

# INSTALLATION GUIDE

# HYPERSENSE 7X-HS-C1W-X

## INTRODUCTION

HyperSense is a subset of HyperStat capable of doing only sensing /monitoring. This Device acts as a wired user interface to Smart Node running a DAB or Lighting Profile. Both powering and communication is done through the 4-wire cable harness and hence wiring effort is minimal.

## PACKAGE CONTENTS

- HyperSense device
- Mounting accessories

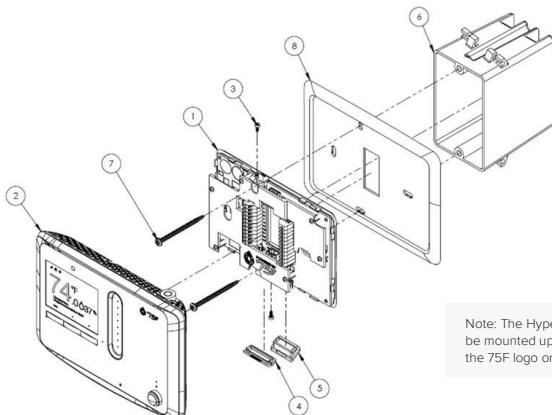
## SPECIFICATIONS

<b>Power</b>	Power Source: 6.5 DC input SmartNode
<b>Operating range</b>	Humidity 20-85% non-condensing. Temperature 0 to 122°F (-17 to 50°C)
<b>Communication</b>	4-wire interface for RS 485 communication @ 115200 baud and 6.5V DC, 100mA power source
<b>Onboard Sensors</b>	CO2 sensor with a range of 0 - 40,000 ppm, accuracy of +/-30ppm (0 - 5000ppm, 25C). Drift +/- 50ppm over 400 -5000ppm range over a lifetime of 15 years VOC sensor with derived e-CO2; Typical Accuracy: 15% of measured value; TVOC: 0 - 60,000 ppb; CO2eq: 0 - 60,000 ppm; Drift: 1.3% of the measured value per year Occupancy sensor based on passive infrared (PIR) with detection range of 4m with 15-degree angle Light Sensor. Ambient light sensor • <100 LUX resolution • High-accuracy UV index sensor • Matches erythermal curve Sound sensor with 40-120dB response for 100Hz to 10KHz PM2.5, PM10 sensor (optional). Detection range of 0-1000µg/m3 and accuracy of +/-10µg/m3 (PM2.5, 0-100µg/m3) or +/-25µg/m3 (PM10, 0-100µg/m3). Maximum long-term mass concentration precision limit drift: <ul style="list-style-type: none"><li>• 0 to 100 µg/m3 ±1.25 µg/m3/year</li><li>• 100 to 1000 µg/m3 ±1.25 % mV/year</li></ul>
<b>Inputs</b>	2 x 10K Type-2 thermistor inputs with 2% accuracy 2 x 0-10V Analog voltage inputs with 2% detection accuracy (2-10V) Touch slider for temperature control along with 3 mechanical buttons
<b>Outputs</b>	2.8" 240x320 pixel TFT display

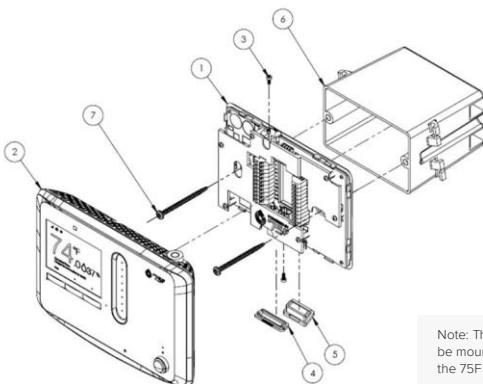
## PRECAUTIONS

- Failure to wire devices with the correct polarity when using a shared transformer may result in damage to any device powered by the shared transformer.
- Turn off the power before wiring. Never connect or disconnect the wiring with the power turned on. Do NOT allow live wires to touch the circuit boards.
- Install in accordance with all state and local codes.
- Do not connect the front to the back plate assembly when the power is ON.

## MOUNTING



Note: The HyperSense must always be mounted upright such that you see the 75F logo on the top right corner.



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1. HyperStat Interface - HyperSense

2. HyperStat Main

3. Allen head screws

4. Rubber cover 1

5. Rubber cover 2

6. Gang Box

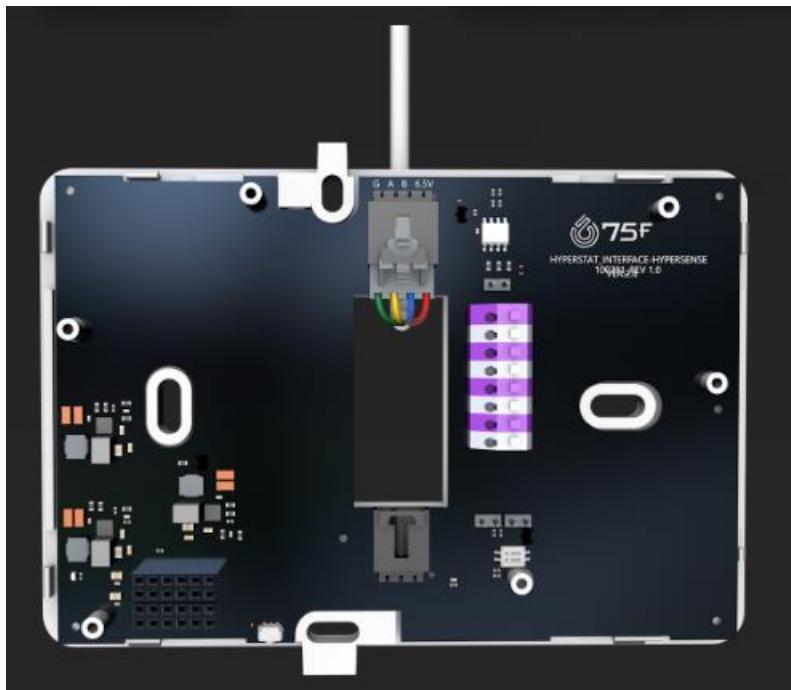
7. PHP screws

8. Back plate

1. Place the HyperStat Interface-HyperSense PCB and the back plate (only if the gang box is fixed vertically) on the gang box such that back plate covers the gang box and fix these two items to the wall gang box with the PHP screws provided in the box.
2. Now align the HyperStat main to lock onto the HyperStat Interface- HyperSense PCB.
3. Use the Allen head screws to make this entire setup tamper-proof.
4. Rubber covers 1 and 2 must be fixed to cover the programming pins.

## POWERING

HyperSense Powers from 6.5V DC available through the 4-wire cable harness from 75F Smart Node product as shown below



## FCC NOTES

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no

guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## ISED NOTES

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- 1) L'appareil ne doit pas produire de brouillage;
- 2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

## RF Exposure warning:

Please maintain minimum separation distance of 20cm from any person during device regular operation.

## 75F TECHNICAL SUPPORT

Installations carried out by non-certified technicians/engineers would void warranty.

For more information on wiring, commissioning, or usage of 75F products, please refer to any documentation provided with the job. If no documentation was provided with the job, please use the 75F Help Center ([support.75f.io](https://support.75f.io)) where you can find application specific wiring schematics and helpful user guides and videos.

If you need more information, please visit [support.75f.io](https://support.75f.io) for instructional videos, installation guides, and more. You can also call +1 888 612 7575 (USA) or 1800 121 4575 (INDIA) if you need technical support.

