

# PIR Ready VT7200 Series 24 Vac Low Voltage Zoning Thermostats For Commercial HVAC Applications

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#### Product overview

The VT7200 PI thermostat family is specifically designed for zoning applications.

Typical applications include local hydronic reheat valve control and pressure dependent VAV with or without local reheat. The product features a backlit LCD display with dedicated function menu keys 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 3 point floating and analog 0 to 10 Vdc control. In addition remote room sensing is available.



Fig.1 - VT7200 Series

They all contain an SPST auxiliary switch that can be used to control lighting or auxiliary reheat. 3 additional inputs are also provided for monitoring and / or various advanced functions.

All devices are also available with Echelon, BACnet MS-TP or Zigbee wireless network adapter.

The thermostats are also compatible with the new Viconics PIR cover accessories. Thermostats equipped with a PIR cover provide advanced active occupancy logic, which will automatically switch occupancy levels from Occupied to Stand-By and Unoccupied as required by local activity being present or not. This advanced occupancy functionality provides advantageous energy savings during occupied hours without sacrificing occupant comfort. All thermostats can be ordered with or without a factory installed PIR cover ( see ordering notes below ).

- The additional following documents are available at: www.viconics.com
- PIR application information and examples, are available on document: APP-PIR-Guide-Exx
- PIR cover installation information is available on document: PIR Cover Installation-Exx
- Information on the LON models (VT7200x5x00E), is available on document ITG-VT72\_73-PIR-LON-Exx
- Information on the BACnet models (VT7200x5x00B), is available on document ITG-VT72\_73-PIR-BAC-Exx
- Information on the Wireless models (VT7200x5x00W), is available on documents: ITG-VWG-40-BAC-Exx and LIT-VWG-40-SETUP-Exx

#### Models available -

	VT7200C5x00	VT7200F5x00
Viconics Part Numbers	VT7200C5x00B (BACnet)	VT7200F5x00B (BACnet)
	VT7200C5x00E (Echelon)	VT7200F5x00E (Echelon)
	VT7200C5x00W (Wireless)	VT7200F5x00W (Wireless)
Control Outputs	2 x Tri-state floating	2 x Analog 0 to 10 Vdc
	1 x Auxiliary or reheat contact	1 x Auxiliary or reheat contact

## **Ordering Information Notes:**

- Thermostats can be ordered with a factory installed PIR cover. Please use (5500) extension instead of the (5000) only extension.: Ex. VT7200C5500E.
- Thermostats ordered without a PIR cover can be retrofitted with a separate PIR accessory cover afterwards when required

### Features and benefits -

Features	Benefits
Advanced occupancy functions	⇒ Through the network or smart local occupancy
	sensing
Ready for PIR accessory cover	⇒ Fully integrated advanced occupancy functionality with
• Ready for FIR accessory cover	a PIR accessory cover
3 configurable inputs	⇒ Adds functionality
Pre-configured sequences of operation	⇒ One model meet more applications
	⇒ Reduces project delivery cost
Unique configuration setup utility	⇒ Minimizes parameter tampering
Lockable keypad	⇒ Tamper proof, no need for thermostat guards
Available for 24 Vac On/Off, Floating or Analog	⇒ Meet advanced applications requirements
control	
Auxiliary output	⇒ Can be used for lighting or reheat
Available with various open industry standards	⇒ Adds network integration functionality for additional
communication adapters	savings

Thermostat power requirements: 19-30 Vac 50 or 60 Hz; 2 VA Class 2

Operating conditions: 0 °C to 50 °C ( 32 °F to 122 °F ) 0% to 95% R.H. non-condensing

-30 °C to 50 °C ( -22 °F to 122 °F)

Storage conditions: 0% to 95% R.H. non-condensing

Temperature sensor: Local 10 K NTC thermistor

Temperate sensor resolution:

 $\pm 0.1 \,^{\circ}\text{C} \, (\pm 0.2 \,^{\circ}\text{F})$ 

 $\pm 0.5 \,^{\circ}$  C ( $\pm 0.9 \,^{\circ}$ F) @ 21 °C (70 °F) typical calibrated Temperature control accuracy:

Occ, Stand-By and Unocc cooling setpoint range: 12.0 to 37.5 °C (54 to 100 °F) Occ, Stand-By and Unocc heating setpoint range: 4.5 °C to 32 °C ( 40 °F to 90 °F ) -40 °C to 50 °C ( -40 °F to 122 °F ) Room and outdoor air temperature display range

Proportional band for room temperature control: Cooling & Heating: 1.8°C (3.2°F) Dry contact across terminal BI1, BI2 & UI3 to Scom Binary inputs:

> Contact output rating: Triac output: 30 Vac, 1 Amp. Maximum, 3 Amp. in-rush

Analog: 0 to 10 Vdc into  $2K\Omega$  resistance min.

Wire gauge 18 gauge maximum, 22 gauge recommended 4.94" x 3.38" x 1.13" Dimensions:

Approximate shipping weight: 0.75 lb (0.34 kg)

Agency Approvals all models: UL: UL 873 (US) and CSA C22.2 No. 24 (Canada), File E27734

> with CCN XAPX (US) and XAPX7 (Canada) Industry Canada: ICES-003 (Canada)

Agency Approvals all models FCC: Compliant to CFR 47, Part 15, Subpart B, Class A (US)

CE: EMC Directive 89/336/EEC (Europe Union)

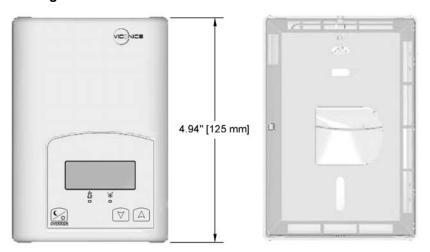
C-Tick: AS/NZS CISPR 22 Compliant (Australia / New Zealand)

Supplier Code Number N10696

Agency Approvals Wireless models FCC: Compliant to: Part 15, Subpart C

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

### **Drawing & Dimensions**



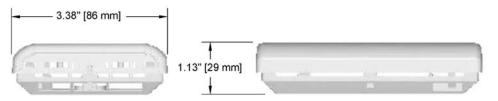


Fig. 1 - Thermostat dimensions

### **Important Notice -**



devices.

undergone

operating controls only and are not safety These instruments rigorous tests verifications prior to shipment to ensure proper and reliable operation in the field. Whenever a control failure could lead to personal injury and/or loss of property, it becomes the responsibility of the user /

VT7200

controls are for use as

series

installer / electrical system designer to incorporate safety devices ( such as relays, flow switch, thermal protections, etc...) and/or alarm system to protect the entire system against such catastrophic failures. Tampering of the devices or miss application of the device will void warranty.