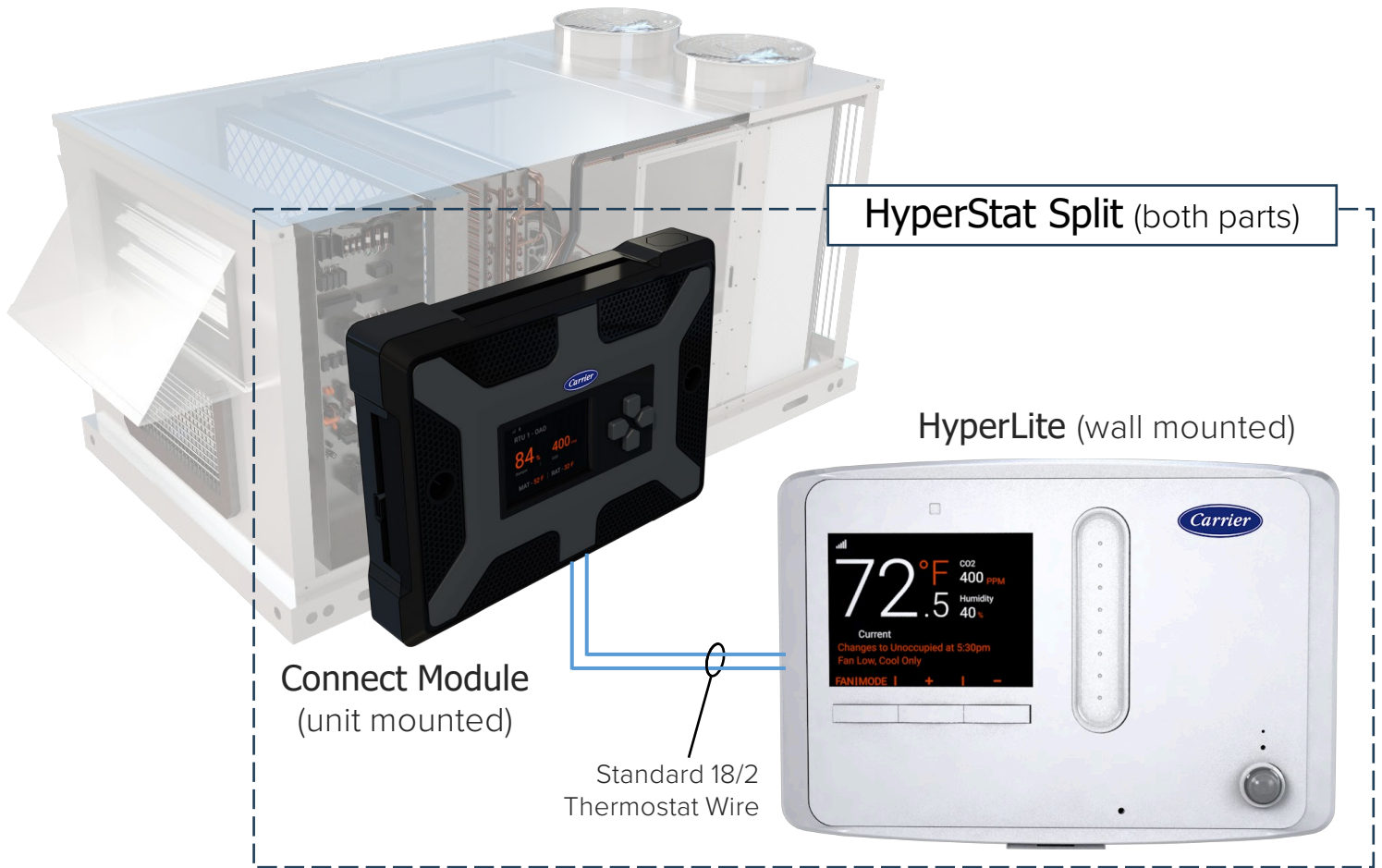




ClimaVision HyperStat Split

Advanced Rooftop Controls Over Two Wires



- Dual enthalpy economizer, demand-control ventilation (DCV), and variable frequency drive (VFD) control
- (7) Onboard sensors for occupancy, temperature, light, humidity, sound, CO2 & optional particulate matter (on the HyperLite)
- (8) Onboard relays
- (8) Universal inputs
- (4) Analog outputs
- BACnet and Modbus

