Honeywell Home
Prestige® IAQ

FOR RESIDENTIAL OR LIGHT COMMERCIAL APPLICATIONS

Job Name	
Engineer	
Mechanical Contractor	
Contractor's P.O. No.	
Representative	
Notes	

Model(s)				
THX9421R5021WW	Qty.		Notes	
YTHX9421R5085WW	Qty.		Notes	
YTHX9421R5101WW	Qty.		Notes	
YTHX9421R5127WW	Qty.		Notes	
YTHX9421R7001WW	Qty.		Notes	
THM5421R1021	Qty.		Notes	
Approval				
Service				
Tag No.				

APPLICATION

The Prestige IAQ is a 7-Day programmable thermostat with auto changeover that is designed for single stage and multistage control of conventional and heat pump equipment such as rooftop units and split systems in residential and commercial applications. The thermostat controls up to 3 heat / 4 cool conventional systems and up to 4 heat / 2 cool heat pump systems. The thermostat controls humidification, dehumidification, ventilation, an economizer and a lighting panel. Prestige IAQ has sensor inputs that are used with remote indoor air temperature sensor(s), an outdoor air temperature sensor, a discharge air temperature sensor, a return air temperature sensor, an occupancy sensor for remote setback and dry contact devices for displaying alerts.

- The thermostats are equipped with a 16:9 touchscreen TFT color display (WQVGA - 480 x 272 pixels).
- Provides a USB port to upload Dealer Information, Custom Reminders, Custom Event Schedules, Holiday Schedule and Software Updates and to download Data Logs.
- Provides remote access to the thermostat when used with the RedLINK internet gateway.
- Provides control using optional remote temperature and humidity sensors.
- Prestige IAQ integrates with the Niagara-AX framework.

SPECIFICATIONS

Terminal Designations:
Equipment Interface Module: R, RC, RH, C, W-O/B, W2-AUX 1, W3-AUX 2, Y, Y2, G, A-L/A, U1 U1, U2 U2, U3 U3, S1 S1, S2 S2, S3 S3, S4 S4, A, B, C, D
THX9421 Thermostat: R, C

Electrical Ratings (Equipment Interface Module):

Terminal	Voltage (50/60Hz)	Max. Current Rating
W - O/B	18 to 30 VAC and 750 mVDC	1.00A
Y (cooling)	18 to 30 VAC	1.00A
G (fan)	18 to 30 VAC	0.50A
W2 - Aux 1 (heating)	18 to 30 VAC	0.60A
W3 - Aux 2 (heating)	18 to 30 VAC	0.60A
Y2 (Cooling)	18 to 30 VAC	0.60A
A-LA (Output)	18 to 30 VAC	1.00A
(U1, U1), (U2, U2), (U3, U3)	30 VAC max.	0.50A

Power Consumption of THX9421R Thermostat:
Full brightness = 3.0 VA
1/2 brightness = 2.1 VA
Backlight off = 1.9 VA

Power Consumption of Equipment Interface Module: 2.0 VA

Prestige Thermostat and Kit Numbers:
YTHX9421R5085WW: Kit contains Prestige Thermostat, Equipment Interface Module (EIM), & two duct sensors.
YTHX9421R5101WW: Kit contains Prestige Thermostat, Equipment Interface Module (EIM), C7089R1013 wireless outdoor sensor, & two duct sensors.
YTHX9421R5127WW: Kit contains Prestige Thermostat, Equipment Interface Module (EIM), RedLINK Internet Gateway, & two duct sensors.
YTHX9421R7001WW: Kit contains Prestige Thermostat, Equipment Interface Module (EIM), RedLINK Internet Gateway, wireless outdoor sensor, wireless indoor sensor & two duct sensors.

RedLINK Communication:
Frequency: 900 Mhz frequency range
Re-Sync Time: RedLINK devices re-establish communication within 6 minutes after AC power resumes.

Temperature Setting Range:
Heating: 40 to 90 °F (4.5 to 32 °C)
Cooling: 50 to 99 °F (10 to 37 °C)

Temperature Sensor Accuracy:
± 1.5 °F at 70 °F (0.75 °C at 21.0 °C)

Humidification Setting Range: 10% to 60% RH

Dehumidification Setting Range: 40% to 80% RH

Humidity Display Range: 0% to 99%

Humidity Sensor Accuracy:
± 5% RH from 30% to 50% RH at 75 °F (24 °C)

Cool Indication:
Displays "Cool On" when the thermostat turns the cooling on.

