75F® Smart Stat™

All-in-one commercial thermostat and humidistat with seven onboard sensors for indoor air quality management and thermostatic control.

- Temperature, Humidity, CO_2, VOC, Light, Sound, Supply Air Temperature, and Occupancy Sensors

- 6 onboard relays

- 2 thermistor inputs

- 24V AC/DC power

75F® Smart Stat™

Upgrade your building with an all-in-one wireless thermostat and humidistat, complete with 7 onboard sensors for improved comfort and IAQ. The Smart Stat requires no networking or field programming, making spaces more comfortable and efficient.

The Smart Stat controls almost all commercial equipment types requiring single-setpoint control: Single or two stage equipment, PTAC and VTAC units, two and four pipe fan coils, induction units, heat pumps, split systems, unit heaters, hydronic and electric baseboard heaters, dehumidifiers, and more. This makes it the perfect choice for environments where individual zone sensing, integrated display, and improved IAQ are desired.

OVERVIEW

The 75F Smart Stat is an all-in-one thermostat, humidistat, and IAQ sensing station. It brings HVAC equipment online for secure remote management from any smartphone or connected device. Occupants can make temperature adjustments within predefined limits or adjust fan settings from either a radial touch-illuminated interface or the 75F Occupant App.

This device supports the WELL building standard for healthy buildings and tracks occupancy, temperature, VOC, derived CO_2, humidity, light and sound measurements every 60 seconds for integration to a built-in analytics package.

KEY FEATURES

• **Onboard IAQM for Maximal Productivity and Comfort.** The 75F Smart Stat adheres to The WELL Building Standard metrics for indoor air quality without running wires or integrating data across multiple different sensor units. This real-time data visibility assures a more comfortable and productive indoor environment while achieving energy savings.

• **Personalized Zone Control, Right Out of The Box.** The Smart Stat controls almost any existing HVAC equipment as a quick-install retrofit or new-build solution.

• **Web and mobile access.** Facilisight® from 75F gives owners and facility managers remote control, monitoring and analytics of IAQ Smart Stat data for building and equipment performance across multiple sites, floors, and zones. The 75F Occupant App includes mobile temperature and lighting control, plus geofencing and feedback tools.

• **Improved installation.** With easy Bluetooth pairing and no programming required, installing a Smart Stat takes minutes. Machine learning from 75F Athena™ factors building position and load history, real-time sensor data, and outside weather forecasts to predictively manage building zones.

• **Secure Wireless Mesh Network.** Unlike WiFi connected thermostats, Smart Stat uses 75F's secure and proprietary encrypted 900Mhz mesh-network for lightweight, best-path communications between devices and with the 75F Central Control Unit™.

ADDITIONAL FEATURES

• Radial-touch user interface to adjust zone temperature
• Commissions in just minutes with Bluetooth pairing
• 30' temperature probe included to measure supply air temperature
• BACNet IP available points

INCLUDED

(1) Smart Stat, (1) Airflow Sensor

VARIATION

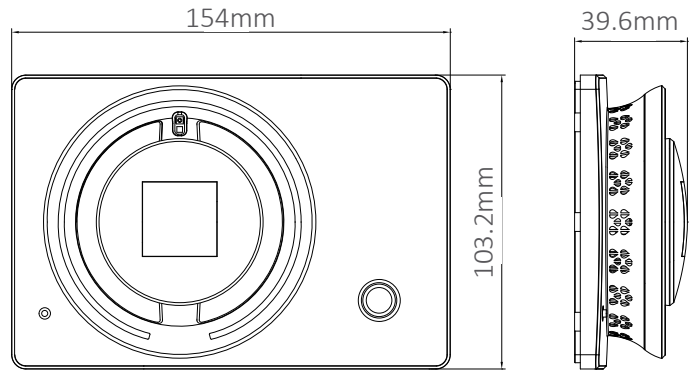Additional temperature probe for remote temperature placement

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MECHANICAL

Dimensions	154mm x 103.2mm x 39.6mm
Mounting	(2) screws in drywall
Operating Temp	Operating temp. 0-50˚C (32-122˚F)

I/O

Inputs	(2) 10K Type-2 thermistor inputs (2) 0-10V analog inputs
Outputs	(6) Relays 125V AC/0.3A, 30V DC/1A

ELECTRICAL

Power	24V AC for power. Consumption < 1VA

COMMUNICATIONS

Bluetooth	Used during commissioning and wireless triangulation
Mesh	IEEE 802.15.4-compliant; used for device communication on mesh network
Wired	4 wire RS-485 interface.

ACCURACY AND RANGE

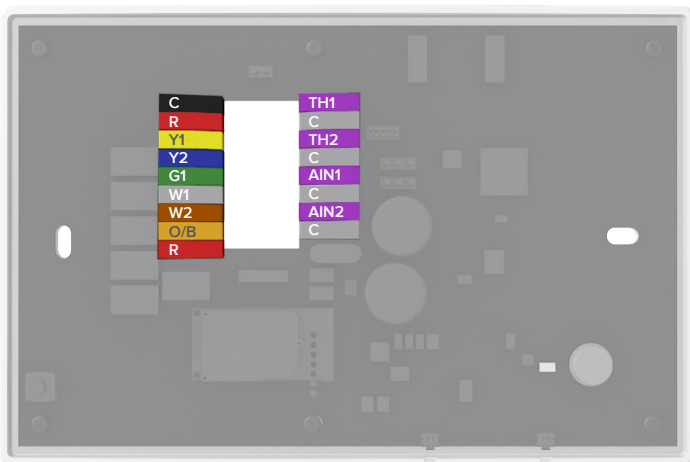Temperature (typical +/- 0.2C)

Humidity (typical +/- 2% RH)

VOC sensor with derived CO_2: 0 – 60,000 ppm; TVOC: 0 – 60,000 ppb; Typical Accuracy 15% of measured value

Optional dedicated CO_2 sensor: 0 – 2,000 ppm

High accuracy UV index sensor; matches erythermal curve, ambient light sensor, <100 mlx resolution

Sound sensor 40-120dB

Occupancy sensor 35-degree field of view