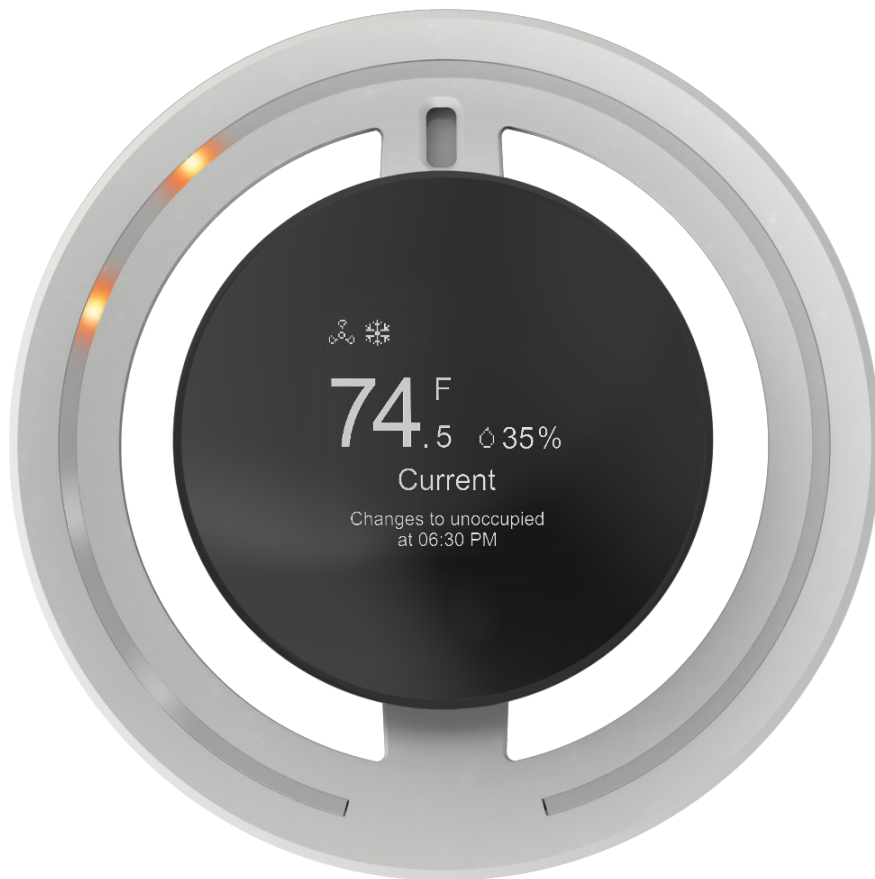


SPEC SHEET

# 75F<sup>®</sup> Local Interface Sensor<sup>™</sup>

Our room sensor and local interface.



Senses:

- Temperature
- Humidity
- Light



# 75F<sup>®</sup> Local Interface Sensor<sup>™</sup>

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 Local Interface Sensor, a room sensor and user interface that takes highly accurate readings of temperature, humidity, and light. This device can be extended to control HVAC equipment when connected to backend interfaces such as the 75F Hyper Stat or Smart Stat.



## OVERVIEW

The Local Interface Sensor<sup>™</sup> is a room sensor and user interface. It can be extended to control HVAC equipment by connecting it to different interface back-end controls including 75F<sup>®</sup> Advanced Lighting<sup>™</sup> Panel Interface and the 75F<sup>®</sup> Smart Stat<sup>™</sup>. The Local Interface Sensor uses Bluetooth for provisioning and communicates with the 75F<sup>®</sup> Central Control Unit<sup>™</sup> using a 900 Mhz wireless mesh network.

