



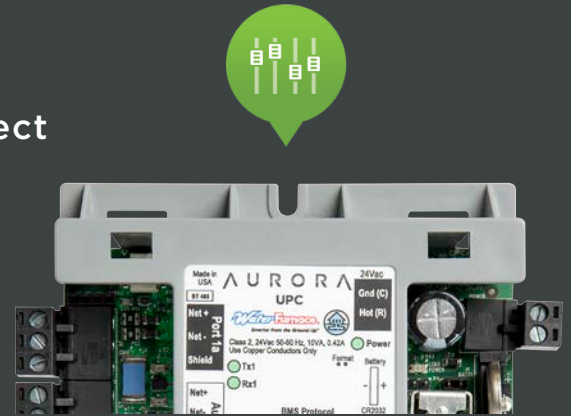
## AURORA UNIVERSAL PROTOCOL CONVERTER (UPC)

The Aurora Universal Protocol Converter (UPC) is designed to incorporate the advanced features, performance and controls of WaterFurnace Aurora-based heat pumps into commercial Building Automation Systems (BAS). The module seamlessly communicates with Aurora boards to provide access to internal sensors, relay operations, and faults in addition to allowing individual unit configuration—all without the need to manually access the heat pump.

Aurora UPC integrates into Building Automation Systems with ease thanks to its ability to convert Aurora Modbus protocol to BACnet MS/TP, LON, or N2 protocols. Utilize Aurora UPC and WaterFurnace heat pump technologies to bring unmatched flexibility and control over the comfort of your facility.

# AURORA

A native, integrated controller that offers direct control, monitoring, and configuration of the water/ground source heat pump system over a variety of standard network protocols.



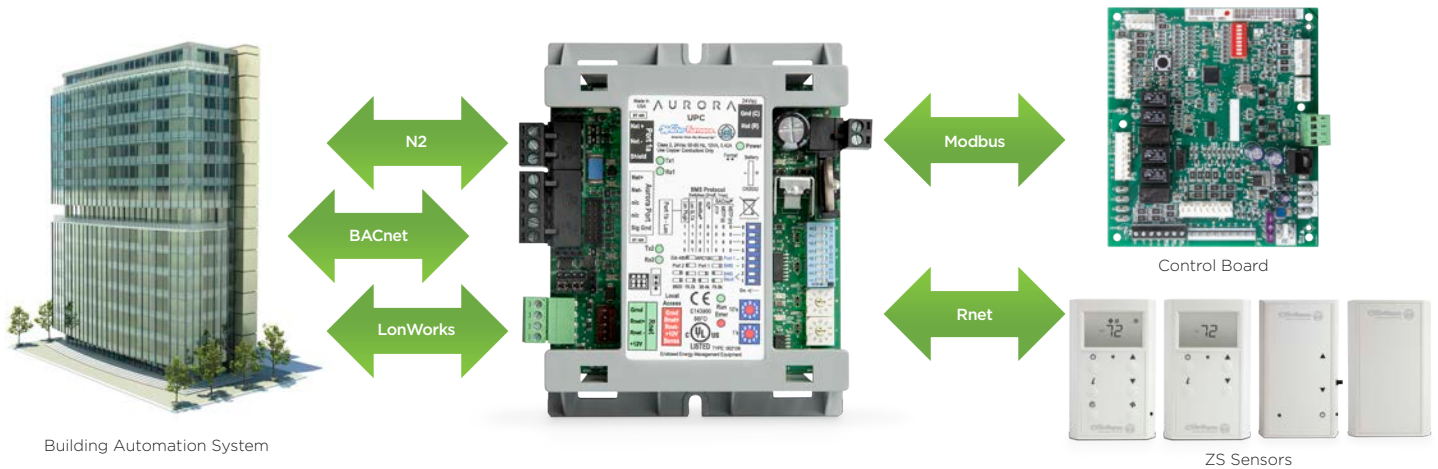
### KEY FEATURES

- Onboard CR2032 battery with 10-year lifespan provides 720 hours of cumulative power outage
- Multi-protocol field selectable communication port that supports:
  - EIA-485 BACnet MS/TP @ 9600, 19.2k, 38.4k, 76.8k baud
  - Metasys N2 Open
  - LonWorks TP/FT-10 (Requires optional LON plug-in communication card)
- Status of all unit operating conditions and fault lockouts
- LEDs for status of power, network communication, processor operation, and errors
- Provides gateway into Aurora heat pump controls for unsurpassed control flexibility
  - Network points for commanding unit into load shed, emergency shutdown, assist in fan speed selection, and freeze protection settings
- Local laptop or Aurora Touch Interface connection for field service
- Heating and cooling control from a remotely located zone sensor
- Rnet communication port which allows for up to five ZS Series Rnet zone sensors

