

#### BACNET PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT

**Date:** May 17, 2011

**Vendor Name:** Delta Controls Inc.

**Product Name:** enteliTOUCH

**Product Model Number:** eTCH-7ET

**Product Version:** 3.40

**BACnet Protocol Revision:** 6

#### **Product Description:**

Delta Controls enteliTOUCH eTCH-7ET is an interactive touch screen with a 7-inch, widescreen format LCD display that sits within typical system architectures and provides a way for operators to monitor and manage the building Automation system without using Delta Controls Operator Workstation (OWS).

It allows operators to monitor and manage building Automation systems by using custom real-time graphics that are created using Delta Controls Illustrator. The enteliTOUCH can be wall or panel mounted in mechanical rooms or public spaces, making it easy to view or edit authorized system objects.

The enteliTOUCH's full color, wide-screen format LCD display communicates via links to the database graphics, which allows for monitoring and setting schedules for air handlers, boilers, chillers, and other mechanical equipment.

The Delta Controls enteliTOUCH uses BACnet over Ethernet, BACnet/IP, or BACnet MS/TP (with optional add-on module) to communicate with controllers on a local area network, making it simple to do things such as change occupancy schedules, adjust temperature setpoints, and view floor layouts.

### **BACnet Standardized Device Profile (Annex L):**

☐ BACnet Advanced Operator Workstation (B-AWS)
☐ BACnet Life-safety Workstation (B-LSWS)
☑ 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)

### **BACNET PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT**

### **BACnet Interoperability Building Blocks Supported (Annex K):**

BACnet Interoperability Building Block	Supported
Data Sharing	•
Data Sharing-ReadProperty-A (DS-RP-A)	$\overline{\mathbf{V}}$
Data Sharing-ReadProperty-B (DS-RP-B)	$\overline{\mathbf{V}}$
Data Sharing-ReadPropertyMultiple-A (DS-RPM-A)	$\overline{\mathbf{V}}$
Data Sharing-ReadPropertyMultiple-B (DS-RPM-B)	$   \overline{\checkmark} $
Data Sharing-ReadPropertyConditional-A (DS-RPC-A)	
Data Sharing- ReadPropertyConditional-B (DS-RPC-B)	
Data Sharing-WriteProperty-A (DS-WP-A)	
Data Sharing-WriteProperty-B (DS-WP-B)	
Data Sharing-WritePropertyMultiple-A (DS-WPM-A)	
Data Sharing-WritePropertyMultiple-B (DS-WPM-B)	
Data Sharing-COV-A (DS-COV-A)	
Data Sharing-COV-B (DS-COV-B)	$   \overline{\checkmark} $
Data Sharing-COVP-A (DS-COVP-A)	
Data Sharing-COVP-B (DS-COVP-B)	
Data Sharing-View-A (DS-V-A)	
Data Sharing-Advanced View-A (DS-AV-A)	$\overline{\square}$
Data Sharing-Modify-A (DS-M-A)	$\overline{m arphi}$
Data Sharing-Advanced Modify-A (DS-AM-A)	
Scheduling	
Scheduling-A (SCHED-A)	
Scheduling-Internal-B (SCHED-I-B)	<u></u>
Scheduling-External-A (SCHED-E-B)	<u> </u>
Scheduling-View Modify-A (SCH-VM-A)	$\overline{\square}$
Scheduling-Advanced View Modify-A (SCH-AVM-A)	
Scheduling-Weekly Schedule-A (SCH-WS-A)	
Scheduling-Weekly Schedule Internal-B (SCH-WS-I-B)	
Scheduling-Readable-B (SCH-R-B)	
Trending	
Trending-View - A (T-V-A)	
Trending-Advanced View and Modify – A (T-AVM-A)	
Trending-Viewing and Modifying Trends-A (T-VMT-A)	
Trending-Viewing and Modifying Trends-Internal-B (T-VMT-I-B)	<b>☑</b>
Trending-Viewing and Modifying Trends-External-B (T-VMT-E-B)	<u></u>
Trending-Automated Trend Retrieval-A (T-ATR-A)	
Trending-Automated Trend Retrieval-B (T-ATR-B)	<b>☑</b>
Trending-Archving-A (T-A-A)	
Network Management	
Network Management  Network Management-Connection Establishment-A (NM-CE-A)	
Network Management-Connection Establishment-B (NM-CE-A)	
Network Management-Configuration-A (NM-RC-A)	
Network Management-Router Configuration-B (NM-RC-A)	
Alarm and Event Management	
Alarm and Event Management Alarm and Event-Notification-A (AE-N-A)	$\square$
Alarm and Event-Notification Internal-B (AE-N-I-B)	<b>☑</b>
	<b>☑</b>
Alarm and Event-Notification External-B (AE-N-E-B)	<b>☑</b>
Alarm and Event-ACK-A (AE-ACK-A)	
Alarm and Event-ACK-B (AE-ACK-B)	<b>☑</b>
Alarm and Event-Alarm Summary-A (AE-ASUM-A)	<b>☑</b>
Alarm and Event-Alarm Summary-B (AE-ASUM-B)	Ĭ □
Alarm and Event-Enrollment Summary-A (AE-ESUM-A)	



