DATA SHEET

Casambi Smart WiFi Thermostat with CO_2 Sensor

Overview

- Compatible with Casambi Wireless Mesh Systems
- Built-in Wi-Fi Connectivity
- Gas/Electric to 2H/2C, Heat Pump to 3H/2C
- Humidity Sensing and Control
- CO_2 Sensing and Control
- Advanced Remote Sensor Bus
- Two Configurable Relays
- Full Color Touchscreen
- Weekly & Calendar Scheduling
- BACnet/IP and Modbus TCP/IP Included
- 16 Remote Sensors: up to six indoor, one humidity, one outdoor, six water leak sensor, and up to three auxiliary sensors for monitoring items (i.e., supply air, return air, walk-in refrigerators and freezers)
- Two Digital Inputs for Fault Conditions, including Condensate and Equipment Faults
- Occupancy Input from Casambi Wireless sensor
- On-board Data Logging with Sub-Metering Support



USA

Applications

The X7C-WIFI-CB-W/B is a Wi-Fi color touchscreen thermostat with Casambi Wireless Mesh, an ad-vanced remote sensor bus, CO_2 sensor, and more.

The Casambi Wireless Mesh occupancy sensor data allows NetX soft setback and soft recovery algorithms to optimize HVAC usage without sacrificing comfort. The scheduling includes daily schedules (4 events per day) and up to 80 Additional Events. The X7C-WIFI-CB-W/B also in-cludes full Modbus TCP/IP and BACnet/IP support over Wi-Fi, directly on the thermo-stat. The CO_2 sensor requires no field calibration for five years.

The X7C-WIFI-CB-W/B is designed to operate with mwConnect's Casambi Wireless Mesh system and the Network Thermostat CloudConnect Online Management software.

Manufactured in the USA

The X7C-WIFI-CB-W/B device is Manu-factured in the USA, using both imported and US-made components.

Operation

Casambi Wireless Mesh Controls: The device connects to a wireless mesh network via a mobile app, available as iOS or Android, to allow initial setup and subsequent parameters adjustments.

Energy Savings: Efficient Equipment Restart randomizes equipment starts to minimize multiple units turning on simultaneously when there are multiple NetX thermostats at the location. Random Restart on power up staggers restart of HVAC system after a power outage to minimize peak inrush current. Adaptive Recovery for Schedules allows system to achieve desired setpoint at the beginning of the schedule. NLC Soft Setback and Soft Recovery algorithms optimize energy savings

See the mwConnect Casambi Commissioning User Manual for more information.

Note:
1. Wireless Range is highly dependent on the integration of fixtures, surrounding environment and conditions. It is recommended to conduct testing for wireless range accuracy.

Summary

Product Type:
Commercial Grade Wi-Fi Thermostat

Rated Voltage:
20V to 30VAC, 24VAC nominal

Rated A.C. / D.C. Current:
0.05 to 0.75 AC / 0.0 to 0.75 DC Amp continu-ous, per output, surges to 3 Amps maximum

Temperature Control Range:
Heating: 38 to 88°F (6 to 30°C) in 1° steps
Cooling: 60 to 108°F (16 to 40°C) in 1° steps

Humidity Control Range:
Humidify: 10% to 60%RH in 5%RH steps
Dehumidify: 35% to 75%RH in 5%RH steps

CO2 Sensing:
Range: 400-2,000 ppm
Accuracy: 40 ppm
Adjustable High CO_2 Indication: 500-2,000 ppm

Wireless Radio:2.4GHz 802.11b/g/n, Securi-ty: Open, WEP, WPA-PSK, WPA2-PSK

Expansion Port: Integrated Casambi Wireless Mesh Module

Max Wireless Range[1]: 100ft (30.4m)

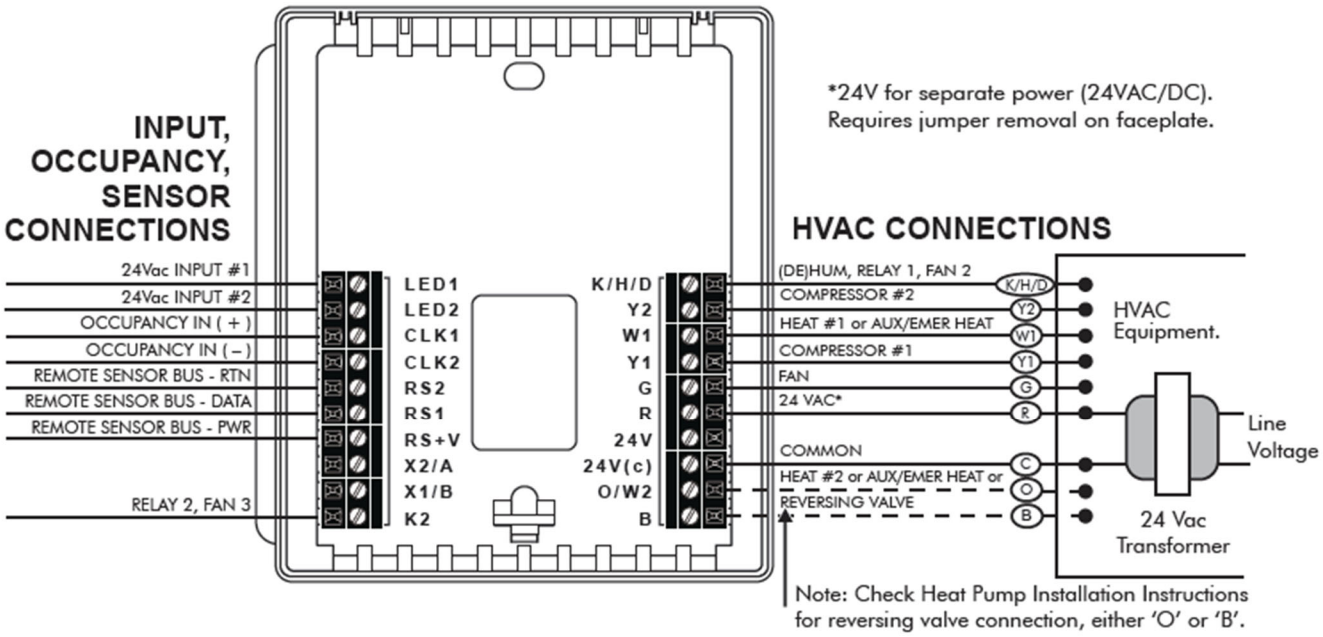
Dimensions: 5.1"H x 4.7"W x 1.15"D (128mm x 119mm x 29mm)

Color: White or Black

Warranty: 5 years

Project	
Location/Type	

Wiring Diagram



How To Order

Model No.	Description	Rated Voltage	Color
X7C-WIFI-CB-W	Casambi Wireless Mesh Commercial Grade Thermostat with built-in WiFi and CO_2 sensor	20V to 30VAC, 24VAC nominal	White
X7C-WIFI-CB-B	Casambi Wireless Mesh Commercial Grade Thermostat with built-in WiFi and CO_2 sensor	20V to 30VAC, 24VAC nominal	Black