ClimaVision HyperStat Split (7C-HS-K9X-X)

The HyperStat Split empowers contractors to upgrade rooftop units with Advanced Rooftop Control with unprecedented ease, bringing energy efficiency to more buildings than ever before. Using only two existing wires from the RTU to the thermostat, the HyperStat Split provides dual enthalpy economizer, demand-control ventilation, and VFD control. An onboard PIR occupancy sensor enhances energy savings with auto away, and its hefty I/O package enables alerts like condensate overflow and dirty filters.



OVERVIEW

The HyperStat Split is a two-piece solution for single-zone equipment control. It consists of a HyperLite IAQ zone sensor and a Connect Module, the advanced equipment controller. As both an occupant interface and a powerful indoor air quality sensing station, the HyperLite takes user input and collects data on temperature, humidity, light, sound, CO2, occupancy, and particulate matter. The Connect Module communicates with the HyperLite over two wires from the RTU or FCU and performs staged or modular control. With the ability to accept eight universal analog inputs, the Connect Module moves load control away from the zone and into the equipment empowering a more capable retrofit solution.

KEY FEATURES

- Dual enthalpy economizer, demand-control ventilation, and VFD control for full Advanced Rooftop Controls over two wires
- Support for condensate overflow and dirty filter sensors with notifications for advanced alerts
- Real-time access to sensor data and remote control over building parameters through Carrier ClimaVision's building intelligence suite of web and mobile apps
- Secure and proprietary encrypted 900 MHz wireless mesh network allows for lightweight, reliable communications between devices, eliminating the need to run wires throughout a facility

ADDITIONAL FEATURES

- Over-the-air firmware updates
- Power and communication carried over two wires
- In a retrofit application, any two existing thermostat wires can be used
- Plug-and-Play solution for Advanced Rooftop Control

EQUIPMENT CONTROL

Unitary equipment with up to three stages of cooling/heating/fan or fully modulating plus economizer control:

- Rooftop Units
- Fan Coil Units
- Unit Heaters



convenient magnetic cover

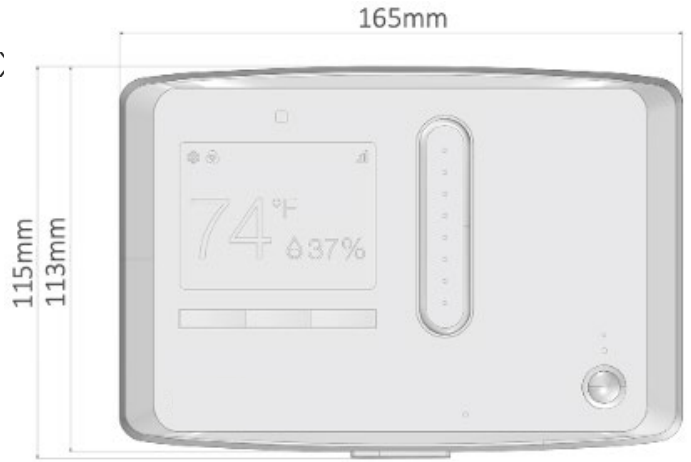
INCLUDED

-
- (1) Each of HyperLite and Connect Module
-
- (1) Mounting Adapter plate
-
- (2) Mounting Screws
-

ClimaVision HyperLite (7C-HS-C13W-)

MECHANICAL

Dimensions	6.5" x 4.5" x 1.15" (165mm x 115mm x 29mm)
Operating Range	-4 – 122°F (-20 to 50°C)
Screen	2.8" TFT
Mounting	(2) screws in drywall



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 CO₂ 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

OPTIONAL SENSOR

PM2.5, PM10 7C-SE-K1X-X Detection range of 0-1000ug/m3 and accuracy of +/- 10ug/m3 (PM2.5, 0-100 ug/m3) or +/- 25ug/m3 (PM10, 0-100ug/m3)

ELECTRICAL

Power Power over RS485 two-wire protocol.

