

ClimaVision HyperSense

Sophisticated Indoor Air Quality Sensing Station & Occupant Interface



- Occupancy, temperature, light, humidity, sound, CO2, VOC and optional particulate matter (PM2.5 and PM10) sensors
- TFT LCD display with touch slider and user buttons
- (2) Thermistor inputs
- (2) Analog inputs

ClimaVision HyperSense (7C-HS-C1W-X)

The HyperSense caters to use cases where a highly capable remote interface is desired for a ClimaVision Smart Node controlling a VVT or VAV terminal unit. HyperSense is part of ClimaVision's vertically-integrated suite of intelligent building solutions delivering multimode sensing, remote monitoring, and individual zone control for the comfort and productivity of building occupants. The HyperSense works out of the box with the Smart Node.



OVERVIEW

The HyperSense brings building owners up to eight onboard sensors for indoor air quality management (IAQM) bundled into one device. Paired with the Smart Node, the HyperSense's industry-leading sensing turns into granular and sophisticated zone control. The HyperSense delivers various parameter values in a room or zone to the Smart Node, which then carries out advanced control algorithms based on real-time data from the space.

KEY FEATURES

- Provides a large screen with a touch slider and mechanical keys to change values on the Smart Node
- Measures indoor air quality and conveys the information to a Smart Node
- 4 wire interface for RS 485 communication from the Smart Node to the HyperSense

ADDITIONAL FEATURES

- Sensor bus for power and communication with the Smart Node
- Option to connect a particulate matter sensor (configurable to PM2.5 or PM10) (7C-SE-K1X-X)

COMPATIBLE APPLICATIONS

- VVT
- VAV
- Outside Air Optimization
- Single-Stage Equipment Controls

INCLUDED

(1) HyperSense

- (1) Mounting Adapter plate
- (2) Mounting Screws





ClimaVision HyperSense

MECHANICAL

| Dimensions | 6.5" x 4.5" x 1.15" (165mm x 115mm x 29 mm) |
|-----------------|--|
| Mounting | (2) screws in drywall |
| Screen | 2.8" 240x320 pixel TFT LCD |
| Operating Range | 32°F to 122°F (0°C to 50°C) |

SENSORS

| Temperature | Operating range between 32°F to 122°F (0°C to 50°C); typical accuracy of +/- 1°F or 0.2°C |
|-------------------------------------|--|
| Humidity | Operating range between 20 to 85% noncondensing; Typical accuracy of +/- 2% RH |
| Dedicated CO ₂ Sensor | Range 0-40'000 ppm; Accuracy +/-30ppm over range of 400- 10,000ppm and lifetime of 15 years |
| Light | Ambient light sensor; high-accuracy UV index sensor; matches erythemal curve; < 100 mix resolution |
| Sound | 40-120dB response for 100 Hz to 10Khz |
| Occupancy | Passive Infra Red (PIR) with detection range of 4m with 30-degree angle |
| VOC | TVOC: 0-60'000 ppb. Typical Accuracy - 15% of measured value |

OPTIONAL SENSOR

 PM2.5, PM10
 Detection range of

 7C-SE-K1X-X
 0-1000ug/m3 and accuracy of +/

 10ug/m3 (PM2.5, 0-100 ug/m3) or
 +/- 25ug/m3 (PM10, 0-100ug/m3)



ELECTRICAL

| Power | 6.5V DC (+/-15%) with a maximum |
|-------|---------------------------------|
| | power consumption of 2.5W |

COMMUNICATIONS

| Wired | (1) 4 wire RS-485 interface used to |
|-------|---|
| | power and communicate with the Smart Node |

I/O

| Inputs | (2) 10K Type-2 thermistor inputs |
|---------|--|
| | with 2% accuracy |
| | (2) 0-10V analog voltage inputs |
| | with 2% detection accuracy |
| Outputs | (1) One-wire interface (1) TFT Screen |
| | |

WALL PLATE

6.1" x 4.4" (155mm x 113mm)



