
Object-identifier	V					75	BACnetObjectIdentifier
Object-name	V			V		77	CharacterString
Object-type	V					79	BACnetObjectType
Present-value	V			V		85	REAL
description		V		V		28	Character String
Status-Flags	V					111	BACnetStatusFlag
Event-State	V					36	BACnetEventState
Reliability		V				103	BACnetReliability
Out-of-service	V			V		81	Boolean
units	V			V		117	BACnetEngineeringUnits
min-pres-value		V		V		69	REAL
Max-pres_value		V		V		65	REAL
Input-type			V	V		1737	Enumerated

Analog Output

Dynamic Creatable : No
Dynamic Deletable : No

Property Name	Required	Optional	Proprietary	Writable	Range	Property ID	Data Type
Object-identifier	V					75	BACnetObjectIdentifier
Object-name	V			V		77	CharacterString
Object-type	V					79	BACnetObjectType
Present-value	V			V		85	REAL
description		V		V		28	Character String
Status-Flags	V					111	BACnetStatusFlags
Event-State	V					36	BACnetEventState
Out-of-service	V			V		81	Boolean
units	V			V		117	BACnetEngineeringUnits
min-pres-value		V		V		69	REAL
Max-pres_value		V		V		65	REAL
Priority-array	V					87	BACnetPriorityArray
Relinquish-default	V			V		104	REAL
Output-Type			V	V		1738	Enumerated

Analog Value

Dynamic Creatable : No
Dynamic Deletable : No

Property Name	Required	Optional	Proprietary	Writable	Range	Property ID	Data Type
Object-identifier	V					75	BACnetObjectIdentifier
Object-name	V			V		77	CharacterString
Object-type	V					79	BACnetObjectType

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Present-value	V			V		85	REAL
description		V		V	50Chars	28	Character String
Status-Flags	V					111	BACnetStatusFlags
Event-State	V					36	BACnetEventState
Out-of-service	V			V		81	Boolean
units	V			V		117	BACnetEngineeringUnits
Priority-array	V					87	BACnetPriorityArray
Relinquish-default	V			V		104	REAL

Binary Input

Dynamic Creatable : No

Dynamic Deletable : No

Property Name	Required	Optional	Proprietary	Writable	Range	Property ID	Data Type
Object-identifier	V					75	BACnetObjectIdentifier
Object-name	V			V		77	CharacterString
Object-type	V					79	BACnetObjectType
Present-value	V			V		85	BACnetBinaryPV
description		V		V	50Chars	28	Character String
Status-flags	V					111	BACnetStatusFlags
Event-state	V					36	BACnetEventState
Reliability		V				103	BACnetReliability
Out-of-service	V			V		81	Boolean
Polarity	V			V		84	BACnetPolarity
Change-of-state-time		V				16	BACnetDateTime
Change-of-state-count		V		V		15	unsigned
Time-of-state-count-reset		V				115	BACnetDateTime
Elapsed-active-time		V		V		33	Unsigned32
Time-of-Active-time-Reset		V				114	BACnetDateTime

Binary Output

Dynamic Creatable : No

Dynamic Deletable : No

Property Name	Required	Optional	Proprietary	Writable	Range	Property ID	Data Type
Object-identifier	V					75	BACnetObjectIdentifier
Object-name	V			V		77	CharacterString
Object-type	V					79	BACnetObjectType
Present-value	V			V		85	BACnetBinaryPV
description		V		V	50Chars	28	Character String
Status-Flags	V					111	BACnetStatusFlags
Event-state	V					36	BACnetEventState
Out-of-service	V			V		81	Boolean
Polarity	V			V		84	BACnetPolarity
Change-of-state-time		V				16	BACnetDateTime
Change-of-state-count		V		V		15	unsigned
Time-of-state-count-reset		V				115	BACnetDateTime
Elapsed-active-time		V		V		33	Unsigned32
Time-of-active-time-reset		V				114	BACnetDateTime
Minimum-off-time		V		V		66	Unsigned32