#### **BACNET PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT**

BACnet Interoperability Building Block	Supported
Alarm and Event-Enrollment Summary-B (AE-ESUM-B)	Ī
Alarm and Event-Information-A (AE-INFO-A)	$\overline{\checkmark}$
Alarm and Event-Information-B (AE-INFO-B)	$\overline{\checkmark}$
Alarm and Event-LifeSafety-A (AE-LS-A)	
Alarm and Event-LifeSafety-B (AE-LS-B)	
Alarm and Event-View Notifications-A (AE-VN-A)	$\overline{\checkmark}$
Alarm and Event-Advanced View Notifications-A (AE-AVN-A)	
Alarm and Event-View Modify-A (AE-VM-A)	$\overline{\checkmark}$
Alarm and Event-Advanced View Modify-A (AE-AVM-A)	
Alarm and Event-Alarm Summary-A (AE-AS-A)	$\overline{\checkmark}$
Device Management	
Device Management-Dynamic Device Binding-A (DM-DDB-A)	V
Device Management-Dynamic Device Binding-B (DM-DDB-B)	
Device Management-Dynamic Object Binding-A (DM-DOB-A)	
Device Management-Dynamic Object Binding-B (DM-DOB-B)	
Device Management-DeviceCommunicationControl-A (DM-DCC-A)	
Device Management-DeviceCommunicationControl-B (DM-DCC-B)	
Device Management-Private Transfer-A (DM-PT-A)	
Device Management-Private Transfer-B (DM-PT-B)	
Device Management-Text Message-A (DM-TM-A)	
Device Management-Text Message-B (DM-TM-B)	
Device Management-TimeSynchronization-A (DM-TS-A)	
Device Management-TimeSynchronization-B (DM-TS-B)	
Device Management-Automatic Time Synchronization-A (DM-ATS-A)	
Device Management-Manual Time Synchronization-A (DM-MTS-A)	$\overline{\checkmark}$
Device Management-UTCTimeSynchronization-A (DM-UTC-A)	
Device Management-UTCTimeSynchronization-B (DM-UTC-B)	
Device Management-ReinitializeDevice-A (DM-RD-A)	
Device Management-ReinitializeDevice-B (DM-RD-B)	
Device Management-Backup and Restore-A (DM-BR-A)	
Device Management-Backup and Restore-B (DM-BR-B)	
Device Management-List Manipulation-A (DM-LM-A)	
Device Management-List Manipulation-B (DM-LM-B)	
Device Management-Object Creation and Deletion-A (DM-OCD-A)	
Device Management-Object Creation and Deletion-B (DM-OCD-B)	
Device Management-Virtual Terminal-A (DM-VT-A)	
Device Management-Virtual Terminal-B (DM-VT-B)	
Device Management-Automatic Network Mapping-A (DM-ANM-A)	
Device Management-Automatic Device Mapping-A (DM-ADM-A)	

## **Segmentation Capability:**

# **Standard Object Types Supported:**

Object-Type	Supported	Dynamically Creatable	Dynamically Deletable	Optional Properties Supported	Writable Properties
Accumulator	Ø		$\overline{\square}$		
Access Door					



