

75F® HyperStat™

All-in-one commercial thermostat and humidistat with 8 on-board sensors for superior IAQ management and localized temperature control



- Occupancy, temperature, light, humidity, sound, CO₂ and optional VOC and particulate matter (PM2.5 and PM10)
- TFT LCD display with touch slider and user buttons
- (6) Onboard relays
- (3) Analog outputs
- (2) Thermistor inputs
- (2) Analog inputs

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Give your occupants the power of IAQ management and localized temperature control with 75F's HyperStat, an all-in-one thermostat and humidistat thoughtfully crafted to support healthy, comfortable spaces. Each stat has up to eight on-board sensors for a complete picture of IAQ in your zone and has control capabilities for three-stage equipment to fine-tune sequences for optimal building health.

The HyperStat works out of the box with the 75F intelligent building solution. Replacing non-connected thermostats with the HyperStat's cloud-enabled capabilities is as easy as swapping out the wires. The sleek, contemporary design will look right at home in any space.



OVERVIEW

The 75F HyperStat is an all-in-one IAQ sensing station, thermostat and humidistat. It brings HVAC equipment online for secure remote management from any smartphone or connected device. Occupants can make temperature adjustments within predefined limits from a touch slider, TFT LCD screen, or buttons.

This device supports the WELL Building standard for healthy buildings and tracks occupancy, temperature, dedicated CO2, humidity, light, sound, and optional VOC and particulate matter measurements every 60 seconds.

KEY FEATURES

- Built-in sequences for occupancy detection mean your HyperStat prioritizes health and comfort when it matters most and saves valuable energy when spaces are empty.
- Pre-loaded equipment profiles allow for interfacing to a wide variety of staged and fully modulating equipment.
- Facility directors have real-time access to sensor data and remote control over building parameters through the HyperStat's integration with Facilisight, 75F's building intelligence suite of web and mobile apps.
- Auto Away and Auto Forced Occupied settings override building schedules to save energy with setback modes in unoccupied spaces and enhance comfort by conditioning zones that become occupied during unoccupied hours.

ADDITIONAL FEATURES

- Over-the-air firmware updates.
- Sensor bus for power and communication
- Commissions and communicates with the Central Control Unit in just minutes with Bluetooth pairing

EQUIPMENT CONTROL

Supports staging of cooling, heating or fan (up to 3 stages) or fully modulating:

- Rooftop Units
- Water Source Heat Pumps
- Unit Heaters
- PTAC Units
- 2-Pipe Fan Coil Units
- Induction Units



INCLUDED

- (1) HyperStat
- (2) Mounting screws



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MECHANICAL

Dimensions	6.5" x 4.5" x 1.15" (165mm x 115mm x 29 mm)
Mounting	(2) screws in drywall
Screen	2.8" 240x320 pixel TFT LCD
Operating Range	32°F to 122°F (0°C to 50°C)

SENSORS

Temperature	Operating range between 32°F to 122°F (0°C to 50°C); typical accuracy of +/- 1°F or 0.2°C
Humidity	Operating range between 20 to 85% noncondensing; Typical accuracy of +/- 2% RH
Dedicated CO ₂ Sensor	Range 0-40'000 ppm; Accuracy +/-30ppm over range of 400-10,000ppm and lifetime of 15 years
Light	Ambient light sensor; high-accuracy UV index sensor; matches erythema curve; < 100 mix resolution
Sound	40-120dB response for 100 Hz to 10Khz
Occupancy	Passive Infra Red (PIR) with detection range of 4m with 30-degree angle

OPTIONAL SENSORS

PM2.5, PM10	Detection range of 0-1000ug/m3 and accuracy of +/- 10ug/m3 (PM2.5, 0-100 ug/m3) or +/- 25ug/m3 (PM10, 0-100ug/m3)
VOC	TVOC: 0-60'000 ppb. Typical Accuracy - 15% of measured value

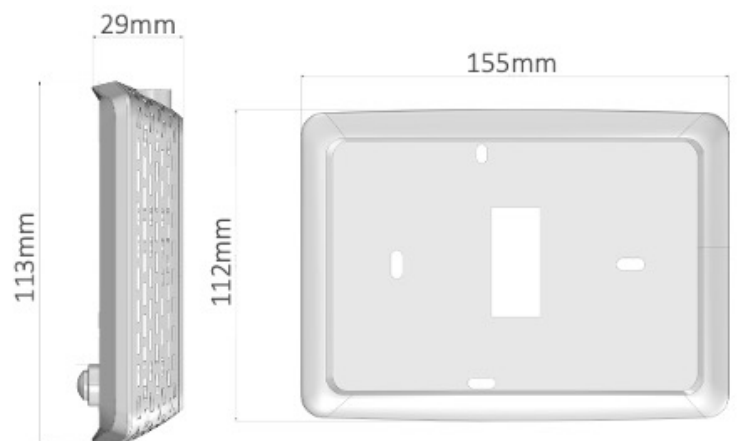


ELECTRICAL

Power	24V AC/DC (+/-15%) with nominal power consumption 1.0W and maximum consumption of 2.5W
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COMMUNICATIONS