COMMUNICATIONS

Bluetooth Used during commissioning to pair with the CCU

Mesh 900 MHz IEEE 802.15.4-compliant; used for device communication on mesh network

Wired (1) 2-wire Power RS485 used to communicate with Connect Module

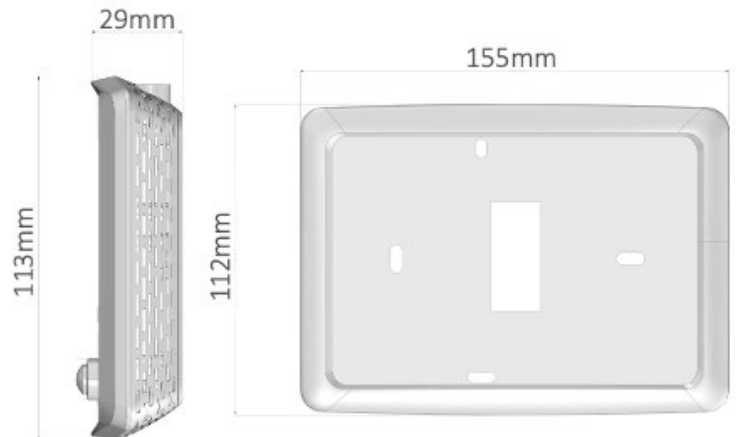
I/O

Inputs None

Outputs (1) POR RS485 Interface
(1) TFT Screen

WALL PLATE

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



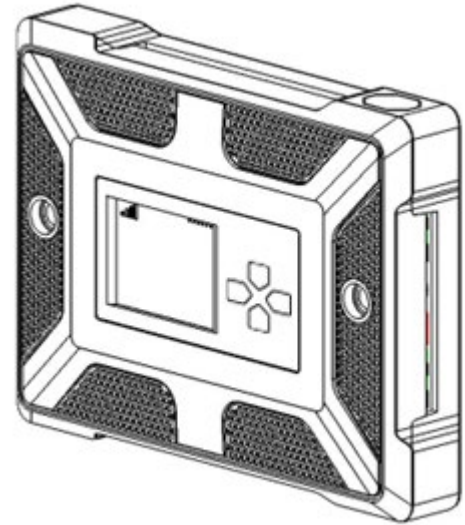
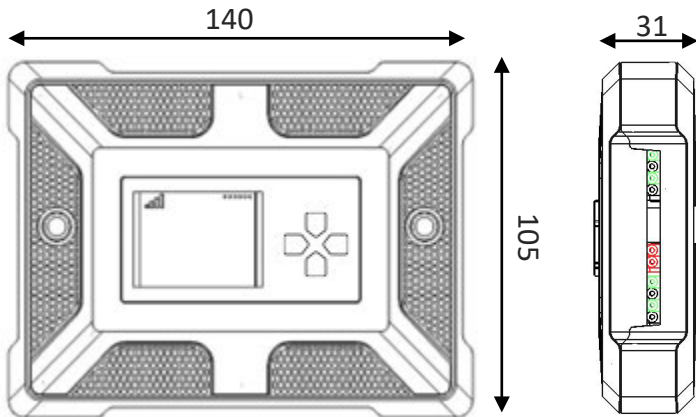
ClimaVision Connect Module (7C-SN-C4X-X)

MECHANICAL

Dimensions 5.5" x 4.13" x 1.22" (140 mm x 105 mm x 31mm)

Mounting Wall

Screen TFT LCD, 1.77", 128(RGB)* 160 Pixels



COMMUNICATIONS

Bluetooth Bluetooth – Available for future use.

- Wired**
- Modbus RTU / BACnet over RS485 communication
 - Sensor bus
 - Power over RS485 to enable communication with the HyperLite and power the unit over standard thermostat wires.
 - Dedicated Modbus/BACnet MSTP ports to interface with 3rd party BMS devices.

I/O

- Inputs**
- A. (8) Universal inputs.
 - B. (1) Sensor Bus

- Outputs**
- C. (4) 0-10V dc or 4-20mA analog outputs
 - D. (8) relays rated at 1A, 120V ac or 24 V ac/dc resistive load

ELECTRICAL

Power 24V AC/DC (+/-15%) with nominal power consumption 1.0W and maximum consumption of 2.5W