## KEY FEATURES

- Temperature sensing
- Humidity sensing
- Light level sensing
- Bluetooth for provisioning
- Can communicate with SN, HIA or LPI via 4 wire interface
- Capable of 900 Mhz wireless communication with CCU
- Power via 4 wire interface (needs 6.5v)
- Ready to support BACnet

## ADDITIONAL FEATURES

- Touch interface in outer ring
- 128 x 128 pixel OLED display
- Sleek design, low impact aesthetics

## APPLICATIONS

- 75F<sup>®</sup> Dynamic Airflow Balancing<sup>™</sup>
- 75F<sup>®</sup> Outside Air Optimization<sup>™</sup>
- 75F<sup>®</sup> Smart VAV with Reheat<sup>™</sup>
- 75F<sup>®</sup> Hydronic Controls<sup>™</sup>
- 75F<sup>®</sup> Single Stage Equipment<sup>™</sup>
- 75F<sup>®</sup> Advanced Lighting<sup>™</sup>

## INCLUDED

---

(1) Local Interface Sensor

---

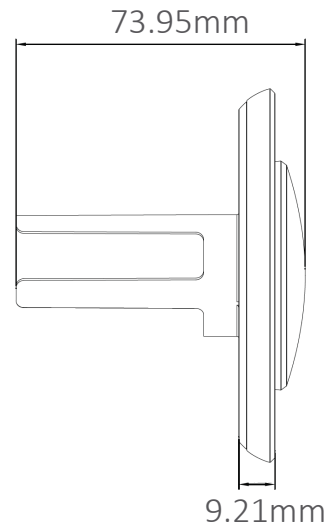
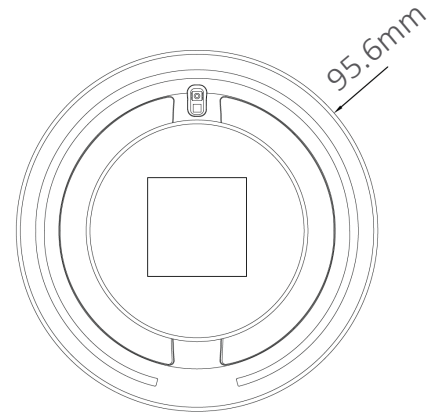
# 75F<sup>®</sup> Local Interface Sensor<sup>™</sup>

## MECHANICAL

<b>Dimensions</b>	73.95mm depth x 95.63mm circumference x 9.21mm plate depth
<b>Screen</b>	128 x 128 pixel OLED display, touch interface in outer ring
<b>Mounting</b>	(1) toggle bolt (requires 32mm hole in wall)
<b>Operating Temp</b>	Operating Environment: 0°F – 122°F
<b>Termination</b>	4 pin connector
<b>Accuracy</b>	Humidity (typical +/- 2% RH), temperature (typical +/- 0.2C)

## ELECTRICAL

<b>Power</b>	6.5V DC provided by Smart Node via 4 wire interface
--------------	---



## COMMUNICATIONS

<b>Bluetooth</b>	Bluetooth for provisioning
<b>Wired</b>	4 wire interface for power and communication

SPEC SHEET

# 75F<sup>®</sup> Wall Sensor<sup>™</sup>

Provides essential measurements of zone temperature and humidity.



- Accurate temperature readings
- Accurate humidity readings
- Sleek design, low impact aesthetics

## 75F® Wall 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 Wall Sensor, a high-precision temperature and humidity sensor that pairs with the 75F Smart Node to deliver data that influences equipment control. This device can be daisy chained with other sensors on the 1-wire bus to provide an extensible sensor network.



### OVERVIEW

The 75F Wall Sensor adds a high precision temperature and humidity sensor that is pre calibrated from the factory. The Wall Sensor is easily mounted on a wall by a single toggle bolt.

A Wall Sensor paired with a 75F® Smart Node™ results in a clean aesthetic in your space while minimizing installation times. The Wall Sensor provides accurate temperature and humidity values from your space and the Smart Node reports these values to the 75F® Central Control Unit™ (CCU).

