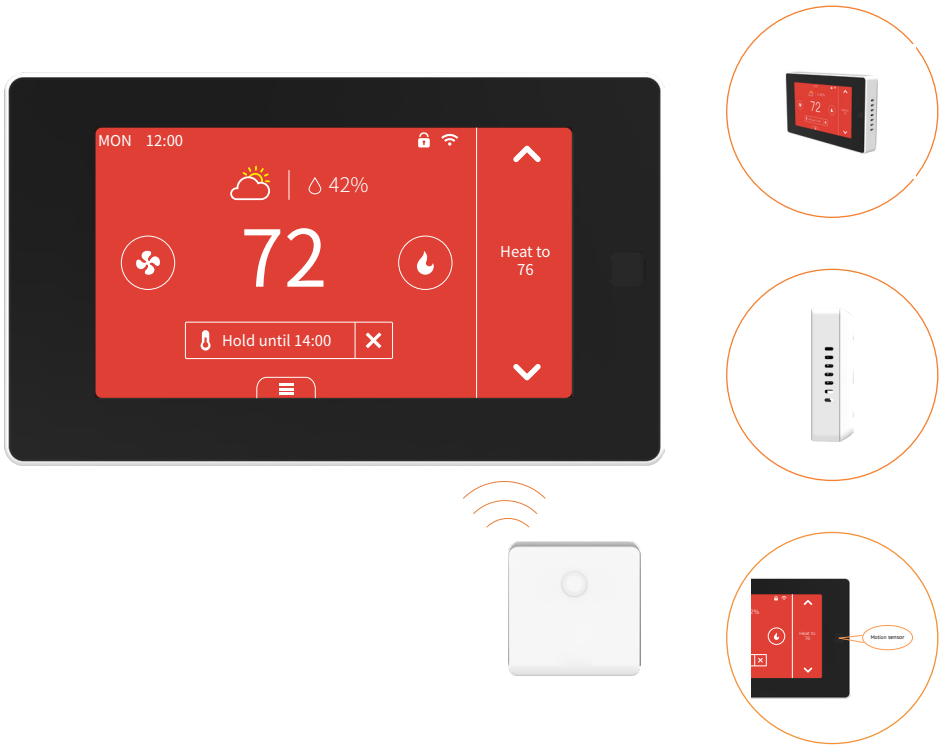
Products
– Comfort / Thermostat

PCT513 Wi-Fi Touchscreen Thermostat



Description

The Wi-Fi Touchscreen thermostat makes it easier and smarter to control your household temperature. With remote zone sensors, you can balance hot or cold spots throughout the home to achieve best comfort. And you will be able to remotely control the temperature anytime through your mobile phone and web portal.

Features

Basic HVAC Control

- Supports 2H/2C multistage conventional system or 4H/2C Heat Pump system
- The 4-period and 7-day programming schedule on the device or through the APP
- Multiple HOLD options: Permanent Hold, Temporary Hold, Follow Schedule
- Automatic heating and cooling changeover
- Fan cycle mode periodically circulates fresh air for comfort and health
- Smart warmup, preheat or precool your house before you get home

Advanced HVAC Control

- Support up to 16 remote zone sensors
- Geofencing
- Low temperature protection
- Vacation mode
- Optional time settings for compressor short cycle protection delay
- No click sound when thermostat starts work
- Equipment test for installation

User Interaction
• 4.3-inch full-color touch screen
• Voice control: Amazon Alexa and Google Home
• System status indicated by different backlight colors
• Backlight brightness level adjustable
• PIR motion detection
• Intuitive UI

Information & Notification
• 5-day weather forecast
• Indoor humidity sensing
• Multi-room temperature display
• Filter change reminder
• Unusual heating or cooling alert

Installation & Setup
• Power module available to power your thermostat without a C-Wire having to run a fifth wire.
• Interactive wizard
• Built-In level for mounting
• Multi-level keypad lockout

Smart IoT Features
• Supports Wi-Fi 802.11 b/g/n @2.4 GHz
• Control the thermostat remotely using an APP or Web portal
• Access to multiple thermostats from a single APP or Web portal
• Private cloud guarantees data privacy
• Device-level and cloud-level API available for integration with 3rd party Cloud

Technical Specifications

Compatibility	
Compatible systems	• Conventional: 2-stage heating and 2-stage cooling HVAC systems • Heat Pump: 2-stage heating, 2-stage cooling, 2-aux heating • Supports natural gas, electric, hot water, steam or gravity, gas fireplaces (24 Volts), oil heat sources • Supports heat pump,dual fuel
Wiring Terminals	
RH	• 24VAC primary for heating
RC	• 24VAC primary for cooling
C	• 24VAC common
W1	• 1st stage Primary heating relay / Aux heat
W2	• 2nd stage Secondary heating relay / Aux heat
Y1	• 1st stage Primary compressor contactor
Y2	• 2nd stage Secondary compressor contactor
G	• Fan relay
O/B	• Changeover valve for heat pumps
S	• Optional wiring module terminal to combine Y and G, while reserve an extra in-wall wire to power on the thermostat
HVAC Control Functions	
System Mode	• Heat, Cool, Auto, Off • Emergency Heat (Heat Pump only)
Fan Mode	• On, Auto, Circle(adjustable)
Advanced	• Setting temperature locally or remotely • Auto-changeover between heat and cool mode (System Auto) • Compressor protection time is available for select • Failure protection by cutting off all circuit relays • Smart warmup (In Follow Schedule hold) • Low temperature protection
Auto Mode Deadband	• 1.5° C, 3° F
Temp. Setpoint Span	• 0.5° C, 1° F
Wireless Connectivity	
Wi-Fi	• 802.11 b/g/n @ 2.4GHz
Tx-Power	• ±2dBm
Radio	• 915MHZ

Physical Specifications	
LCD Screen	• 4.3-inch full-color touch screen
PIR Sensor	• Detect occupancy • Sensing Distance 3m, Angle 70°
Electrical Rating	• 24 VAC, 1A Carry; 5A Surge 50/60 Hz
Switches/Relays	• 9 Latching type relay, 1A maximum loading
Temperature	• Sensing Range: -40~125°C • Sensing Accuracy: ±1°C • Response Time: 2min
Humidity	• Sensing Range: 0~100% • Sensing Accuracy: ±3% (20% ~80%) • Response Time: 2min
Operating Environment	• 0~ 50° C, 32 ~122° F • Humidity range: 5%~95%
Storage Temperature	• -30 ~ 60° C , -22° F ~ 140° F
Wiring	• 18 AWG, Requires both R and C wires from the HVAC System
Dimensions	• 131(L) × 78 (W)× 29.2(H) mm
Mounting Type	• Wall Mounting
Remote Zone Sensor	
Battery	• DC 3V (2*AAA batteries)
Radio	• 915MHZ
LED	• 2-color LED (Red,Green)
PIR	• Detect occupancy • Sensing Distance 5m, Angle 120°
Temperature	• Sensing Range: -40~125°C • Sensing Accuracy: ±0.5°C • Response Time: 2min
Operating Environment	• 0~ 50° C, 32 ~122° F (Indoor only) • Humidity range: 5%~95%
Dimension	• 62(L) × 62 (W) × 15.5(H) mm
Mounting Type	• Tabletop stand or Wall mounting