### BACNET PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT

Object-Type	Supported	Dynamically Creatable	Dynamically Deletable	Optional Properties Supported	Writable Properties
Analog Input	Ø	Ø	Ø	Description, Device Type, Reliability, Min Pres Value, Max Pres Value, Update Interval, Resolution, COV Increment	Object Name, Present Value, Description, Reliability, COV Increment, Out of Service
Analog Output	Ø	Ø	Ø	Description, Device Type, Reliability, Min Pres Value, Max Pres Value, Resolution, COV Increment	Object Name, Description, Present Value, Reliability, COV Increment, Relinquish Default, Out of Service
Analog Value	Ø	Ø	Ø	Description, Reliability, COV Increment	Object Name, Description, Present Value, Units, Reliability, COV Increment, Out of Service
Averaging					
Binary Input	Ø	Ø	Ø	Description, Device Type, Reliability, Active Text, Inactive Text, COS Time, COS Count, COS Time, Reset	Object Name, Description, Present Value, Reliability, Polarity, Change of State Count, Out of Service
Binary Output	Ø	Ø	Ø	Description, Device Type, Reliability, Active Text, Inactive Text, COS Time, COS Count, COS Time Reset, Min On Time, Min Off Time	Object Name, Description, Present Value, Reliability, Polarity, Change of State Count, Relinquish Default, Min On Time, Min Off Time, Out of Service
Binary Value	Ø	Ø	Ø	Description, Reliability, Active Text, Inactive Text	Object Name, Description, Present Value, Out of Service, Reliability
Calendar	Ø	Ø	Ø	Description	Object Name, Description, Present Value, Date List
Command					
Device	YES	N/A	N/A	Description, Location, APDU Seg Timeout, Time Synch Recipients, Max Segments Accepted, Max Master, Max Info Frames, Local Time, Local Date, UTC Offset, DST Status, Configuration Files, Last Restore Time, Backup Failure Timeout, Active COV Subscriptions	Object Name, Description, Location, Time Synch Recipients, UTC Offset, Backup Failure Timeout
Event Enrollment	Ø	Ø	☒	Description, Notification Class	Object Name, Description, Event Type, Event Parameters, Object Property Reference, Event Enable, Notification Class
File	Ø	Ø	Ø	Description	Object Name, Description, File Type, File Size, Archive, Read Only
Group					



### **BACNET PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT**

Object-Type	Supported	Dynamically Creatable	Dynamically Deletable	Optional Properties Supported	Writable Properties
Life Safety Point					
Life Safety Zone					
Load Control					
Loop	Ø	Ø	Image: control of the	Description, Reliability, Update Interval, Proportional Constant, Proportional Units, Integral Constant, Integral Units, Derivative Constant, Derivative Units, Bias, Maximum Output, Minimum Output, COV Increment	Object Name, Description, Present Value, Reliability, Out of Service, Action, Manipulated Var Ref, Controlled Variable Ref,, Controlled Var Units, Setpoint, Setpoint Ref, Proportional Constant, Integral Constant, Derivative Constant, Bias, Priority For Writing, COV Increment
Multi-state Input					
Multi-state Output					
Multi-state Value	Ø	Ø	Ø	Description, Reliability, State Text	Object Name, Description, Present Value, Reliability, Out Of Service
Notification Class	Ø	Ø	Ø	Description	Object Name, Description, Priority, Ack Required, Recipient List
Program	Ø	Ø	Ø	Description, Reliability, Reason for Halt, Description of Hal	Object Name, Description, Present Value, Reliability, Program Change,
Pulse Converter					
Schedule	Ø	Ø	Ø	Description, Schedule Exceptions	Object Name, Description, Present Value, Effective Period, Weekly Schedule, Exception Schedule, List of Object Property References, Priority for Writing
Structured View					
Trend Log	☑	Ø	<b>☑</b>	Description, Start Time, Stop Time, Log Device Object Prop, Log Interval, COV Resubscription Interval, Notification Threshold, Records Since Notification, Notification Class, Event Enable, Acked Transitions, Notify Type, Event Time Stamps	Object Name, Description, Log Enable, Start Time, Stop Time, Log Device Object Prop, Log Interval, COV_Resubscription Interval, Stop When Full, Buffer Size, Record Count, Notification Threshold, Notification Class, Event Enable,
Proprietary	<b>I</b>	<b>I</b>	<b>I</b>	Z. chi Timo Sumpo	

# **Data Link Layer Options:**

☑ BACnet IP, (Annex J)

☑ BACnet IP, (Annex J), Foreign Device

☑ ISO 8802-3, Ethernet (Clause 7) (10Base2, 10Base5, 10BaseT, Fiber)

☐ ANSI/ATA 878.1, 2.5 Mb. ARCNET (Clause 8)



### **BACNET PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT**

□ 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): 9600, 19200, 38400 □ Point-To-Point, modem, (Clause 10), baud rate(s): 9600, 19200, 38400 □ LonTalk, (Clause 11), medium: □ Other:								
Device Address Binding:								
Is static device binding supported? (Necessary for two-way communication w	☐ Yes ☑ No vith MS/TP slaves		ices.)					
<b>Networking Options:</b>								
Router		$\square$						
Annex H, BACnet Tunnelling								
BACnet/IP Broadcast Management Device	e (BBMD)	$\overline{\checkmark}$						
Does the BBMD support registrations Devices?	by Foreign	☑						
Character Sets Supported:								
Indicating support for multiple character s	ets does not imply	that they can all be s	supported simultaneously.					
☑ ANSI X3.4	□ IBM/Microsoft	t DBCS	□ JIS C 6226					
□ ISO 10646 (ICS-4)	□ ISO 10646 (UC	CS2)	□ ISO 8859-1					
If this product is a communequipment/networks(s) that	_	• /	the types of non-BACnet	ţ				
Not applicable.								