### KEY FEATURES

- Accurate temperature readings (typical +/-0.2C)
- Accurate humidity readings (typical +/- 2% R.H.)
- Proprietary 1-wire protocol to communicate with a master device such as an HIA or 75F® Smart Node™
- Can be daisy-chained with other sensors on the 1-wire bus to provide extensible sensor network

### ADDITIONAL FEATURES

- 3-wire interface for power and communication
- Sleek design, low impact aesthetics
- Factory pre-calibrated
- Easily mounted

### APPLICATIONS

- 75F® Dynamic Airflow Balancing™
- 75F® Outside Air Optimization™
- 75F® Smart VAV with Reheat™
- 75F® Hydronic Controls™
- 75F® Single Stage Equipment™
- 75F® Advanced Lighting™

### INCLUDED

---

(1) Wall Sensor

---

# 75F® Wall Sensor™

## MECHANICAL

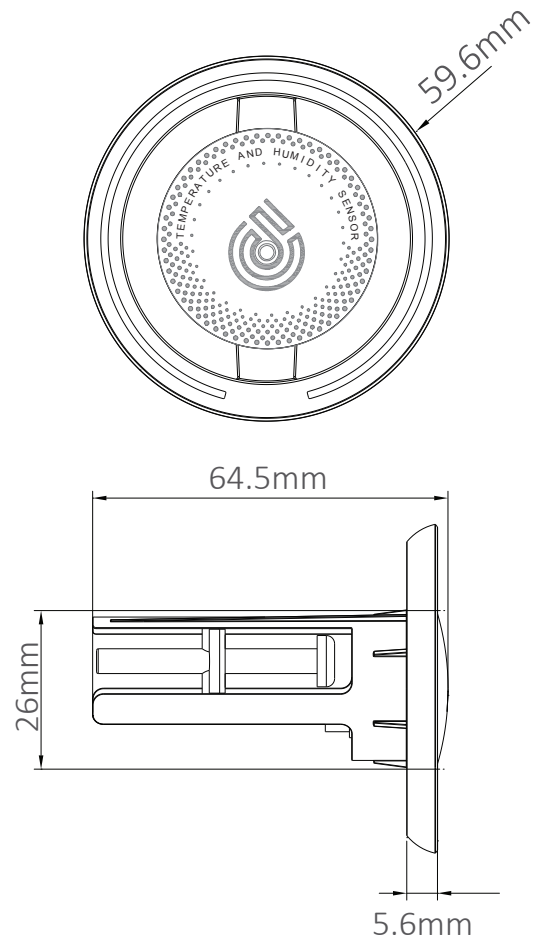
<b>Dimensions</b>	59.6mm circumference x 5.6mm surface depth x 64.5mm total length x 26mm backplate height
<b>Mounting</b>	(1) toggle bolt, requires 1" hole in drywall
<b>Operating Temp</b>	Operating Environment: 0°F – 122°F
<b>Termination</b>	3 pin connector
<b>Accuracy</b>	Humidity (typical +/- 2% RH), temperature (typical +/- 0.2C)

## ELECTRICAL

<b>Power</b>	6.5V DC provided by Smart Node via 3 pin connectors
--------------	--

## COMMUNICATIONS

<b>Wired</b>	3 wire interface for power and communication; proprietary 1 wire protocol to communicate with a master device
--------------	---



SPEC SHEET

# 75F® Wall Sensor (White)™

Provides essential measurements of zone temperature and humidity.



- Accurate temperature readings
- Accurate humidity readings
- Sleek design, low impact aesthetics

## 75F® Wall Sensor (White)™

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 Wall Sensor, a high-precision temperature and humidity sensor that pairs with the 75F Smart Node to deliver data that influences equipment control. This device can be daisy chained with other sensors on the 1-wire bus to provide an extensible sensor network.



### OVERVIEW

The 75F Wall Sensor adds a high precision temperature and humidity sensor that is pre calibrated from the factory. The Wall Sensor is easily mounted on a wall by a single toggle bolt. The white version comes without the ring for a more minimalistic look.

A Wall Sensor paired with a 75F® Smart Node™ results in a clean aesthetic in your space while minimizing installation times. The Wall Sensor provides accurate temperature and humidity values from your space and the Smart Node reports these values to the 75F® Central Control Unit™ (CCU).

