i-Vu® Building Automation System
ZS Space Sensors

The i-Vu® Building Automation System provides everything you need to access, manage, and control your building, including the powerful i-Vu user interface, plug-and-play BACnet® controllers, and state-of-the-art Carrier equipment.

Carrier's line of intelligent ZS space sensors provide the function and flexibility you need to manage the conditions important to the comfort, productivity, and sustainability of your building.

The ZS sensors are available in a variety of zone sensing combinations to address your application needs. These combinations include temperature, relative humidity, and indoor air quality (carbon dioxide and volatile organic compounds (VOCs)).

Designed to work with i-Vu controllers and the i-Vu Building Automation System, the ZS sensor line includes the ZS Standard, ZS Plus, ZS Pro and ZS Pro-F.

	ZS Standard	ZS Plus	ZS Pro	ZS Pro-F

Features

Feature	ZS Standard	ZS Plus	ZS Pro	ZS Pro-F
Temp, CO_2, Humidity, and VOC Options	•	•	•	•
Neutral color	•	•	•	•
Addressable / supports daisy-chaining	•	•	•	•
Hidden communication port	•	•	•	•
Mounts on a standard 2" by 4" electrical box	•	•	•	•
Occupancy status indicator		•	•	•
Push-button occupancy override		•	•	•
Setpoint adjust		•	•	•
Large, easy- to-read LCD			•	•
Alarm indicator			•	•
Fan speed control			•	•
Cooling / Heating / Fan Only - Mode Control				•
°F to °C conversion button				•

Options	Part Number	Part Number	Part Number	Part Number
Temperature Only	ZS-CAR	ZSPL-CAR	ZSP-CAR	ZSPF-CAR
Temp with CO_2	ZS-C-CAR	ZSPL-C-CAR	ZSP-C-CAR	ZSPF-C-CAR
Temp with Humidity	ZS-H-CAR	ZSPL-H-CAR	ZSP-H-CAR	ZSPF-H-CAR
Temp with VOC	ZS-V-CAR	ZSPL-V-CAR	ZSP-V-CAR	ZSPF-V-CAR
Temp, Humidity, CO_2	ZS-HC-CAR	ZSPL-HC-CAR	ZSP-HC-CAR	ZSPF-HC-CAR
Temp, Humidity, VOC	ZS-HV-CAR	ZSPL-HV-CAR	ZSP-HV-CAR	ZSPF-HV-CAR

*Note: To order a sensor without a Carrier logo, use "BNK" in place of "CAR" above.

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Sensing Element	Range	Accuracy
Temperature with any Option (excluding Humidity)	-4° to 122° F (-20° C to 50° C)	±0.35° F (0.2° C)
Temperature with Humidity and any Option	50° F to 104° F (10° C to 40° C)	±0.5° F (0.3° C)
Humidity	10% to 90%	±1.8% typical
CO_2	400 to 1250 PPM 1250 to 2000 PPM	±30PPM or +/-3% of reading (greater of two) ±5% of reading plus 30 PPM
VOC	0 to 2,000 PPM	±100 PPM

Power Requirements	Sensor Type	Power Required
Temperature Only Temperature with Humidity	All Models	12 Vdc @ 8 mA
Temp with VOC, or Temp/VOC/Humidity	All Models	12 Vdc @ 60 mA
Temp with CO_2 , or Temp/ CO_2/Humidity	All Models	12 Vdc @ 15 mA (idle) to 190 mA (CO2 measurement cycle)

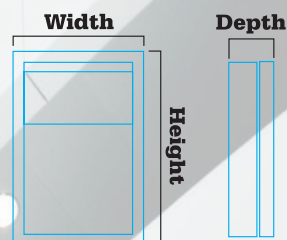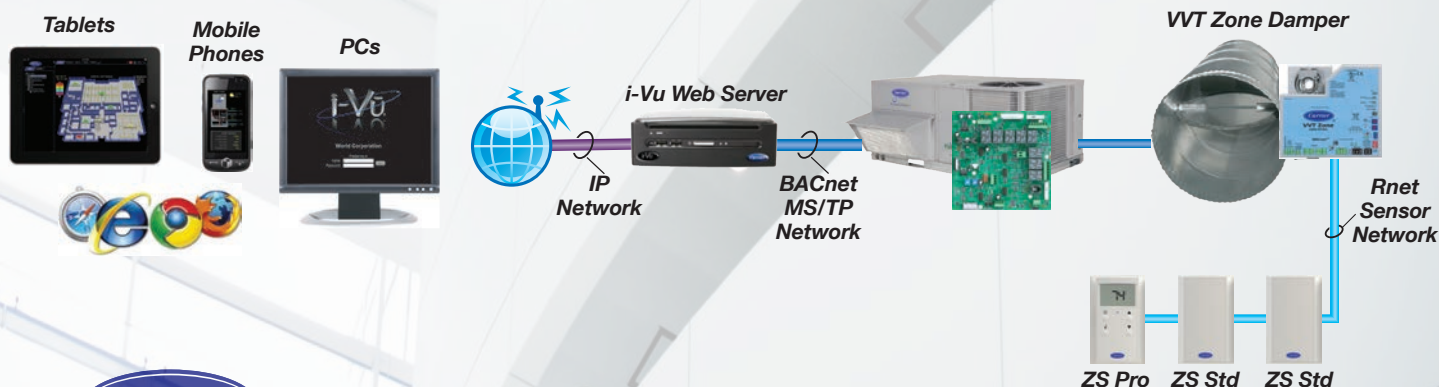|	
Power Supply	A controller supplies the Rnet sensor network with 12 Vdc @ 210 mA. Additional power may be required for your application. See sensor power requirements above.
Communication	115 kbps Rnet connection between sensor(s) and controller 15 sensors max per Rnet network; 5 sensors max per control program
Local Access Port	For connecting a laptop computer to the local equipment or i-Vu® network for maintenance and commissioning
Environmental Operating Range	32° to 122° F (0° - 50° C), 10% to 90% relative humidity, non-condensing
Mounting Dimensions	Standard 4"x 2" electrical box using provided 6/32" x 1/2" mounting screws

Overall Dimensions

Temperature Sensor or Temperature with Humidity Sensor	**Width:** 3" (7.62 cm) Height: 4-13/16" (12.22 cm) Depth: 13/16" (2.01 cm)
Sensor with C02 or VOC	Width: 2-7/8" (7.3 cm) Height: 4-13/16" (12.22 cm) Depth: 1-1/4" (3.18cm)

Width   **Depth**

Height

The i-Vu Building Automation System

Tablets   *Mobile Phones*   *PCs*   *i-Vu Web Server*   *VVT Zone Damper*

IP Network   BACnet MS/TP Network   Rnet Sensor Network

ZS Pro   *ZS Std*   *ZS Std*

Carrier
United Technologies

CONTROLS EXPERT

Tested. Certified. Factory Authorized.