



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 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, ZS-Pro-M and ZS Pro-F.

ZS Standard



ZS Plus



ZS Pro



ZS Pro-M



ZS Pro-F



Features

Temp, CO ₂ , and humidity options	•	•	•	•	•
VOC 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 ₂	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 ₂	ZS2-HC-CAR	ZS2PL-HC-CAR	ZS2P-HC-CAR	ZS2P-HCM-CAR	ZS2PF-HC-CAR
Temp with VOC	ZS2-V-BNK	ZS2PL-V-BNK			
Temp, Humidity, VOC	ZS2-HV-BNK	ZS2PL-HV-BNK			

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



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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	20% to 80%	±2% 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	All Models	12 Vdc @ 8 mA
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 (CO ₂ measurement cycle)

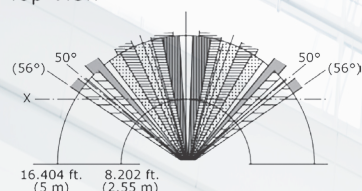
Power supply A controller supplies the Rnet sensor network with 12 Vdc @ 210 mA. Additional power may be required for your application. See sensor power requirements above.

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

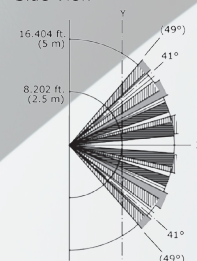
Motion sensing

Top View



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)

Side View

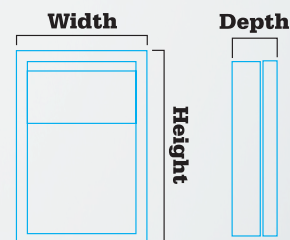


Environmental operating range 32° to 122° F (0° - 50° C), 10% to 90% relative humidity, non-condensing

Mounting dimensions Standard 4"x 2" electrical box using provided 6/32" x 1/2" mounting screws

Overall dimensions

Width: 2.75" (6.99 cm)
Height: 4.75" (12.07 cm)
Depth: 0.858" (2.18 cm)



CONTROLS EXPERT

Tested. Certified. Factory Authorized.

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

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