

75F® Multi Sensor

An all-in-one wall sensor supporting indoor air quality, comfort, and efficiency



- Senses for temperature, humidity, occupancy, and CO₂
- Enables out-of-the-box high-quality zoning control when combined with the 75F® Smart Node™
- PIR occupancy sensor and algorithms for Auto Away and Auto Forced Occupied provide additional energy savings opportunities

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75F's suite of sensor offerings gives building owners the power of IoT-connected devices for optimal efficiency and comfort in spaces where it matters most. Measure to manage with the 75F Multi Sensor, a high-precision CO₂, occupancy, temperature and humidity sensor that connects with the 75F® Smart Node™ or Stat to deliver data that influences equipment control. This device can be daisy chained with other sensors on the PoR sensor bus to provide an extensible sensor network.



OVERVIEW

The 75F® Multi Sensor is an all-in-one sensor providing temperature, humidity, occupancy, and CO₂ to augment the 75F® Smart Node™ for high-quality performance in zoning systems. This small sensor informs air quality and occupancy-based energy sequences for optimal IAQ and efficiency.

The sensor plugs into the standard sensor bus that 75F offers on its nodes and stats. The modern, low-profile design appeals to aesthetics and allows the sensor to blend in with office environments.

KEY FEATURES

- Accurate temperature readings (typical +/- 1F)
- Accurate humidity readings (typical +/- 2% R.H.)
- Accurate occupancy measurement with a measuring angle of 110-degree angle and 9.8 foot (3 meter) distance
- CO₂ sensitivity and accuracy meets Title 24. +/- 75 ppm at a 400 to 1000 ppm concentration
- Proprietary 1-wire protocol to communicate with a master device such as an HIA or the Smart Node
- Can be daisy-chained with other sensors to provide extensible sensor network

ADDITIONAL FEATURES

- PoR Sensor bus for power and communication
- Sleek design, low-impact aesthetics
- Factory pre-calibrated
- Easily mounted
- Up to 4 devices can be connected on the Bus

COMPATIBLE APPLICATIONS

- 75F® Dynamic Airflow Balancing™
- 75F® Outside Air Optimization™
- 75F® Smart VAV with Reheat™
- 75F® Single-Stage Equipment
- HyperStat Remote Sensing



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MECHANICAL

Dimensions 2.4" x 0.83" (60.9mm x 21.1mm)

Mounting Wall Mount

Operating Temperature 32°F – 122°F (0°C – 50°C)

SENSORS

Temperature 32°F – 122°F (0°C – 50°C); typical accuracy of +/- 1°F or 0.5°C

Humidity Sensing range between 20 to 85%RH; Typical accuracy of +/- 2% RH

CO2 +/- 75 ppm at 400 and 1000 ppm concentration when measured at sea level and 77°F (25°C)

Occupancy Senses targets within 3mtr distance and 110 degree angle.

ELECTRICAL

Power 24VDC (+/-10%) over the PoR

COMMUNICATIONS

Wired Two wire Power over RS485 line to enable communication and power. Up to 4 sensors can be connected on the bus.

