



# i-Vu<sup>®</sup> Building Automation System ZS Space Sensors



*The i-Vu<sup>®</sup> 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<sup>®</sup> 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**

Temp, CO <sub>2</sub> , 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 <sub>2</sub>	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 <sub>2</sub>	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.



# i-Vu® Building Automation Systems ZS Space Sensors

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 <sub>2</sub>	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

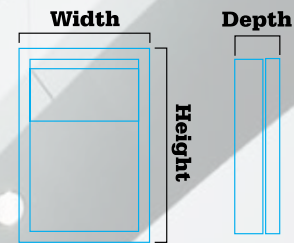
  

Power Requirements	Sensor Type	Power Required
Temperature Only Temperature with Humidity	All Models	12 Vdc @ 8 mA
Temp with VOC, or Temp/VOC/Humidity	All Models	12 Vdc @ 60 mA
Temp with CO <sub>2</sub> , or Temp/ CO <sub>2</sub> /Humidity	All Models	12 Vdc @ 15 mA (idle) to 190 mA (CO2 measurement cycle)

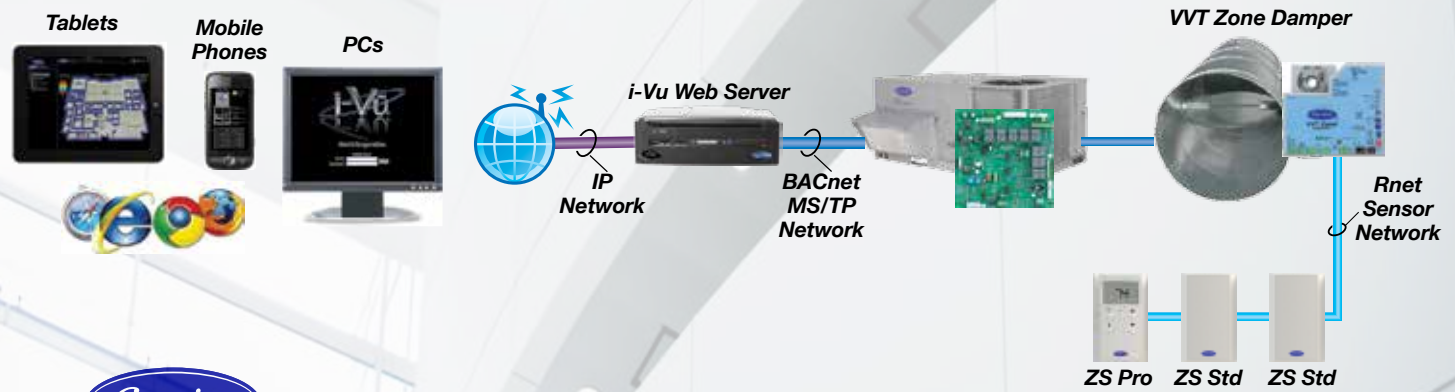
  

<b>Power Supply</b>	A controller supplies the Rnet sensor network with 12 Vdc @ 210 mA. Additional power may be required for your application. See sensor power requirements above.
<b>Communication</b>	115 kbps Rnet connection between sensor(s) and controller 15 sensors max per Rnet network; 5 sensors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

Overall Dimensions	
Temperature Sensor or Temperature with Humidity Sensor	<b>Width:</b> 3" (7.62 cm) <b>Height:</b> 4-13/16" (12.22 cm) <b>Depth:</b> 13/16" (2.01 cm)
Sensor with CO <sub>2</sub> or VOC	<b>Width:</b> 2-7/8" (7.3 cm) <b>Height:</b> 4-13/16" (12.22 cm) <b>Depth:</b> 1-1/4" (3.18cm)



## The i-Vu Building Automation System



**CONTROLS EXPERT**  
Tested. Certified. Factory Authorized.

For more information, contact  
**your local Carrier Controls Expert.**  
Controls Expert Locator:  
[www.carrier.com/controls-experts](http://www.carrier.com/controls-experts)

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