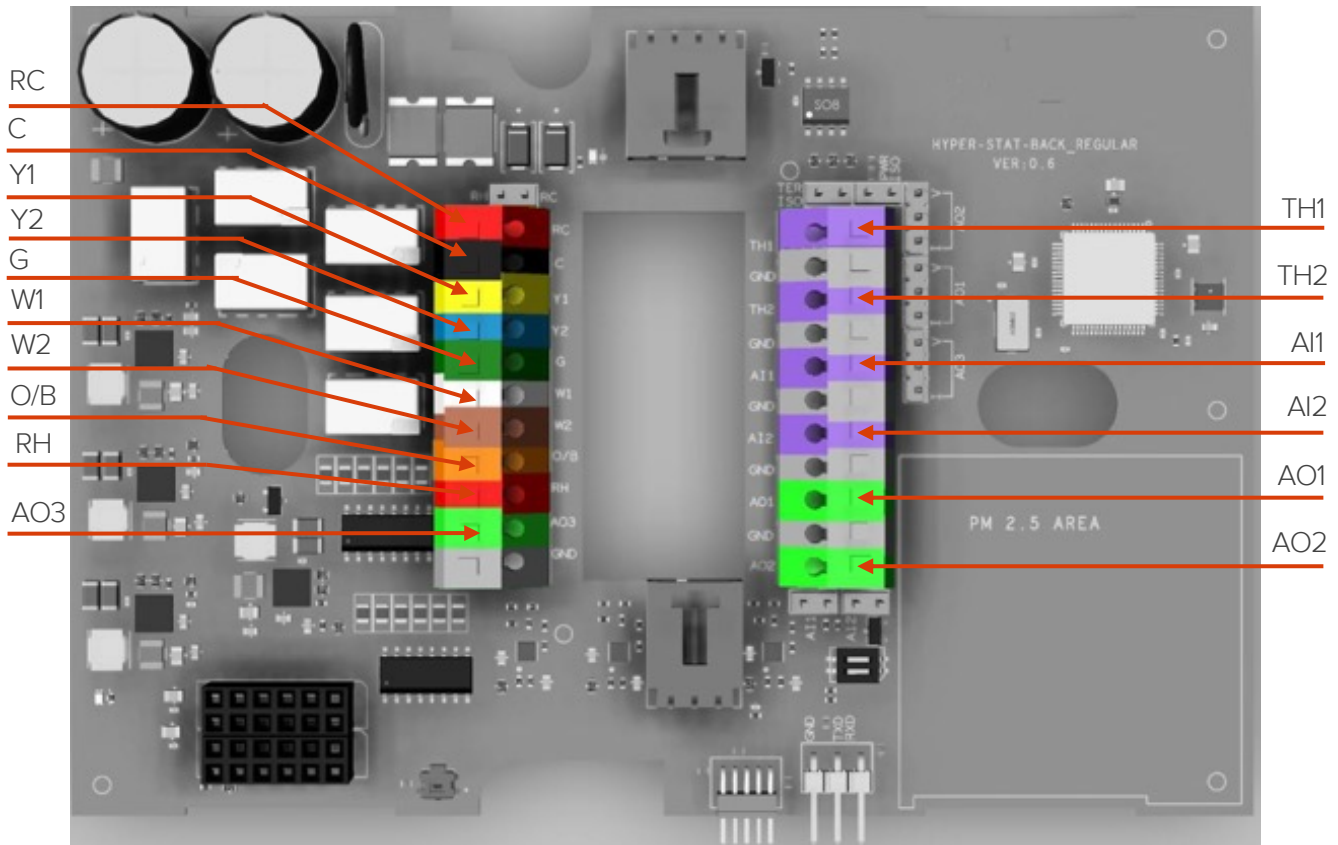
Bluetooth	BLE4.1; used during commissioning
Mesh	900 MHz IEEE 802.15.4-compliant; used for device communication on mesh network
Wired	4 wire RS-485 interface 3 wire connector for low-power sensor bus



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I/O

Inputs	(2) 10k type-2 thermistor inputs with 2% accuracy (2) 0-10V analog voltage inputs with 2% detection accuracy
Outputs	(6) 24V dc/1A relays (3) 0-10V/4 -20ma (max load of 20mA per channel) analog outputs



WALL PLATE

Dimensions 6.1" x 4.5" (155mm x 113 mm)