### KEY FEATURES

- Accurate temperature readings (typical +/-0.2C)
- Accurate humidity readings (typical +/- 2% R.H.)
- Proprietary 1-wire protocol to communicate with a master device such as an HIA or 75F® Smart Node™
- Can be daisy-chained with other sensors on the 1-wire bus to provide extensible sensor network

### ADDITIONAL FEATURES

- 3-wire interface for power and communication
- Sleek design, low impact aesthetics
- Factory pre-calibrated
- Easily mounted

### APPLICATIONS

- 75F® Dynamic Airflow Balancing™
- 75F® Outside Air Optimization™
- 75F® Smart VAV with Reheat™
- 75F® Hydronic Controls™
- 75F® Single Stage Equipment™
- 75F® Advanced Lighting™

### INCLUDED

---

(1) Wall Sensor

---



# 75F® Wall Sensor (White)™

## MECHANICAL

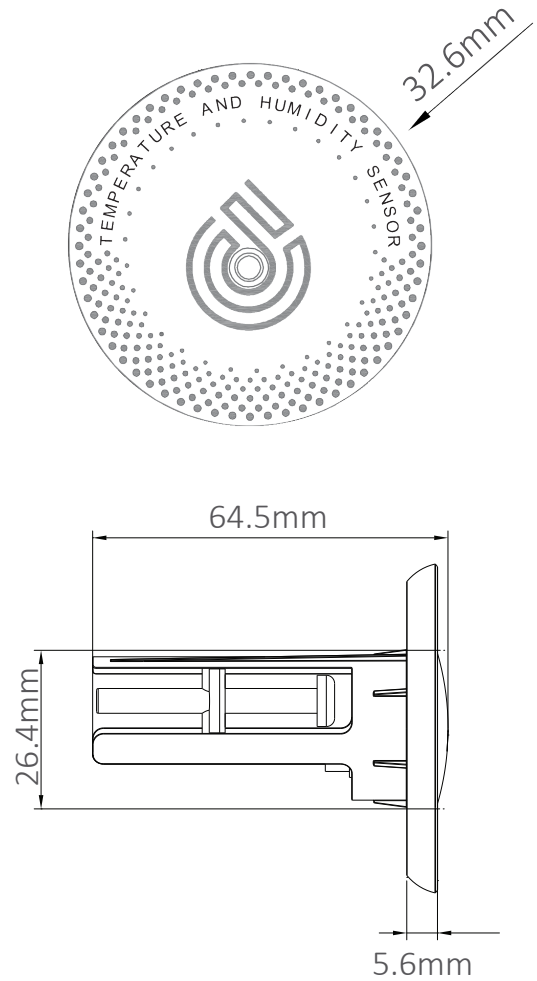
<b>Dimensions</b>	36.2mm circumference x 5.6mm surface depth x 64.5mm total length x 26.4mm backplate height
<b>Mounting</b>	(1) toggle bolt, requires 1" hole in drywall
<b>Operating Temp</b>	Operating Environment: 0°F – 122°F
<b>Termination</b>	3 pin connector
<b>Accuracy</b>	Humidity (typical +/- 2% RH), temperature (typical +/- 0.2C)

## ELECTRICAL

<b>Power</b>	6.5V DC provided by Smart Node via 3 pin connectors
--------------	---

## COMMUNICATIONS

<b>Wired</b>	3 wire interface for power and communication; proprietary 1 wire protocol to communicate with a master device
--------------	---



SPEC SHEET

# 75F® Wireless Wall Sensor™

A high-precision, pre-calibrated temperature and humidity sensor



- Accurate temperature readings
- Accurate humidity readings
- Wireless Bluetooth communication
- Sleek design, low impact aesthetics

## 75F® Wireless Wall Sensor™

When structural barriers in your space prevent wiring, 75F's Wireless Wall Sensor saves the day. Activating this sensor's highly accurate temperature and humidity readings is as easy as mounting the device to your wall and pairing to your Central Control Unit – the sensor takes care of the rest. It comes pre-calibrated from the factory, and communicates seamlessly with its sister sensors via Bluetooth. Once installed, the Wireless Wall Sensor will keep sharing data for two years before needing a battery change.



### OVERVIEW

The 75F® Wireless Wall Sensor™ adds a high precision temperature and humidity sensor that is pre-calibrated from the factory to a microcontroller and Bluetooth module. The Wireless Wall Sensor uses Bluetooth protocol to communicate with other devices.

