

ZS2 ZONE SENSORS

COMMUNICATING IAQ SENSORS



INTELLIGENT IAQ SENSORS FOR THE WEBCTRL® BUILDING AUTOMATION SYSTEM

Multiple public studies¹ suggest that indoor environments can profoundly impact the health and decision-making performance of building occupants. They advise that the levels of carbon dioxide, volatile organic compounds, and particulate matter that we commonly encounter in schools, healthcare facilities, and commercial office buildings should be held within healthy thresholds. Additionally, humidity can increase heating and cooling costs, support mold and bacterial growth, contributing to allergies, respiratory problems, and occupant discomfort.

Automated Logic's ZS2 line of intelligent IAQ zone sensors provides the function and flexibility you need to manage the conditions essential to your facility's comfort, productivity, and sustainability. ZS2 sensors are designed to measure room temperature, relative humidity, carbon dioxide (CO₂), and volatile organic compounds (VOCs). They are available in a variety of zone sensing combinations to address your specific control requirements and ventilation strategies.

Standard

- Temperature, Humidity, Motion, CO₂, and VOC options
- Supports daisy-chaining
- Hidden communication port



Plus

- All the features of Standard and
- Push-button occupancy override
- Occupancy status indicator
- Setpoint adjust



Pro

- All the features of Plus and
- Large, easy-to-read LCD
- Alarm indicator
- Push-button controls



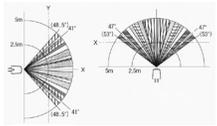
Pro F

- All the features of Pro and
- Fan speed control
- °F to °C conversion button
- Cooling / Heating / Fan Only Modes



1) Harvard T.H. Chan School of Public Health; The COGfx Study: <https://cogfx.forhealth.org>
US EPA Indoor Air Quality (IAQ) <https://www.epa.gov/indoor-air-quality-iaq>

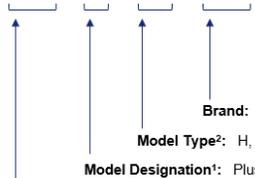
SPECIFICATIONS

ZS2 Zone 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
Carbon dioxide (CO ₂)	400 to 1250 PPM 1250 to 2000 PPM	±30PPM or +/-3% (greater of two) ±5% of reading plus 30 PPM
Volatile organic compounds (VOC)	0 to 2,000 PPM CO ₂ equivalent reading (CO ₂ e)	±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	Model 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 100 mA (CO ₂ measurement cycle)
Power Supply	A controller supplies limited amount of power. Please refer to the controller's specifications. Additional power may be required. See sensor power requirements above.	
Other Specs		
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	
Dimensions	Global Models	
Overall dimensions	Width: 3.56" (90.3 mm); Height: 3.77" (95.7 mm); Depth: 1.37" (34.6 mm)	

PART NUMBERS

Part Number Codestring:

Z S 2 E (XX) - (XXX) - A L C



Zone Sensor Gen. 2

NOTE 1: (XX) optional and not applicable to standard versions for Plus, Pro, Pro F only
NOTE 2: (XXX) optional sensing models up to three (3) characters

Part Number Examples: ZS2E-ALC, ZS2EP-H-ALC, ZS2EPF-HC-ALC

Style Color: White	Standard	Plus	Pro	ProF
Temp Only	ZS2E-ALC	ZS2EPL-ALC	ZS2EP-ALC	ZS2EPF-ALC
Temp + Humidity	ZS2E-H-ALC	ZS2EPL-H-ALC	ZS2EP-H-ALC	-
Temp + Humidity + Motion	-	-	-	-
Temp + Humidity + CO ₂	ZS2E-HC-ALC	ZS2EPL-HC-ALC	-	-
Temp + Humidity + VOC	ZS2E-HV-ALC	-	-	-
Temp + Motion	ZS2E-M-ALC	ZS2EPL-M-ALC	ZS2EP-M-ALC	ZS2EPF-M-ALC
Temp + CO ₂	ZS2E-C-ALC	ZS2EPL-C-ALC	ZS2EP-C-ALC	-