



# Viconics' VT7300 Series 24 Vac Low Voltage Fan Coil Thermostats For Commercial and Lodging HVAC Applications



## VT7300 SERIES

### PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT (PICS)

LAST REVISION: NOVEMBER 4, 2009

**Vendor Name:** Viconics  
**Product Name:** VT7300 Series  
**Product Model Number:** VT7300A5x00B, VT7305A5x00B,  
VT7300C5x00B, VT7305C5x00B,  
VT7350C5x00B, VT7355C5x00B,  
VT7300F5x00B, VT7305F5x00B,  
VT7350F5x00B, VT7355F5x00B,  
VT7300M5x00B, VT7301F5x00B  
**Product Version:** 2.5.05  
**BACnet Protocol Revision:** 2 (135-2001)

### Product Description

The VT7300 PI thermostat family is specifically designed for fan coil control. The product features a backlit LCD display with dedicated function menu buttons for simple operation. Accurate temperature control is achieved due to the product's PI proportional control algorithm, which virtually eliminates temperature offset associated with traditional, differential-based thermostats.

Models are available for On/Off, 3 point floating and analog 0 to 10 Vdc control.

All models contain can control three, two or single fan speed. 3 additional inputs are also provided for various functions.

### 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)



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## 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 <sup>a, b</sup> Out_of_Service <sup>a</sup> Object_Name <sup>c</sup>
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 <sup>d</sup> Out_of_Service <sup>d</sup>

a : Present\_Value and Out\_of\_Service properties are writable for every AV objects except :

- PI Heating Demand (AV21)
- PI Cooling Demand (AV22)

b : Present\_Value property for Room Temperature (AV7) and Room Humidity (AV10) is writable only if Room Temp Override (BV8) is enabled and Room Humidity Override (BV11) is enabled respectively.

c : Object\_Name property is writable for the following object only :

- Room Temperature (AV7)

d : Present\_Value and Out\_of\_Service properties are writable for every MV objects except :

- Heating Valve Status (MV26)
- Cooling Valve Status (MV27)
- Fan Status (MV28)



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## 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.