i-Vu® Building Automation System
TB & TM Plus Series Thermostats

Enhance occupant comfort and optimize energy efficiency in a wide range of HVAC applications with the Carrier TB and TM Plus thermostats. Available with BACnet (TBPL series) or MODBUS (TMPL series) communication protocols, the TB and TM Plus thermostats seamlessly integrate with your building management system (BMS) or provides standalone zone/room control. Leveraging the advanced capabilities of Carrier's i-Vu® platform, the TB and TM Plus deliver precise temperature control for any space.

Key Features

- Easy-to-use touchscreen display
- Temperature, humidity, and motion onboard sensors for optimal control
- BACnet or MODBUS communication protocol capable (depending on model) for flexible system integration
- Configurable inputs and outputs for versatile control
- Real-time clock maintains accurate time for up to 7 days during power outages
- Flexible power supply options (24VAC or 110-220V)*

**depending on thermostat model*

Applications

- Fan (FCUs): Enhance occupant comfort by providing individual control over fan speed and temperature
- Rooftop Units (RTUs): Optimize RTU operation for energy efficiency through precise temperature and airflow control
- Heat Pumps: Maximize heat pump performance and efficiency with integrated control of heating and cooling modes
- Variable Frequency Drives (VFDs): Seamlessly integrate with VFDs to fine-tune motor speeds and optimize energy consumption

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Specifications

TB Plus Series (BACnet)	**Part#**			
Options	24V, Temp., Humidity	24V, Temp., Humidity, Motion	110-220V, Temp. Only	-
Branded	TBPL-24-H-C	TBPL-24-HM-C	TBPL-H-C	-
Unbranded	TBPL-24-H	-	TBPL-H	-
Communication	BACnet MS/TP (subordinate device) Baud rates up to 76.8 kbps, detected and set automatically by the thermostat			
TM Plus Series (MODBUS)	**Part#**			
Options	24V, Temp., Humidity	-	-	110-220V, Temp., Humidity, Motion
Unbranded	TMPL-24-H	-	-	TMPL-HM
Communication	Modbus RTU (server) Baud rates up to 76.8 kbps, detected and set automatically by the thermostat			
Power Requirements	24 VAC ± 15% 4VA no load, 76 VA Full Load		110-220 VAC	
Display	Backlit, Resistive Touchscreen			
Sensing Element				
Temperature	Range: 41-95° (5-35°C), Accuracy: ± 1°F (0.5°C)			
Humidity Range: 10-90% Accuracy: ± 3% Typical	X	X	X	X
Motion Sensor Type: PIR, quad, omnidirectional Distance: 16.4 ft. (5 m) Detection Range: 90 x 30 (HxV) Movement Speed: 2.62 – 3.94 ft/s (0.8 – 1.2 m/s) Detection Object: 15.75 x 9.84 in. (400 x 250 mm)	-	X	-	X
Inputs	T1, 0 - Normally Open (NO) or Normally Closed (NC) dry contract, or 0-10 Vdc AI, or 50 kOhm thermistor @ 77°F (25°C) A, B - Communication +/- (RS485) In1, 0 - NO or NC dry contract, or 0-10 Vdc AI, or 50 kOhm thermistor @ 77°F (25°C) C, R – Power 24 VAC			
Outputs	11, 12, 13 – DO, 3A 14 – DO 0.3A 15, 16 - DO 0.3A or AO 0-10 Vdc, 5 mA max.,not isolated			
Environmental Operating Range	50° to 122°F (10° to 50°C), 10 - 90% RH, non-condensing			
Housing	Rectangular form factor, fire-retardant ABS plastic, UL94V-0			
Mounting	Installs to a standard wall box with mounting hardware included (consult technical instructions)			
Compliance	FCC CFR47, chapter 1, subchapter A, part 15, class B ICC, ICES-003, class B CE Mark LVD, 2014/35/EU RoHS 2011/65/EU C-Tick Mark, AS/NZS 61000-6-3 CA Prop. 65			
Dimensions	3.15" W x 5.04" H x 0.62" D (8cm W x 12.8cm H x 1.55cm D) w/ PIR 3.15" W x 4.65" H x 0.62" D (8cm W x 11.81cm H x 1.55cm D) w/o PIR NOTE: Depth of unit that inserts into gang-box is 0.95" (2.4cm)			
Weight	9.7 oz (0.28 kg)			

For more information, contact your local Carrier Controls Expert.

Controls Expert Locator:
www.carrier.com/controls-experts