HARRIS
Integrated Solutions

Building Automation Made **Easier** With **Smart Technology**

Authorized Dealer of

AutomatedLogic

ZS IAQ ZONE SENSORS

INDOOR AIR QUALITY SENSORS

INTELLIGENT IAQ SENSORS FOR THE WEBCTRL® BUILDING AUTOMATION SYSTEM

Multiple public studies[1] 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 ZS 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. ZS sensors are designed to measure room temperature, relative humidity, carbon dioxide (CO_2), and volatile organic compounds (VOCs). They are available in various zone sensing combinations to implement ideal ventilation strategies and address your specific control requirements.

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

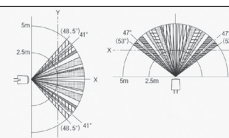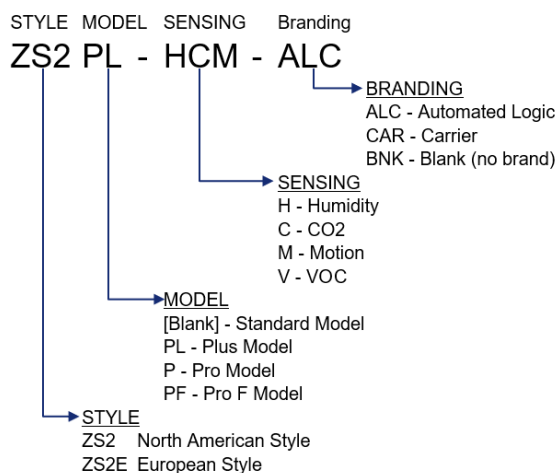| Standard	Plus	Pro	Pro F
• Temperature, Humidity, CO_2, VOC and Motion Detection Options • Supports daisy-chaining • Hidden communication port	All the features of Standard and • Push-button occupancy override • Occupancy status indicator • Setpoint adjust	All the features of Plus and • Large, easy- to-read LCD • Alarm indicator • Push-button controls	All the features of Pro and • Fan speed control • °F to °C conversion button • Cooling / Heating / Fan Only Modes

SPECIFICATIONS

ZS IAQ 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 CO2 equivalent reading (CO2e)	±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 power. 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	North American Models	European Models
Overall dimensions	Width: 2.75" (69.85 mm) Height: 4.75" (120.65 mm) Depth: 1.5" (38.10 mm)	Width: 3.56" (90.42 mm) Height: 3.77" (95.76 mm) Depth: 1.5" (38.10 mm)
Overall dimensions	Width: 2.75" (69.85 mm) Height: 4.75" (120.65 mm) Depth: 1.3" (33.02 mm)	Width: 3.56" (90.42 mm) Height: 3.77" (95.76 mm) Depth: 1.3" (33.02 mm)
Part Numbering		

STYLE   MODEL   SENSING   Branding

ZS2 PL - HCM - ALC

BRANDING
ALC - Automated Logic
CAR - Carrier
BNK - Blank (no brand)