### KEY FEATURES

- Accurate temperature readings (typical +/-0.2C)
- Accurate humidity readings (typical +/- 2% R.H.)
- Wireless Bluetooth communication
- 2-year battery life

### ADDITIONAL FEATURES

- Sleek design, low impact aesthetics
- Factory pre-calibrated
- Easily mounted

### APPLICATIONS

- 75F® Dynamic Airflow Balancing™
- 75F® Smart VAV with Reheat™

### INCLUDED

---

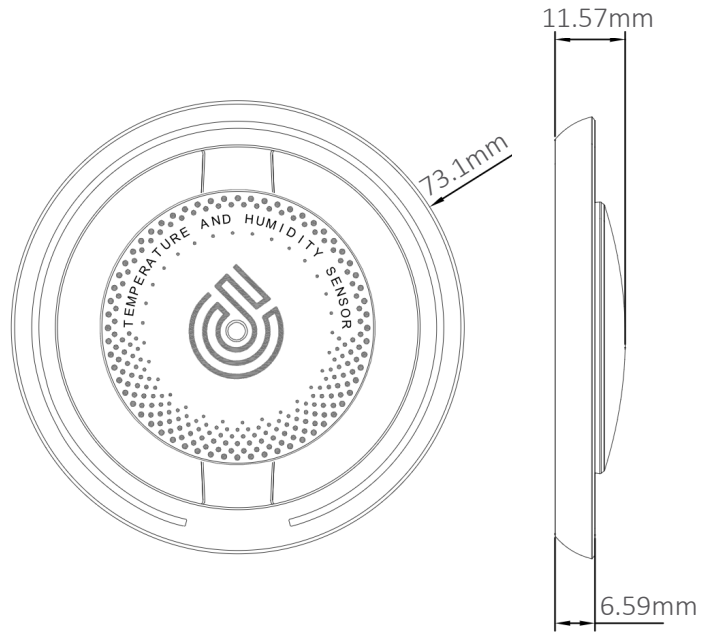
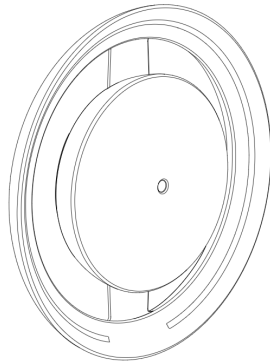
(1) Wireless Wall Sensor

---

# 75F® Wireless Wall Sensor™

## MECHANICAL

<b>Dimensions</b>	73.1mm circumference x 11.57mm total depth x 6.59mm plate depth
<b>Mounting</b>	(1) toggle bolt
<b>Operating Temp</b>	Operating environment: 0°F - 122°F



## COMMUNICATIONS

<b>Wi-Fi</b>	Wi-Fi to connect to internet
<b>Bluetooth</b>	Used during commissioning and wireless triangulation

## I/O

<b>Inputs</b>	5V DC
---------------	-------

## ELECTRICAL

<b>Supply</b>	24V AC/DC
---------------	-----------

SPEC SHEET

# 75F<sup>®</sup> Ceiling Sensor<sup>™</sup>

High-precision temperature and humidity measurement for increased comfort

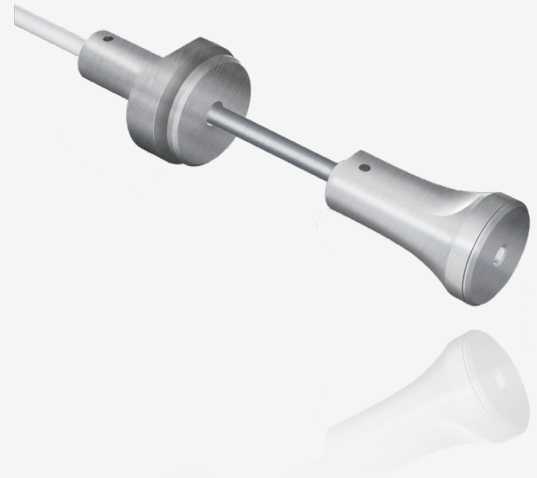


- Accurate temperature readings
- Accurate humidity readings
- Sleek design, low impact aesthetics

## 75F® Ceiling 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. This rings true even for wide open spaces or zones without room for a wall-mounted sensor.

