SPEC SHEET

75F® Multi Sensor

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



- Senses for temperature, humidity, occupancy, and CO_2
- Enables out-of-the-box Title 24 compliance when combined with the
 75F® Smart Node™



75F® Multi Sensor

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 CO_2 , occupancy, temperature and humidity sensor that connects with the 75F® Smart Node $^{\text{m}}$ or Stat to deliver data that influences equipment control. This device can be daisy chained with other sensors on the sensor bus to provide an extensible sensor network.



OVERVIEW

The 75F® Multi Sensor is an all-in-one sensor providing temperature, humidity, occupancy, and CO_2 to augment the 75F® Smart Node^{$^{\text{M}}$} for full Title 24 compliance. 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 100-degree angle and 8ft height
- \cdot CO $_2$ 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

- 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





75F[®] Multi Sensor



Dimensions	2.4" x0.83" (60.9mm x 21.1mm)
Mounting	Wall Mount
Operating Temperature	32°F – 122°F (0°C – 50°C)

SENSORS

Temperature	14°F — 140°F (-10°C — 60°C); typical accuracy of +/- 1°F or 0.2°C
Humidity	Sensing range between 0 to 100%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 8ft distance and 100 deg angle.

ELECTRICAL

Power	3.3VDC (+/-10%)
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COMMUNICATIONS

Wired	Sensor bus for power and
	communication; proprietary 1 wire
	protocol to communicate with a
	master device. Up to 4 sensors can
	be connected on the bus.