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Minimum-on-time		V		V		67	Unsigned32
Priority-array	V					87	BACnetPriorityArray
Relinquish-default	V			V		104	BACnetBinaryPV

Binary Value

Dynamic Creatable : No

Dynamic Deletable : No

Property Name	Required	Optional	Proprietary	Writable	Range	Property ID	Data Type
Object-identifier	V					75	BACnetObjectIdentifier
Object-name	V			V		77	CharacterString
Object-type	V					79	BACnetObjectType
Present-value	V			V		85	BACnetBinaryPV
Description		V		V	50Chars	28	Character String
Status-flags	V					111	BACnetStatusFlags
Event-state	V					36	BACnetEventState
Out-of-service	V			V		81	Boolean
Minimum-off-time		V		V		66	Unsigned32
Minimum-on-time		V		V		67	Unsigned32
Priority-array	V					87	BACnetPriorityArray
Relinquish-default	V			V		104	BACnetBinaryPV

Device

Dynamic Creatable : No

Dynamic Deletable : No

Property Name	Required	Optional	Proprietary	Writable	Range	Property ID	Data Type
Object-identifier	V					75	BACnetObjectIdentifier
Object-name	V			V	50Chars	77	CharacterString
Object-type	V					79	BACnetObjectType
Description		V		V	50Chars	28	CharacterString
System-status	V					112	BACnetDeviceStatus
Vendor-name	V					121	CharacterString
Vendor-identifier	V					120	Unsigned16
Model-name	V					70	CharacterString
Firmware-revision	V					44	CharacterString
Application-software-version	V					12	CharacterString
Protocol-version	V					98	Unsigned
Protocol-revision	V					139	Unsigned
Protocol-services-supported	V					97	BACnetServicesSupported
Protocol-object-types-supported	V					96	BACnetObjectTypesSupported
Object-List	V					76	SEQUENCE OF BACnetObjectIdentifier
Max-apdu-length-accepted	V			V		62	Unsigned
Segmentation-supported	V					107	BACnetSegmentation
Local-time		V				57	Time

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Local-date		V				56	Date
Apdu-segment-timeout		V		V	1000-65535	10	Unsigned
Apdu-timeout	V					11	Unsigned
Number-of-apdu-retries	V					73	unsigned
Max-master		V		V	1-127	64	Unsigned
Max-info-frames		V		V		63	Unsigned
Device-address-binding	V					30	SEQUENCE OF BACnetaddressBinding
Database-revision	V					155	Unsigned

Loop

Dynamic Creatable : No

Dynamic Deletable : No

Property Name	Required	Optional	Proprietary	Writable	Range	Property ID	Data Type
Object-identifier	V					75	BACnetObjectIdentifier
Object-name	V			V		77	CharacterString
Object-type	V					79	BACnetObjectType
Present-value	V					85	REAL
Description		V		V	50Chars	28	CharacterString
Status-flags	V					111	BACnetStatusFlag
Event-State	V					36	BACnetEventState
Out-of-service	V			V		81	Boolean
Output-Units	V			V		82	BACnetEngineeringUnits
Manipulated-variable-reference	V			V		60	BACnetObjectPropertyReference
Controlled-variable-reference	V			V		19	BACnetObjectPropertyReference
Controlled-variable-value	V					21	REAL
Controlled-variable-Units	V			V		20	BACnetEngineeringUnits
Setpoint-reference	V			V		109	BACnetSetpointReference
Setpoint	V					108	REAL
Action	V			V		2	BACnetAction
Proportional-constant		V		V		93	REAL
Proportional-constant-units		V		V		94	BACnetEngineeringUnits
Integral-constant		V		V		49	REAL
Integral-constant-units		V		V		50	BACnetEngineeringUnits
Derivative-constant		V		V		26	REAL
Derivative-constant-units		V		V		27	BACnetEngineeringUnits
Bias		V		V		14	REAL
Maximum-output		V		V		61	REAL
Minimum-output		V		V		68	REAL
Priority-for-writing	V			V		88	Unsigned