ZS Sensors

Intelligent Room Sensors

AUTOMATEDLOGIC
United Technologies
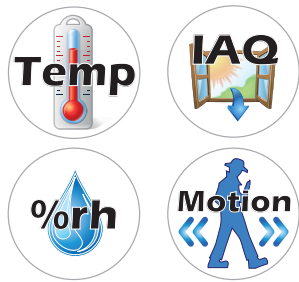
The Automated Logic® ZS room sensors are an integral component of the WebCTRL® building automation system. These sensors provide the function and flexibility you need to manage the conditions important to the comfort, productivity, and sustainability of your facility, and are designed to work with ZN, SE, and ME line controllers.

The ZS sensors measure room temperature, relative humidity, carbon dioxide, motion and VOCs (volatile organic compounds), and are available in a variety of zone-sensing combinations to address your specific control requirements.

Temp · **IAQ** · **%rh** · **Motion**

Features	ZS Standard	ZS Plus	ZS Pro	ZS Pro-M	ZS Pro-F
Temp, CO_2 and Humidity Options		●	●	●	●
VOC Options		●	●		●
Addressable / supports daisy-chaining		●	●	●	●
Hidden communication port		●	●	●	●
Occupancy status indicator		●	●	●	●
Push-button occupancy override		●	●	●	●
Setpoint adjust		●	●	●	●
Large, easy- to-read LCD			●	●	●
Alarm indicator			●	●	●
Motion Sensing				●	
Fan speed control					●
Cooling / Heating / Fan Only - Mode Control					●
°F to °C conversion button					●

The WebCTRL® building automation system gives you the ability to understand your building operations and analyze the results. The WebCTRL system integrates environmental, energy, security and safety systems into one powerful management tool that allows you to lower energy consumption, increase occupant comfort, and achieve sustainable building operations. Our web-based platform allows building managers to control and access information about their HVAC, lighting, central plant and critical processes on premises or remotely at any time of day.

WebCTRL®

We make data **big.**™
Next level building automation engineered to help you make smart decisions.

ZS Sensors

Specifications

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% (greater of two) ±5% of reading plus 30 PPM
VOC	0 to 2,000 PPM	±100 PPM
Motion Sensing		Sensor Type: PIR Distance: 16.4 feet, (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)

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 (CO_2 measurement cycle)

Power Supply	A controller supplies the Rnet sensor network with 12 Vdc @ 210 mA. Additional power may be required. 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 WebCTRL® 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 CO_2 or VOC	Width: 2-7/8" (7.3 cm) Height: 4-13/16" (12.22 cm) Depth: 1-1/4" (3.18cm)

Options & Part Numbers	ZS Standard	ZS Plus	ZS Pro	ZS Pro-F	ZS Pro-M
Temperature Only	ZS-ALC	ZSPL-ALC	ZSP-ALC	ZSPF-ALC	ZSP-M-ALC
Temp with CO_2	ZS-C-ALC	ZSPL-C-ALC	ZSP-C-ALC	ZSPF-C-ALC	ZSP-CM-ALC
Temp with Humidity	ZS-H-ALC	ZSPL-H-ALC	ZSP-H-ALC	ZSPF-H-ALC	ZSP-MH-ALC
Temp, Humidity, CO_2	ZS-HC-ALC	ZSPL-HC-ALC	ZSP-HC-ALC	ZSPF-HC-ALC	ZSP-HCM-ALC
Temp with VOC	ZS-V-ALC	ZSPL-V-ALC	ZSP-V-ALC	ZSPF-V-ALC	-
Temp, Humidity, VOC	ZS-HV-ALC	ZSPL-HV-ALC	ZSP-HV-ALC	ZSPF-HV-ALC	-

*Note: To order without an Automated Logic logo, use "BNK" in place of "ALC" above.

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