

75F[®] Multi Sensor

An all-in-one wall sensor supporting indoor air quality, comfort, and efficiency without pulling new wire



- Senses for temperature, humidity, occupancy, and CO₂
- Enables out-of-the-box high-quality zoning control when combined with the 75F[®] Smart Node™ and Connect Module
- PoR sensor bus uses any two wires, including standard 18/2 thermostat cabling for power and communication.
- PIR occupancy sensor and algorithms for Auto Away and Auto Forced Occupied provide additional energy savings opportunities

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 CO₂, occupancy, temperature and humidity sensor that connects with 75F nodes and stats to deliver remote influencing data for equipment control.

Power and communications through standard 2-wire connections, the Multi Sensor eliminates the need for complex wiring and costly installations. 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 75F controllers for high-quality performance in zoning systems. This small sensor informs air quality and occupancy-based energy sequences for optimal IAQ and efficiency, all without pulling new wires.

The sensor plugs into the two-wire PoR sensor bus that 75F offers on its nodes. Up to four Multi Sensors can connect to a single node to provide an average between multiple locations.

KEY FEATURES

- Accurate temperature readings (typical +/- 1F)
- Accurate humidity readings (typical +/- 2% R.H.)
- Occupancy measurement with a measuring angle of 110-degree angle and 10 foot (3 meter) distance
- CO₂ sensitivity and accuracy meets Title 24. +/- 75 ppm at a 400 to 1000 ppm concentration
- Connects over any standard two wires including thermostat, ethernet, twisted pair, or shielded comm wire via 75F's PoR technology. Eliminates the need to pull new wire in retrofits and enables use of affordable 18/2 thermostat wire in new construction.
- 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 PoR bus

COMPATIBLE APPLICATIONS

- CAV
- VAV
- Outside Air Optimization
- Single-Stage Equipment



75F® 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)

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 within 10 feet (3mtr) distance and 110-degree angle.

ELECTRICAL

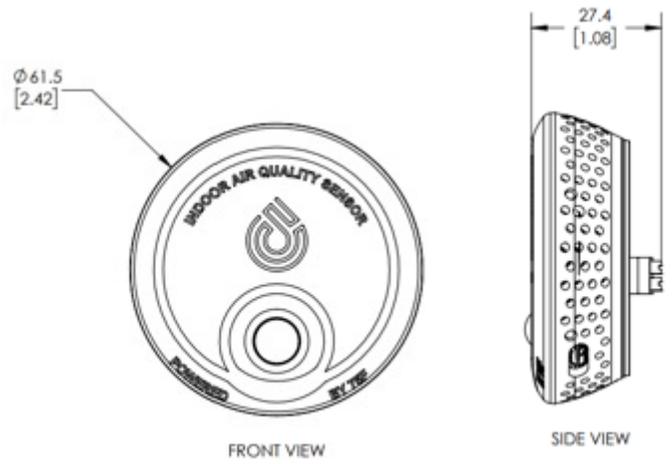
Power 24VDC (+/-10%) over the PoR

COMMUNICATIONS

Wired Two wire Power over RS485 line to enable communication and power.

ORDERING INFORMATION

Wired Multi Sensor – 7X-SE-C77X-X



FRONT VIEW

SIDE VIEW



ISOMETRIC VIEW