The 75F Ceiling Sensor mounts easily to the ceiling with a threaded bush and is adjustable with a set screw, making temperature and humidity readings not only possible in airy spaces, but accurate, too.



### OVERVIEW

The 75F® Ceiling Sensor™ offers high-precision measurement pre-calibrated from the factory for measuring comfort factors of temperature and humidity. The Ceiling Sensor is easily mounted on a ceiling by a threaded bush. The module drop from the ceiling can be adjusted via a set screw.

The Ceiling Sensor uses a proprietary 1-wire protocol to communicate with other devices such as the 75F® Smart Node™.

### KEY FEATURES

- Accurate temperature readings (typical +/-0.2C)
- Accurate humidity readings (typical +/- 2% R.H.)
- 3-wire interface for power and communication
- Can be daisy-chained with other sensors on the 1-wire bus to provide an extensible sensor network

### ADDITIONAL FEATURES

- Sleek design, low impact aesthetics
- Easily mounted on ceiling via threaded bush
- Module drop can be easily adjusted

### APPLICATIONS

- 75F® Dynamic Airflow Balancing™
- 75F® Smart VAV with Reheat™
- 75F® Single Stage Equipment Controls™

### INCLUDED

---

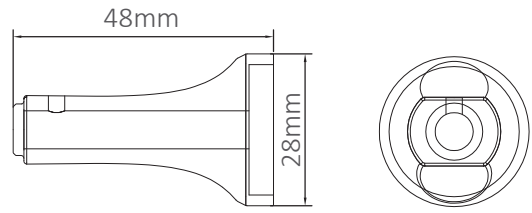
(1) 75F Ceiling Sensor

---

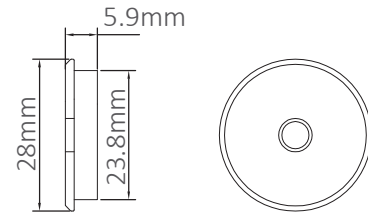
# 75F<sup>®</sup> Ceiling Sensor<sup>™</sup>

## MECHANICAL

<b>Dimensions</b>	48mm body length, 28mm max body height, 45mm male bush length, 32mm male bush max height, 20' included wire, 8" extender for drop adjustments
<b>Mounting</b>	(1) threaded bush, requires 15mm hole in ceiling tile
<b>Operating Temp</b>	Operating environment: 0°F – 122°F
<b>Termination</b>	3 pin connector
<b>Accuracy</b>	Humidity (typical +/- 2% RH), temperature (typical +/- 0.2C)



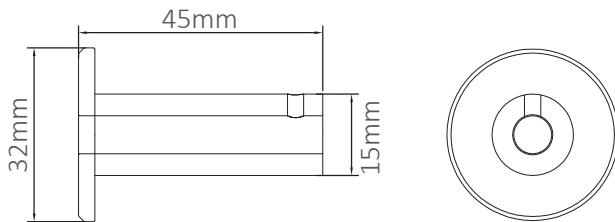
**BODY**



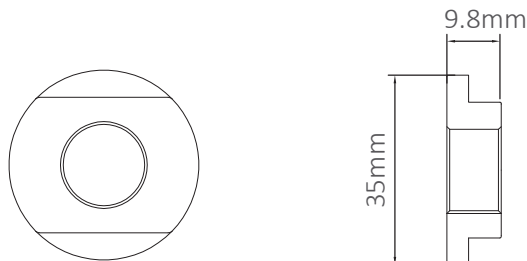
**BODY CAP**

## COMMUNICATIONS

<b>Wired</b>	Proprietary 1-wire protocol to communicate with master devices
--------------	--



**MALE BUSH**



**FEMALE BUSH**

## ELECTRICAL

<b>Power</b>	6.5V DC provided by Smart Node via 3 pin connectors
--------------	---

