OVERVIEW

The TWC48 is a Wi-Fi enabled digital thermostat with built in CO2 sensor. The TWC48 contains a robust thermostat interface and is designed to be used where remote HVAC monitoring and control are desired along with CO2 monitoring

WI-FI COMMUNICATING THERMOSTAT

- Ability to connect to Wi-Fi networks via WPA2-PSK (AES) and 802.1X authentication. Thermostats can connect using EAP-TLS using PKI (Certificate) or PEAP-MSCHAPv2 (Username and Password).
- WPA3 Upgradable.
- Dual band 2.4 GHz/ 5 GHz
- End user control for turning the HVAC on, HVAC off, fan on, fan off, override, and adjusting temperatures within set degrees of freedom
- Demand control ventilation
- Economizer fault detection

CO2 sensor

- Continuous CO2 Monitoring. Thermostat display will flash when CO2 levels exceed 1,100 ppm
- CO2 range of 0 – 2,000 ppm
- CO2 accuracy between +/- 45 ppm

Thermostat Features

- Standard or Heat Pump HVAC Systems
- 128x64 Backlit Graphical Display
- 6 Buttons with On Screen Labels
- Wall mount or mounts on single-gang junction box
- Local temperature and setpoint display
- System Mode (Off, Auto Changeover, Heat, Cool)
- Fan Mode display and control (Auto, Manual On)
- On-screen setup of HVAC Type, Fan Type, Change over type for Heat Pump systems, and sensor calibration
- Degrees Fahrenheit or Celsius Modes
- Compatible with the majority of HVAC systems

TECHNICAL SPECIFICATIONS

HVAC System Compatibility

- Central HVAC systems or separate heating/cooling systems; can use separate RH/RC transformers (split)
- Standard gas/electric HVAC Systems: 2-stage heating, 2-stage cooling
- Heat Pump HVAC Systems: 3-stage heating, 2-stage cooling
- Fan system: Selectable for gas or electric heat systems
- Heat Pump Change Over valve (reversing valve): Selectable for change over with heat or change over with cool
- Emergency Heat: In Heat pump mode, Emergency Heat mode is directly selectable from the thermostat
- Compressor short cycle protection delay - adjustable
- Automatic heating and cooling changeover
- Fan Cycler feature

Remote Sensors

- The TWC48 supports up to 2 remote sensors
- RS1 is for a remote temperature sensor. The remote sensor can replace internal sensor or provide averaging
- RS2 is for any type of sensor, including LAT
- Compatible with A Curve, Type 2, and Type 3 sensors

Wiring Requirements

- 18AWG
- Uses standard thermostat connections (C, R, W1, W2, Y1, Y2, G)

Power Requirements

- 24VAC

Dimensions

- 5"x3"x¾"

Model Number

- TWC48 Wi-Fi Thermostat with CO2 sensor and demand control ventilation