



# i-Vu® Building Automation System

## ZS Space Sensors



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 sensor is 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). 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, ZS-Pro-M and ZS Pro-F.



ZS Standard



ZS Plus



ZS Pro



ZS Pro-M



ZS Pro-F



### Features

Temp, CO <sub>2</sub> , and humidity options	•	•	•	•	•
Neutral color	•	•	•	•	•
Motion sensing option				•	
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					•

Option	ZS Standard	ZS Plus	ZS Pro	ZS Pro-M	ZS Pro-F
Temperature Only	ZS2-CAR	ZS2PL-CAR	ZS2P-CAR	ZS2P-M-CAR	ZS2PF-CAR
Temp with CO <sub>2</sub>	ZS2-C-CAR	ZS2PL-C-CAR	ZS2P-C-CAR	ZS2P-CM-CAR	ZS2PF-C-CAR
Temp with Humidity	ZS2-H-CAR	ZS2PL-H-CAR	ZS2P-H-CAR	ZS2P-HM-CAR	ZS2PF-H-CAR
Temp, Humidity, CO <sub>2</sub>	ZS2-HC-CAR	ZS2PL-HC-CAR	ZS2P-HC-CAR	ZS2P-HCM-CAR	ZS2PF-HC-CAR

\*Note: To order a sensor without a Carrier logo, use "BNK" in place of "CAR" above. Some models are only available without a logo.

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

## ZS Space Sensors



Sensing Element	Range	Accuracy
Temperature with any Option (excluding Humidity)	32° F to 122° F (0° 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	20% to 80%	±2% typical
CO <sub>2</sub>	400 to 1250 PPM 1250 to 2000 PPM	±30 PPM or +/- 3% of reading (greater of two) 5% of reading plus 30 PPM

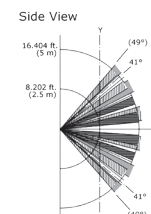
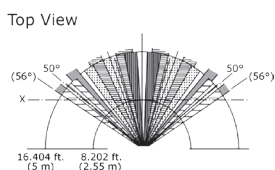
Power Requirements	Sensor Type	Power Required
Temperature Only	All Models	12 Vdc @ 8 mA
Temperature with Humidity	All Models	12 Vdc @ 8 mA
Temperature with CO <sub>2</sub> , or Temp/CO/Humidity	All Models	12 Vdc @ 15 mA (idle) to 190 mA (CO <sub>2</sub> measurement cycle)

### Specifications

<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.

### Motion Sensing

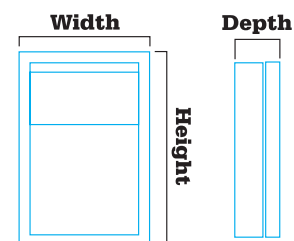
**Sensor Type:** passive infrared (PIR)  
**Distance:** 16.4 ft. (5 m)  
**Detection Range:** (HxV) 100° x 82°  
**Movement Speed:** 2.62 to 3.94 ft/s (0.8 to 1.2 m/s)  
**Detection Object:** 27.56 x 9.84 in. (700 x 250 mm)



<b>Environmental Operating Range</b>	32° F 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
----------------------------	--

<b>Dimensions</b>	<b>Overall</b> <b>Width:</b> 2.75 in. (6.99 cm) <b>Depth:</b> 0.858 in. (2.18 cm) <b>Height:</b> 4.75 in. (12.07 cm)
-------------------	---



For more information, contact your local Carrier Controls Expert.

Controls Expert Locator:  
[www.carrier.com/controls-experts](http://www.carrier.com/controls-experts)