

ANNEX A - PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT (NORMATIVE)

(This annex is part of this Standard and is required for its use.)

BACnet Protocol Implementation Conformance Statement

Date: Mar 14, 2018

Vendor Name: ICONTROLS, Inc.

Product Name: Fronnix BACnet Controller

Product Model Number: iVF700

Application Software Version: Bd.1710101730

Firmware Revision: ICDDC pro V1.04

BACnet Protocol Revision: 14

Product Description:

iVF700 is a controller for building air conditions.

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)
- BACnet Router (B-RTR)
- BACnet Gateway (B-GW)
- BACnet Broadcast Management Device (B-BBMD)
- BACnet General (B-GENERAL)

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

Data Sharing	Device & Network Management
DS-RP-B DS-RPM-B DS-WP-B	DM-DDB-B DM-DOB-B DM-DCC-B DM-RD-B

Segmentation Capability:

- Segmented requests supported Window Size _____
- Segmented responses supported Window Size _____

Standard Object Types Supported:

- * Dynamically creatable object: None
- * Dynamically deletable object: None

* List of BACnet Object type supported

Object Type	Object Type
Analog Input	Device
Analog Output	Multi-state Output
Analog Value	Multi-state Value
Binary Input	
Binary Output	
Binary Value	

* Standard Object types description

1) Analog Input

Properties supported	C-Code	Writable properties W = Writable (W) = Writable if Out_Of_Service = TRUE	Property range restrictions
Object_Identifier			
Object_Name		W	
Object_Type			
Present_Value		(W)	
Description	O	W	
Status_Flags			
Event_State			
Out_Of_Service		W	
Update_Interval			
Units		W	
Min_Pres_Value	O	W	
Max_Pres_Value	O	W	
Property_List			

2) Analog Output

Properties supported	C-Code	Writable properties W = Writable (W) = Writable if Out_Of_Service = TRUE	Property range restrictions
Object_Identifier			
Object_Name		W	
Object_Type			
Present_Value		W	
Description	O	W	
Status_Flags			
Event_State			
Out_Of_Service		W	
Units		W	
Min_Pres_Value	O	W	
Max_Pres_Value	O	W	
Priority_Array			
Relinquish_Default		W	
Property_List			

3) Analog Value

Properties supported	C-Code	Writable properties W = Writable (W) = Writable if Out_Of_Service = TRUE	Property range restrictions
Object_Identifier			
Object_Name		W	
Object_Type			
Present_Value		W	
Description	O	W	
Status_Flags			
Event_State			
Out_Of_Service		W	
Units		W	
Property_List			

4) Binary Input

Properties supported	C-Code	Writable properties W = Writable (W) = Writable if Out_Of_Service = TRUE	Property range restrictions
Object_Identifier			
Object_Name		W	
Object_Type			
Present_Value		(W)	
Description	O	W	
Status_Flags			
Event_State			
Out_Of_Service		W	
Polarity		W	
Change_Of_State_Time	O		
Change_Of_State_Count	O	W	
Time_Of_State_Count_Reset	O		
Elapsed_Active_Time	O	W	
Time_Of_Active_Time_Reset	O		
Property_List			

5) Binary Output

Properties supported	C-Code	Writable properties W = Writable (W) = Writable if Out_Of_Service = TRUE	Property range restrictions
Object_Identifier			
Object_Name		W	
Object_Type			
Present_Value		W	
Description	O	W	
Status_Flags			
Event_State			
Out_Of_Service		W	
Polarity		W	
Change_Of_State_Time	O		
Change_Of_State_Count	O	W	
Time_Of_State_Count_Reset	O		
Elapsed_Active_Time	O	W	
Time_Of_Active_Time_Reset	O		
Priority_Array			
Relinquish_Default		W	
Property_List			

6) Binary Value

Properties supported	C-Code	Writable properties W = Writable (W) = Writable if Out_Of_Service = TRUE	Property range restrictions
Object_Identifier			
Object_Name		W	
Object_Type			
Present_Value		W	
Description	O	W	
Status_Flags			
Event_State			
Out_Of_Service		W	
Property_List			

7) Device

Properties supported	C-Code	Writable properties W = Writable (W) = Writable if Out_Of_Service = TRUE	Property range restrictions
Object_Identifier			
Object_Name		W	
Object_Type			
System_Status			
Vendor_Name			
Vendor_Identifier			
Model_Name			
Firmware_Revision			
Application_Software_Version			
Description	O	W	
Protocol_Version			
Protocol_Revision			
Protocol_Services_Supported			
Protocol_Object_Types_Supported			
Object_List			
Max_Apdu_Length_Accepted			
Segmentation_Supported			
Max_Segments_Accepted	O		
Local_Time	O		
Local_Date	O		
Apdu_Timeout		W	100 ~ 10000
Number_Of_Apdu_Retries		W	Max 10
Device_Address_Binding		W	
Database_Revision			
Property_List			

8) Multi-state Output

Properties supported	C-Code	Writable properties W = Writable (W) = Writable if Out_Of_Service = TRUE	Property range restrictions
Object_Identifier			
Object_Name		W	
Object_Type			
Present_Value		W	
Description	O	W	
Device_Type		W	
Status_Flags			
Event_State			
Out_Of_Service		W	
Number_Of_State			
State_Text			
Priority_Array			
Relinquish_Default		W	
Property_List			

9) Multi-state Value

Properties supported	C-Code	Writable properties W = Writable (W) = Writable if Out_Of_Service = TRUE	Property range restrictions
Object_Identifier			
Object_Name		W	
Object_Type			
Present_Value		W	
Description	O	W	
Status_Flags			
Event_State			
Out_Of_Service		W	
Number_Of_State			
State_Text			
Property_List			

Data Link Layer Options:

- BACnet IP, (Annex J)
- BACnet IP, (Annex J), Foreign Device
- BACnet IPv6, (Annex X)
- BACnet IPv6, (Annex X), 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, 57600
- MS/TP zero configuration master (Clause 9), baud rate(s): _____
- 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: _____
- BACnet/ZigBee (ANNEX O)
- 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

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
 - Does the BBMD support network address translation? Yes No
- BACnet/IPv6 Broadcast Management Device (BBMD)
 - Does the BBMD support registrations by Foreign Devices? Yes No

Networking Security Options:

- Non-secure Device - is capable of operating without BACnet Network Security
- Secure Device - is capable of using BACnet Network Security (NS-SD BIBB)
 - Multiple Application-Specific Keys:
 - Supports encryption (NS-ED BIBB)
 - Key Server (NS-KS BIBB)

Character Sets Supported:

Indicating support for multiple character sets does not imply that they can all be supported simultaneously.

- 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 gateway, describe the types of non-BACnet equipment/networks(s) that the gateway supports:

If this product is a communication gateway which presents a network of virtual BACnet devices, a separate PICS shall be provided that describes the functionality of the virtual BACnet devices. That PICS shall describe a superset of the functionality of all types of virtual BACnet devices that can be presented by the gateway.