

# Wi-Fi Smart Devices

## Wi-Fi Touchscreen Thermostat — PCT513



Wi-Fi



Amazon Alexa



Google home

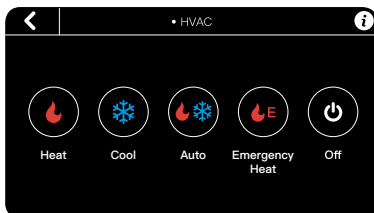


Zone Sensor

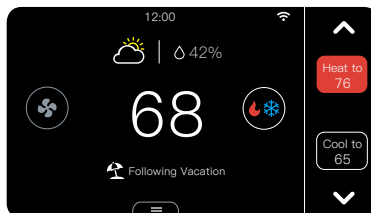
Touchscreen Smart Thermostat

SmartPhone

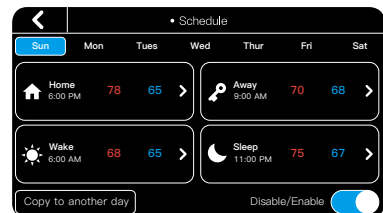
### Smart HVAC Control



2H/2C Conventional & 4H/2C Heat Pump



Automatic heating and cooling changeover



Flexible 4-period/7-day Scheduling

### New Comfort Experience



Touch Screen  
4.3" TFT LCD Display



Voice Control  
Works with Alexa & Google Home



Remote Zone Sensor  
Scattered multi-sensors enable location-based temperature control



Geofencing  
Know when you leave or return for better comfort and energy saving



Weather Forecast  
5-day local weather forecast



Smart Warm-up  
Preheat or precool before you get home



Smart Alerts  
Heating or cooling alerts and air filter change reminders



Vacation Mode  
Run your system economically when you are on vacation



Open API  
Device-level and cloud-level API for system integration

## Main Features

### Basic HVAC Control

- 2H/2C conventional or 4H/2C Heat Pump system
- 4–period/7–day scheduling on the device or through the APP
- Multiple HOLD options
- Periodically circulates fresh air for comfort and health
- Automatic heating and cooling changeover

### Advanced HVAC Control

- Remote Zone Sensors for location–based temperature control
- Geofencing: know when you leave or return for better comfort and energy saving
- Preheat or precool your house before you get home
- Run your system economically while on vacation
- Compressor short cycle protection delay

### User Interaction

- 4.3” TFT LCD touchscreen for comprehensive information display and easy operation
- Voice control: Amazon Alexa and Google Home
- System status indicated by different backlight colors: Red for heat–on, Blue for cool–on
- Backlight brightness level adjustable
- Screen lights up when movement detected
- Intuitive UI to ease the operation even without manual

### Information & Notification

- Weather forecast: display 5–day local weather
- Indoor humidity sensing
- Multi–room temperature display
- Air Filter change reminders
- Unusual heating or cooling alert

### Installation & Setup

- Power adapter available with no requirement for a C–Wire
- Interactive wizard guides you through the quick setup
- Built–In level for mounting
- Multi–level keypad lockout for special occasions

### Smart IoT Features

- Supports Wi-Fi 802.11 B/G/N 2.4
- Control and setup the thermostat remotely using an APP or Web portal
- Access to multiple thermostats from a single APP or Web portal
- Over–the–Air firmware upgrade
- Private cloud guarantees data privacy
- Device–level and cloud–level API available for integration with 3rd party Cloud

## PCT513 Technical Specifications

HVAC Control Functions	
Compatible Systems	<ul style="list-style-type: none"><li>• Conventional (2H/2C)</li><li>• Heat Pump (4H/2C)</li><li>• Supports natural gas, electric, hot water, steam or gravity, gas fireplaces (24 Volts), oil heat sources</li></ul>
System Mode	<ul style="list-style-type: none"><li>• Heat, Cool, Auto, Off, Emergency Heat (Heat Pump only)</li></ul>
Fan Mode	<ul style="list-style-type: none"><li>• On, Auto, Circle</li></ul>
Advanced	<ul style="list-style-type: none"><li>• Setting temperature locally or remotely</li><li>• Auto–changeover between heat and cool mode (System Auto)</li><li>• Compressor protection time is available for select</li><li>• Failure protection by cutting off all circuit relays after power outage</li></ul>
Auto Mode Deadband	<ul style="list-style-type: none"><li>• 3° F</li></ul>
Temp. Setpoint Span	<ul style="list-style-type: none"><li>• 1° F</li></ul>
Humidity Accuracy	<ul style="list-style-type: none"><li>• ±3% Accuracy through the range of 20% RH to 80% RH</li></ul>
Wireless Connectivity	
Wi-Fi	<ul style="list-style-type: none"><li>• 802.11 b/g/n @ 2.4GHz</li></ul>
OTA	<ul style="list-style-type: none"><li>• Over–the–Air Upgradable via Wi-Fi</li></ul>
Radio	<ul style="list-style-type: none"><li>• 915MHZ</li></ul>
Physical Specifications	
LCD Screen	<ul style="list-style-type: none"><li>• 4.3–inch color touch screen; 480 x 272 pixel display</li></ul>
LED	<ul style="list-style-type: none"><li>• 2–color LED (Red, Green)</li></ul>
C–Wire	<ul style="list-style-type: none"><li>• Power adapter available with no requirement for a C–Wire</li></ul>
PIR Sensor	<ul style="list-style-type: none"><li>• Sensing Distance 4m, Angle 60°</li></ul>
Speaker	<ul style="list-style-type: none"><li>• Click sound</li></ul>
Data Port	<ul style="list-style-type: none"><li>• Micro USB</li></ul>
DIP Switch	<ul style="list-style-type: none"><li>• Power selection</li></ul>
Electrical Rating	<ul style="list-style-type: none"><li>• 24 VAC, 2A Carry; 5A Surge 50/60 Hz</li></ul>
Switches/Relays	<ul style="list-style-type: none"><li>• 9 Latching type relay, 1A maximum loading</li></ul>
Dimensions	<ul style="list-style-type: none"><li>• 135(L) × 77.36 (W) × 23.5(H) mm</li></ul>
Mounting Type	<ul style="list-style-type: none"><li>• Wall Mounting</li></ul>
Wiring	<ul style="list-style-type: none"><li>• 18 AWG, Requires both R and C wires from the HVAC System</li></ul>
Operating Temperature	<ul style="list-style-type: none"><li>• 32° F to 122° F, Humidity range: 5%~95%</li></ul>
Storage Temperature	<ul style="list-style-type: none"><li>• –22° F to 140° F</li></ul>
Certification	<ul style="list-style-type: none"><li>• FCC</li></ul>
Zone Sensor	
Dimension	<ul style="list-style-type: none"><li>• 62(L) × 62 (W) × 15.5(H) mm</li></ul>
Battery	<ul style="list-style-type: none"><li>• Two AAA batteries</li></ul>
Radio	<ul style="list-style-type: none"><li>• 915MHZ</li></ul>
LED	<ul style="list-style-type: none"><li>• 2–color LED (Red, Green)</li></ul>
Button	<ul style="list-style-type: none"><li>• Button for join network</li></ul>
PIR	<ul style="list-style-type: none"><li>• Detect occupancy</li></ul>
Operating	<ul style="list-style-type: none"><li>• Temperature range: 32~122° F (Indoor)</li></ul>
Environment	<ul style="list-style-type: none"><li>• Humidity range: 5%~95%</li></ul>
Mounting Type	<ul style="list-style-type: none"><li>• Tabletop stand or Wall mounting</li></ul>
Certification	<ul style="list-style-type: none"><li>• FCC</li></ul>



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