



VT7600 SERIES

PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT (PICS)

LAST REVISION: NOVEMBER 4, 2009

Vendor Name: Viconics
Product Name: VT7600 Series
Product Model Number: VT7656B5x00B, VT7652B5x00B,
 VT7652H5x00B, VT7652A5x00B,
 VT7605B5x00B, VT7600H5x00B,
 VT7600B5x00B, VT7600A5x00B.
 VT7607B5x00B, VT7657B5x00B
Product Version: 3.5.04
BACnet Protocol Revision: 2 (135-2001)

Product Description

The VT7600 PI thermostat family is specifically designed for single stage and multi-stage control of heating/cooling equipment such as rooftop and self-contained units. The product features an intuitive, menu-driven, back-lit LCD display which walks users through the programming steps, making the process extremely simple. Accurate temperature control is achieved due to the product's PI time proportional control algorithm, which virtually eliminates temperature offset associated with traditional, differential-based thermostats.

BACnet Standardized Device Profile (Annex L):

- 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 Interoperability Building Blocks Supported (Annex K):

| BACnet Interoperability Building Block | Supported |
|---|-------------------------------------|
| Data Sharing-ReadProperty-B (DS-RP-B) | <input checked="" type="checkbox"/> |
| Data Sharing-ReadPropertyMultiple-B (DS-RPM-B) | <input checked="" type="checkbox"/> |
| Data Sharing-WriteProperty-B (DS-WP-B) | <input checked="" type="checkbox"/> |
| Device Management-Dynamic Device Binding-B (DM-DDB-B) | <input checked="" type="checkbox"/> |
| Device Management-Dynamic Object Binding-B (DM-DOB-B) | <input checked="" type="checkbox"/> |
| Device Management-DeviceCommunicationControl-B (DM-DCC-B) | <input checked="" type="checkbox"/> |

Segmentation Capability:

Segmented Requests Supported Window Size: N/A
 Segmented Responses Supported Window Size: N/A

Standard Object Types Supported:

| Object Type | Supported | Dynamically Creatable | Dynamically Deletable | Optional Properties Supported | Writable Properties |
|-------------------|-------------------------------------|--------------------------|--------------------------|---|---|
| Analog Input | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Reliability | Out_of_Service |
| Analog Value | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Reliability | Present_Value ^a Out_of_Service ^a Object_Name ^b |
| Binary Input | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Reliability Active_Text Inactive_Text | Out_of_Service |
| Binary Value | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Reliability Active_Text Inactive_Text | Present_Value Out_of_Service |
| Device | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Max_Master Max_Info_frames | Object_Identifier Object_Name Max_Master |
| Group | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | N/A | N/A |
| Multi-state Value | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Reliability States_Text | Present_Value Out_of_Service |
| Schedule | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Weekly_schedule | Present_Value Weekly_Schedule |

a: Present_Value and Out_of_Service properties are writable for every AV objects except :

- PI Heating Demand (AV20)
- PI Cooling Demand (AV21)
- Economizer Output (AV23)

b: Object_Name property is writable for 2 objects only :

- Room_Temperature (AV7)



Viconics' VT7600 Series Programmable & Non-Programmable Thermostats for Commercial HVAC Applications

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)
- ANSI/ATA 878.1, RS-485 ARCNET (Clause 8), baud rate(s):
- MS/TP master (Clause 9), baud rate(s): 9600, 19200, 38400, 76800 (Auto Baud)
- 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:

Device Address Binding:

Is static device binding supported? Yes No
(Necessary for two-way communication with MS/TP slaves and certain other devices.)

Networking Options:

| | |
|---|-----|
| Router | N/A |
| Annex H, BACnet Tunnelling | N/A |
| BACnet/IP Broadcast Management Device (BBMD) | N/A |
| Does the BBMD support registrations by Foreign Devices? | N/A |

Character Sets Supported:

- | | | |
|---|---|-------------------------------------|
| <input checked="" type="checkbox"/> ANSI X3.4 | <input type="checkbox"/> IBM/Microsoft DBCS | <input type="checkbox"/> JIS C 6226 |
| <input type="checkbox"/> ISO 10646 (ICS-4) | <input type="checkbox"/> ISO 10646 (UCS2) | <input type="checkbox"/> ISO 8859-1 |

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

Not applicable.