Delta DSC Programmable Controller

BACnet Protocol Implementation Conformance Statement

Date:	**Jan 18, 2011**
Vendor Name:	**Delta Electronics, Inc.**
Manufacturer:	**Airtek International, Inc.**
Product Name:	**Delta DAC Programmable Controller**
Product Model Number:	**DSC8846B, DSC8864B, DSCU842B, DSCB, DSC4211B, DSCV350B, DSL1150B, DSF1150B, DSC24000B, DSC0080B**
Firmware Revision:	**V1.08**
BACnet Protocol Revision:	**4**

Product Description:
DSC series controllers are standalone BACnet B-ASC class programmable controllers. They are designed for monitor and control building electromechanical device, large AHU, clean room, fume hood, VAV, large-scale end device control. They conform international BACnet MS/TP communication protocol and fully compatible with other BACnet system. They can work in a 76,800 bps BACnet MS/TP network and have a MSnet port for a user interface device. The MSnet port can connect to a LCD control panel for control, monitor, and setting the system. DSC has a 32 bit microprocessor and has some I/O points. Its digital outputs are dry contact relays and analog output can be 4~20mA or 0~10VDC. Only the DSCB in the DSC series controllers has an EIM port and this EIM port can connect to 4 EIM modules. Total number of I/O points can be selected by using different combination of EIMs.

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):

DS-RP-B	DS-WP-B	DM-DDB-B	DM-DCC-B	DM-UTC-B
DS-RPM-B	DS-WPM-B	DM-DOB-B	DM-TS-B	DM-RD-B

Segmentation Capability:

☐ Segmented requests supported
☐ Segmented responses supported

Standard Object Types Supported:

Analog Value	Dynamically Creatable :No	Dynamically Deletable :No
Optional Properties Supported:	Description Device-type Min_Pres_Value Max_Pres_Value	
Writable Properties:	Description Present_Value Units Device-type Out_Of_Service Min_Pres_Value Max_Pres_Value	Limit: 128 characters writable when out-of-service Only 'A'/'V'/'P'/'T'/'5'/'3'
Analog Output	Dynamically Creatable :No	Dynamically Deletable :No
Optional Properties Supported:	Description Device-type	
Writable Properties:	Description Limit: Present_Value Relinquish_Default Units Out_Of_Service Device-type	128 characters Range: REAL 0.0~100.0 Range: REAL 0.0~100.0 Only 'A'/'V'
Analog Value	Dynamically Creatable :No	Dynamically Deletable :No
Optional Properties Supported:	Description	
Writable Properties:	Description Limit: Present_Value Units	128 characters
Binary Input	Dynamically Creatable :No	Dynamically Deletable :No
Optional Properties Supported:	Description	
Writable Properties:	Description Present_Value Out_Of_Service Polarity	Limit: 128 characters writable when out-of-service
Binary Output	Dynamically Creatable :No	Dynamically Deletable :No
Optional Properties Supported:	Description	
Writable Properties:	Description Present_Value Relinquish_Default Out_Of_Service Polarity	Limit: 128 characters

Binary Value	Dynamically Creatable :No	Dynamically Deletable :No
Optional Properties Supported:	Description	
Writable Properties:	Description	Limit: 128 characters
	Present_Value	
	Relinquish_Default	
Device	Dynamically Creatable :No	Dynamically Deletable :No
Optional Properties Supported:	Description	
	Location	
	Local_Time	
	Local_Date	
	UTC_Offset	
	Daylight_Savings_Status	
	Max_Master	
	Max_Info_Frames	
	Last_Restore_Time	
Writable Properties:	Description	Limit: 128 characters
	Location	Limit: 128 characters
	Local_Time	
	Local_Date	
	UTC_Offset	Range :-780~780
	Daylight_Savings_Status	
	Max_Master	Range :1~127
	Max_Info_Frames	Range :1~200
File	Dynamically Creatable :No	Dynamically Deletable : No
Optional Properties Supported:	Description	
Writable Properties:	Archive	
	File_Size(File 1024)	Only Program 1024 program-stat != running
Program	Dynamically Creatable :No	Dynamically Deletable : No
Optional Properties Supported:	Description	
	Reson_for_Halt	
	Description_of_Halt	
Writable Properties:	Program_Change	

Data Link Layer Options:

☐ BACnet IP, (Annex J)
☐ BACnet IP, (Annex J), Foreign Device
☐ISO 8802-3, Ethernet (Clause 7)
☐ ATA 878.1, 2.5 Mb. ARCNET (Clause 8)
☐ ATA 878.1, RS-485 ARCNET (Clause 8), baud rate(s)
◙ MS/TP master (Clause 9), baud rate(s): 76.8k, 38.4k, 19.2k, 9600 bps
☐ 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)

Character Sets Supported:

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

◙ ISO 10646 (UTF-8)	☐ IBMÔ/MicrosoftÔ DBCS	☐ISO 8859-1
☐ ISO 10646 (UCS-2)	☐ISO 10646 (UCS-4)	☐JIS C 6226

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

The MSnet port is programmable to be a master or a slave MODBUS RTU port to work with other MODBUS facility.