SPEC SHEET

# 75F<sup>®</sup> Duct Sensor<sup>™</sup>

A flexible terminal equipment controller for nearly any equipment type & brand



- Accurate temperature readings
- Accurate humidity readings
- Sleek design, low impact aesthetics
- 4 side venting holes on pipe
- Variable pipe length



# 75F® Duct 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. Where your HVAC application requires air duct enthalpy values, the 75F Duct Sensor is an effortless and high-value solution. This factory pre-calibrated sensor provides high-precision temperature and humidity readings to a master device, such as 75F's Smart Node in the Outside Air Optimization application. Easily mount the Duct Sensor to your rooftop unit duct with self-drilling screws – even for an exposed duct, this low-impact aesthetic device will look modern and unobtrusive in your space.



## OVERVIEW

The 75F® Duct Sensor™ offers high-precision measurement pre-calibrated from the factory for measuring comfort factors of temperature and humidity. The Duct Sensor is easily mounted on an RTU duct by self-drilling screws.

The Duct Sensor uses a proprietary 1-wire protocol to communicate with other devices such as the 75F® Smart Node™ (OAO version).

## KEY FEATURES

- Accurate temperature readings (typical +/-0.2C)
- Accurate humidity readings (typical +/- 2% R.H.)
- 3 wire interface for power and communication
- Proprietary 1 wire protocol to communicate with a master device

## ADDITIONAL FEATURES

- Sleek design, low impact aesthetics
- 4 side venting holes on pipe
- Variable pipe length
- Easily mounted with self-drilling screws

## APPLICATIONS

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

## INCLUDED

---

(1) Duct Sensor

---

# 75F<sup>®</sup> Duct Sensor<sup>™</sup>

## MECHANICAL

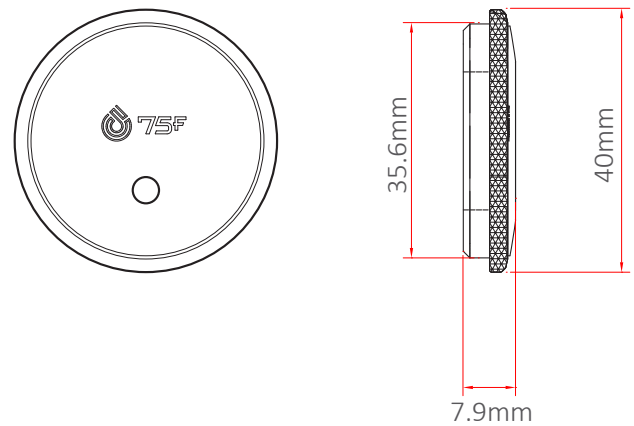
<b>Dimensions</b>	Back plate: 64mm x 7mm Pipe: 36mm x 10.6mm diameter
<b>Mounting</b>	Self-drilling screws, requires 1/2" hole in duct
<b>Operating Temp</b>	Operating Environment: 0°F – 122°F
<b>Termination</b>	3 pin connector
<b>Accuracy</b>	Humidity (typical +/- 2% RH), temperature (typical +/- 0.2C)

## ELECTRICAL

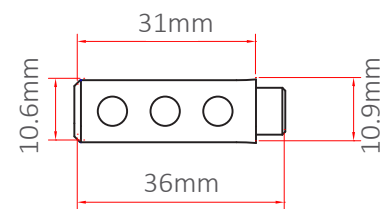
<b>Power</b>	6.5V DC provided by Smart Node via 3 pin connectors
--------------	---

## COMMUNICATIONS

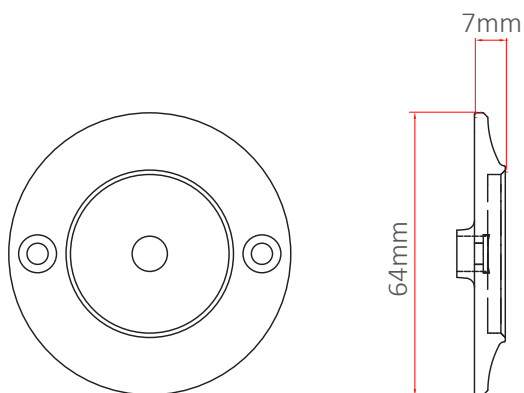
<b>Wired</b>	3 wire interface for power and communication; proprietary 1 wire protocol to communicate with a master device
--------------	---