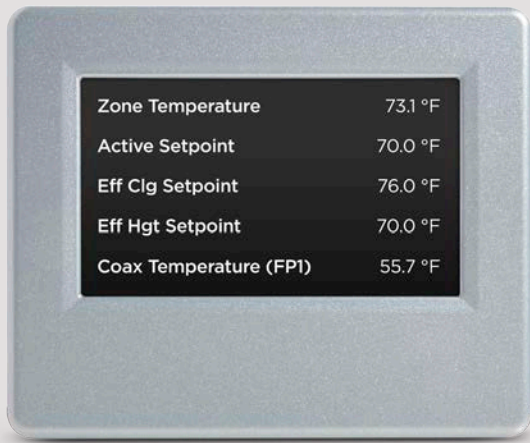
### ADDITIONAL OPTIONS:

- **AURORA TOUCH INTERFACE, NEEDED FOR FIELD CONFIGURATION OF FAN SPEEDS, SET POINTS, ETC.**
- **THE UPCOMING AURORA EXPANSION BOARD (AXB) OPTION IN HEAT PUMP WILL PROVIDE ADDED I/O FOR OPTIONAL SENSOR KITS**
  - Accessory relay, variable speed pump output, loop pump slaving, digital and 0-10v analog output

# AURORA UPC BUILDING AUTOMATION



# AURORA UPC CONTROL & SENSORS



## AURORA TOUCH INTERFACE

Utilizing a touch-screen interface, the UPC provides a technician the ability to configure and diagnose equipment at the unit or from any room sensor for added accessibility and simpler troubleshooting. The technician will have full access to equipment status, parameter values, temperature, and humidity sensing as well as access to alarm and trend history. With website-like navigation, the Aurora Touch Interface is easy to use and provides important insight into the system so your building can operate as efficiently as possible.



## ZS SENSORS

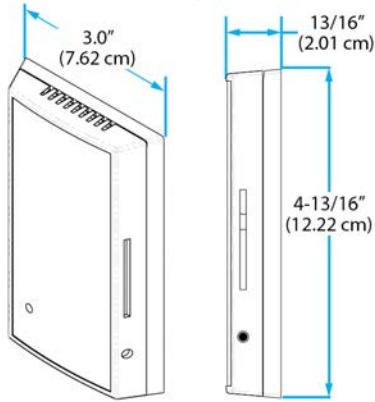
The ZS line of intelligent zone sensors provides the function and flexibility you need to manage the conditions important to the comfort and productivity of the zone occupants. ZS sensors are available in a variety of combinations to address your application needs and include temperature, relative humidity, and indoor air quality. Designed to work with the Aurora UPC controls, the ZS sensor line includes the ZS Base, ZS Plus, ZS Pro, and ZS Pro-F.

Aurora ZS Sensors are also available with optional CO<sub>2</sub> and/or VOC detection to ensure safe, clean air within the building.

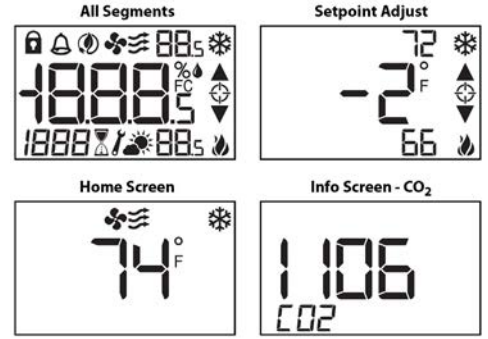
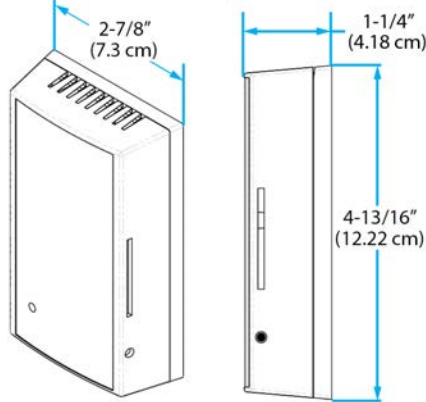
# Physical Data

## ZS Sensors

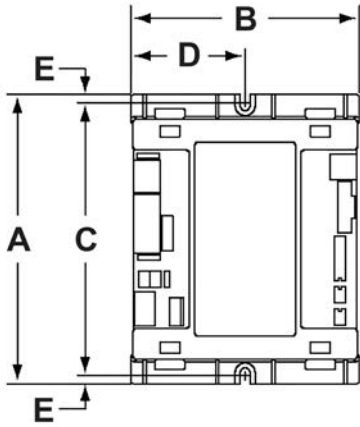
### Temperature Only or Temperature with Humidity



### Sensor with CO<sub>2</sub> or VOC



## UPC Board



Overall	A	5-3/16"	13.2 cm
	B	4-1/8"	10.5 cm
Mounting Hole Dimensions	C	4-7/8"	12.4 cm
	D	2-1/20"	5.2 cm
	E	3/16"	0.5 cm
Depth		1-9/16"	4.0 cm
Weight		0.44 lbs	0.2 kg