## SPEC SHEET

# 75F<sup>®</sup> Multi Sensor

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



- Senses for temperature, humidity, occupancy, and CO<sub>2</sub>
- Enables out-of-the-box Title 24 compliance when combined with the 75F<sup>®</sup> Smart Node<sup>™</sup>



### 75F<sup>®</sup> Multi Sensor

75F's suite of sensor offerings gives building owners the power of IoTconnected devices for optimal efficiency and comfort in spaces where it matters most. Measure to manage with the 75F Multi Sensor, a highprecision CO<sub>2</sub>, occupancy, temperature and humidity sensor that connects with the 75F<sup>®</sup> Smart Node<sup>™</sup> 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<sup>®</sup> Multi Sensor is an all-in-one sensor providing temperature, humidity, occupancy, and CO<sub>2</sub> to augment the 75F<sup>®</sup> Smart Node<sup>™</sup> 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**

Airoverse

- 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
- CO<sub>2</sub> 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**

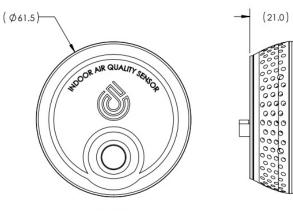
- 75F<sup>®</sup> Dynamic Airflow Balancing<sup>™</sup>
- 75F<sup>®</sup> Outside Air Optimization™
- 75F<sup>®</sup> Smart VAV with Reheat™
- 75F<sup>®</sup> Single-Stage Equipment
- HyperStat Remote Sensing



## 75F<sup>®</sup> Multi Sensor

#### MECHANICAL

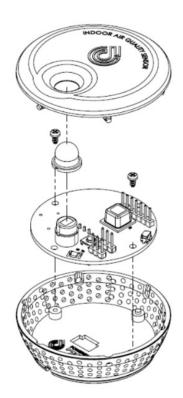
Dimensions	2.4" x0.83" (60.9mm x 21.1mm)
Mounting	Wall Mount
Operating Temperature	32°F – 122°F (0°C – 50°C)



FRONT VIEW

SIDE VIEW





#### **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%)

#### 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.