FRONT PLATE



PIPE



BACK PLATE

SPEC SHEET

# 75F<sup>®</sup> Flush Sensor<sup>™</sup>

A flexible terminal equipment controller for nearly any equipment type & brand



- Accurate temperature readings
- Accurate humidity readings
- Sleek design, low impact aesthetics

## 75F® Flush 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. The Flush Sensor provides accurate temperature and humidity values from your space to the Smart Node, which reports these values to the 75F® Central Control Unit™ (CCU) for zone monitoring and control. This sleek device mounts to a wall or metal beam duct with self-drilling screws – saving you time and money on installation.



### OVERVIEW

The 75F® Flush Sensor™ adds a high precision temperature and humidity sensor that is pre calibrated from the factory. The Flush Sensor is easily mounted on a wall or metal beam duct by self-drilling screws.

Unlike a Wall Sensor it does not involve drilling a hole for the mounting or running the wiring behind the surface. A Flush Sensor paired with a 75F® Smart Node™ results in a clean aesthetic in your space while minimizing installation times.

### KEY FEATURES

- Accurate temperature readings (typical +/-0.2C)
- Accurate humidity readings (typical +/- 2% R.H.)
- 3 wire interface for power and communication
- Proprietary 1 wire protocol to communicate with a master device

### ADDITIONAL FEATURES

- Wireless communication to the 75F® Central Control Unit™ (CCU)
- Sleek design, low impact aesthetics
- Easily mounted with self-drilling screws; does not involve drilling holes or wiring

### APPLICATIONS

- 75F® Dynamic Airflow Balancing™
- 75F® Smart VAV with Reheat™

### INCLUDED

---

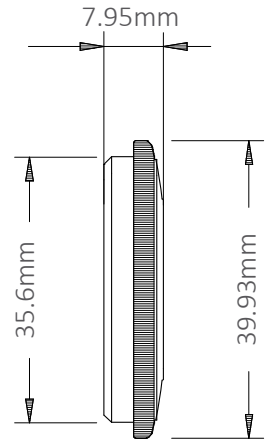
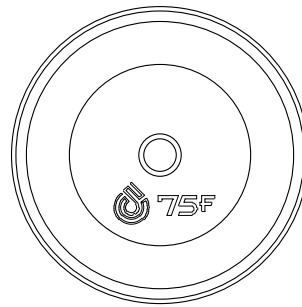
(1) Flush Sensor

---

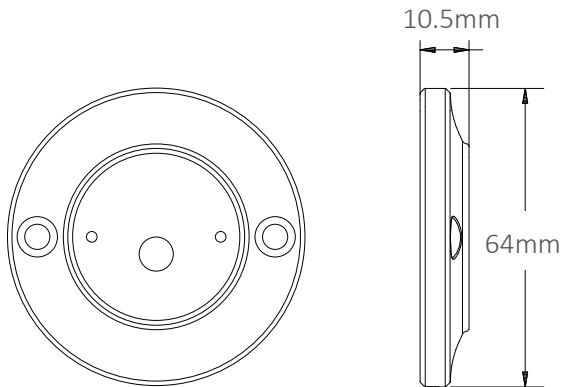
# 75F<sup>®</sup> Flush Sensor<sup>™</sup>

## MECHANICAL

<b>Dimensions</b>	Back plate: 64mm x 10.5mm Front plate: 39.93mm x 7.95mm
<b>Mounting</b>	Self-drilling screws
<b>Operating Temp</b>	Operating Environment: 0°F – 122°F
<b>Termination</b>	3 pin connector
<b>Accuracy</b>	Humidity (typical +/- 2% RH), temperature (typical +/- 0.2C)



**FRONT PLATE**



**BACK PLATE**

## COMMUNICATIONS

<b>Wired</b>	3 wire interface for power and communication; proprietary 1 wire protocol to communicate with a master device
--------------	---

## ELECTRICAL

<b>Power</b>	6.5V DC provided by Smart Node via 3 pin connectors
--------------	---