



i-Vu® Building Automation System ComfortVu™ BACnet Thermostat

24 Vac Plus Models

Part Numbers: TBPL-24-H-C, TBPL-24-HM-C



Features

- Large, backlit LCD display with touchscreen occupant controls
- Support for Celsius or Fahrenheit
- BACnet MS/TP port for easy integration with the i-Vu system or any BACnet-compliant BMS
- On-board DIP switches to configure equipment type and sequence of operation
- 2 universal inputs, 2 analog outputs and 6 digital outputs
- Available in two 24 Vac models: Temperature/Humidity (#TBPL-24-H-C) Temperature/Humidity/PIR Motion (TBPL-24-HM-C)

Supported Functions

- Manage 7-day schedules via the thermostat
- Manage setpoints, occupancy status, fan speed, and heating/cooling mode via the thermostat or BACnet BMS
- Support for Title 24 demand response/economizer FDD and IECC2015 economizer FDD when connected to a BMS

Equipment Compatibility

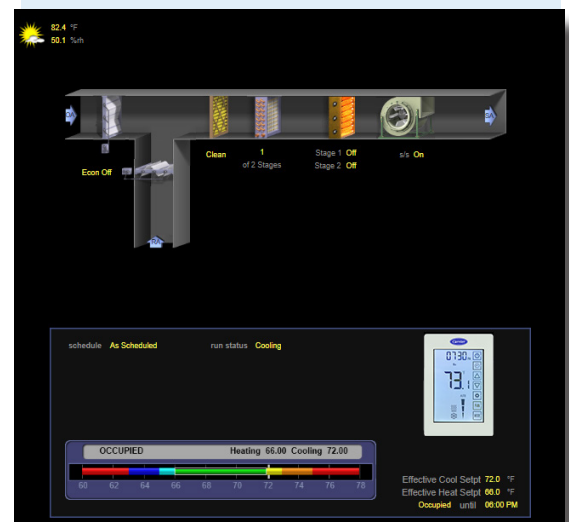
- Rooftop Units
- Heat Pumps
- Fan Coils
- Unit Heaters

Supported Applications (depends on available I/O)

- Up to 3 stages of heat / 2 stages of cool / up to 3 fan speeds
- 2 pipe / 4 pipe cooling / heating valves (0-10V normally closed only)
- VFD (0-10V)
- Economizer (open/close)
- Reversing valve
- Humidifier (0-10V) / Reheat (dehumidify)



Carrier's ComfortVu™ BACnet thermostats offer local control of a building's heating, ventilating and air-conditioning (HVAC) system as well as remote control from any BACnet-compliant building management system (BMS), including Carrier's i-Vu® building automation system.



Seamless integration with the i-Vu® building automation system makes it easy to view, schedule, and manage the connected HVAC system.

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Specifications

| | | | | | | | | | | | | | |
|--------------------------------------|---|--------------------------|-------|--------------------------|--|----------|----------------|----------|-------|------------|--|----------|---------------|
| Power Requirements | 24 Vac ±15%: 4VA unit, 76 VA full load | | | | | | | | | | | | |
| Communication | BACnet MS/TP with baud rates up to 76.8 kbps, detected and set automatically by the BACnet Thermostat. Max 127 devices. | | | | | | | | | | | | |
| Real-Time Clock | Real-time clock keeps track of time in the event of a power failure for up to 7 days. | | | | | | | | | | | | |
| Display | Backlit Touchscreen, °F or °C Selectable | | | | | | | | | | | | |
| Sensing Element | <table border="0"> <tr> <td>Temperature</td> <td>Range</td> <td>41° to 95°F (5° to 35°C)</td> </tr> <tr> <td></td> <td>Accuracy</td> <td>±1.0°F (0.5°C)</td> </tr> <tr> <td>Humidity</td> <td>Range</td> <td>10% to 90%</td> </tr> <tr> <td></td> <td>Accuracy</td> <td>±3.0% typical</td> </tr> </table> | Temperature | Range | 41° to 95°F (5° to 35°C) | | Accuracy | ±1.0°F (0.5°C) | Humidity | Range | 10% to 90% | | Accuracy | ±3.0% typical |
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| | Accuracy | ±1.0°F (0.5°C) | | | | | | | | | | | |
| Humidity | Range | 10% to 90% | | | | | | | | | | | |
| | Accuracy | ±3.0% typical | | | | | | | | | | | |
| Motion Sensing | Sensor Type: PIR, quad, omnidirectional Distance: 16.4 feet (5 m) Detection range: (HxV) 90°C x 30°C Movement speed: 2.62 to 3.94 ft/s (0.8 to 1.2 m/s) Detection object: 15.75 x 9.84 in. (400 x 250 mm) | | | | | | | | | | | | |
| Inputs | <p>T1, 0 – Normally open or normally closed dry contract, or 50 kOhm thermistor @ 25°C</p> <p>A, B - Communication +/- (RS485)</p> <p>In1, 0 - Normally open or Normally closed dry contract, or 50 kOhm thermistor @ 25°C</p> <p>C, R - Power: 24 Vac for part numbers TBPL-24-C and TBPL-24-HM-C, or 110-220 Vac line voltage for part numbers TBPL-C and TBPL-HM-C</p> | | | | | | | | | | | | |
| Outputs | 11, 12, 13 – Digital outputs, 3A; 14, 15, 16 – Digital outputs 0.3A; A01, A02 - Analog output 0-10 Vdc, 5 mA max., not isolated (normally closed valves) | | | | | | | | | | | | |
| Environmental Operating Range | 50° to 122°F (10° to 50°C), 10 to 90% relative humidity, non-condensing | | | | | | | | | | | | |
| Compliance | United States of America: FCC CFR47, Chapter 1, Subchapter A, Part 15, Class B; Canada: Industry Canada Compliant, ICES-003, Class B; Europe: CE-Mark Low Voltage Directive: 2014/35/EU RoHS Compliant: 2011/65/EU; Australia and New Zealand: C-Tick Mark, AS/NZS 61000-6-3 CA Prop 65 Warning: This product can expose you to chemicals including Styrene and 1,3 – Propane sultone, which are known to the State of California to cause cancer. Go to www.p65warnings.ca.gov | | | | | | | | | | | | |
| Physical | Fire-retardant plastic ABS, UL94V-0 | | | | | | | | | | | | |
| Mounting | Wall mount on a standard 4" x 2-1.2 x 2" electrical box using provided 6/32 x 1/2" mounting screws | | | | | | | | | | | | |

Dimensions

Overall

Weight: 9.7 oz (0.28 kg)