Heat Indication:
Displays "Heat On" when the thermostat turns the heating on.

Auxiliary Heat Indication:
Displays "Aux Heat On" when the thermostat turns the auxiliary heat on.

Interstage Differential:
Comfort: The thermostat keeps the indoor temperature within 1 degree of the setpoint (droop less control). The thermostat turns on stage 2 when the capacity on stage 1 reaches 90%.
When the interstage differential is set to 1.0 or higher, the thermostat stages the equipment based on how far the indoor temperature is from the setpoint.

Clock Accuracy:
1 minute per month at 77 °F (25 °C). ± 2 minutes per month over the operating ambient temperature range. Updates automatically when Gateway/Internet is used.

Mounting Means:
Thermostat mounts directly on the wall in the living space using mounting screws and anchors provided. Fits a horizontal 2 x 4 in. junction box. Use a cover plate and its mounting bracket to mount the thermostat onto a vertical 2 x 4 in. junction box.
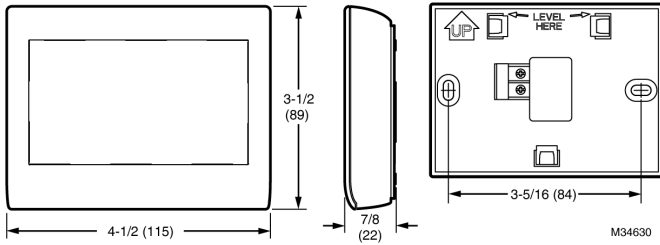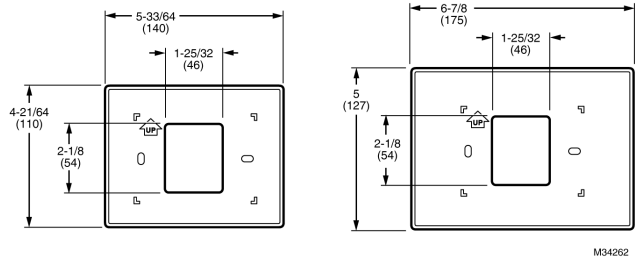Equipment Interface Module (EIM) mounts on HVAC equipment or on a wall in the equipment room.

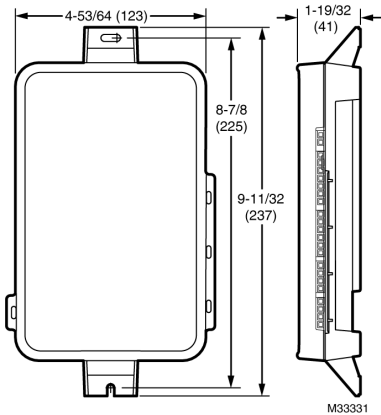| Product	Part Number	Operating Ambient Temperature	Operating Relative Humidity	Shipping Temperature	Physical Dimensions in Inches (mm)	Color(s)
Thermostat	THX9421R5021WW	32 to 120 °F (0 to 48.9 °C)	5% to 90% Non-Condensing	-20 to 120 °F (-28.9 to 48.9 °C)	4-1/2 x 3-1/2 x 7/8 (115 x 88 x 22)	Front-White, Side-White
Equipment Interface Module	THM5421R1021	-40 to 165 °F (-40 to 73.9 °C)	5% to 95% Non-Condensing	-20 to 165 °F (-28.9 to 73.9 °C)	9-11/32 x 4-53/64 x 1-19/32 (237 x 123 x 41)	Gray
Cover Plate (Sold Separately)	THP2400A1027	THP2400A1027 cover plate assembly contains two cover plates (small and large), one bracket, two #6-32 x 5/8 flat head screws and two #6-32 x 1/4 pan head screws.			Cover plate images and dimensions shown below.	White

Dimensions of THX9421 Prestige IAQ thermostat in in. (mm).
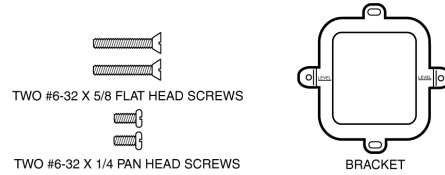

Dimensions of THX9421 Prestige IAQ cover plates in in. (mm).

Dimensions of Equipment Interface Module in in. (mm).

Cover plate screws and bracket.

TWO #6-32 X 5/8 FLAT HEAD SCREWS

TWO #6-32 X 1/4 PAN HEAD SCREWS

BRACKET