SENSING
H - Humidity
C - CO2
M - Motion
V - VOC

MODEL
[Blank] - Standard Model
PL - Plus Model
P - Pro Model
PF - Pro F Model

STYLE
ZS2   North American Style
ZS2E European Style

SKUS

SKU	Brand	Model	Style	Sensing Capabilities				
				Temperature	Motion	CO$_2$	VOC	Humidity
ZS2-ALC	ALC	Standard	North American	Yes				
ZS2-M-ALC	ALC	Standard	North American	Yes	Yes			
ZS2-C-ALC	ALC	Standard	North American	Yes		Yes		
ZS2-H-ALC	ALC	Standard	North American	Yes				Yes
ZS2-V-ALC	ALC	Standard	North American	Yes			Yes	
ZS2-HC-ALC	ALC	Standard	North American	Yes		Yes		Yes
ZS2-HV-ALC	ALC	Standard	North American	Yes			Yes	Yes
ZS2-HCM-ALC	ALC	Standard	North American	Yes	Yes	Yes		Yes
ZS2E-ALC	ALC	Standard	European	Yes				
ZS2E-M-ALC	ALC	Standard	European	Yes	Yes			
ZS2E-V-ALC	ALC	Standard	European	Yes			Yes	
ZS2E-C-ALC	ALC	Standard	European	Yes		Yes		
ZS2E-H-ALC	ALC	Standard	European	Yes				Yes
ZS2E-HV-ALC	ALC	Standard	European	Yes			Yes	Yes
ZS2E-HC-ALC	ALC	Standard	European	Yes		Yes		Yes
ZS2PL-ALC	ALC	Plus	North American	Yes				
ZS2PL-M-ALC	ALC	Plus	North American	Yes	Yes			
ZS2PL-C-ALC	ALC	Plus	North American	Yes		Yes		
ZS2PL-H-ALC	ALC	Plus	North American	Yes				Yes
ZS2PL-V-ALC	ALC	Plus	North American	Yes			Yes	
ZS2PL-HC-ALC	ALC	Plus	North American	Yes		Yes		Yes
ZS2PL-HV-ALC	ALC	Plus	North American	Yes			Yes	Yes
ZS2PL-HCM-ALC	ALC	Plus	North American	Yes	Yes	Yes		Yes
ZS2EPL-V-ALC	ALC	Plus	European	Yes			Yes	
ZS2EPL-ALC	ALC	Plus	European	Yes				
ZS2EPL-M-ALC	ALC	Plus	European	Yes	Yes			
ZS2EPL-C-ALC	ALC	Plus	European	Yes		Yes		
ZS2EPL-H-ALC	ALC	Plus	European	Yes				Yes
ZS2EPL-HC-ALC	ALC	Plus	European	Yes		Yes		Yes
ZS2P-ALC	ALC	Pro	North American	Yes				
ZS2P-C-ALC	ALC	Pro	North American	Yes		Yes		
ZS2P-H-ALC	ALC	Pro	North American	Yes				Yes
ZS2P-HV-ALC	ALC	Pro	North American	Yes			Yes	Yes
ZS2P-HC-ALC	ALC	Pro	North American	Yes		Yes		Yes
ZS2PF-ALC	ALC	Pro-F	North American	Yes				
ZS2PF-M-ALC	ALC	Pro-F	North American	Yes	Yes			
ZS2PF-C-ALC	ALC	Pro-F	North American	Yes		Yes		
ZS2PF-H-ALC	ALC	Pro-F	North American	Yes				Yes
ZS2PF-HV-ALC	ALC	Pro-F	North American	Yes			Yes	Yes
ZS2PF-HC-ALC	ALC	Pro-F	North American	Yes		Yes		Yes
ZS2PF-HCM-ALC	ALC	Pro-F	North American	Yes	Yes	Yes		Yes
ZS2P-M-ALC	ALC	Pro	North American	Yes	Yes			
ZS2P-CM-ALC	ALC	Pro	North American	Yes	Yes	Yes		
ZS2P-HM-ALC	ALC	Pro	North American	Yes	Yes			Yes
ZS2P-HVM-ALC	ALC	Pro	North American	Yes	Yes		Yes	Yes
ZS2P-HCM-ALC	ALC	Pro	North American	Yes	Yes	Yes		Yes
ZS2EP-ALC	ALC	Pro	European	Yes				
ZS2EP-M-ALC	ALC	Pro	European	Yes	Yes			
ZS2EP-C-ALC	ALC	Pro	European	Yes		Yes		
ZS2EP-H-ALC	ALC	Pro	European	Yes				Yes
ZS2EPF-V-ALC	ALC	Pro-F	European	Yes			Yes	
ZS2EPF-M-ALC	ALC	Pro-F	European	Yes	Yes			
ZS2EPF-ALC	ALC	Pro-F	European	Yes				
ZS2-V-BNK	BNK	Standard	North American	Yes			Yes	
ZS2-HV-BNK	BNK	Standard	North American	Yes			Yes	Yes
ZS2PL-V-BNK	BNK	Plus	North American	Yes			Yes	
ZS2PL-HV-BNK	BNK	Plus	North American	Yes			Yes	Yes
ZS2PF-M-BNK	BNK	Pro-F	North American	Yes	Yes			
ZS2PF-HV-BNK	BNK	Pro-F	North American	Yes			Yes	Yes
ZS2PF-HCM-BNK	BNK	Pro-F	North American	Yes	Yes	Yes		Yes
ZS2P-M-BNK	BNK	Pro	North American	Yes	Yes			
ZS2P-CM-BNK	BNK	Pro	North American	Yes	Yes	Yes		
ZS2P-HM-BNK	BNK	Pro	North American	Yes	Yes			Yes
ZS2P-HCM-BNK	BNK	Pro	North American	Yes	Yes	Yes		Yes
ZS2EPF-V-BNK	BNK	Pro-F	European	Yes			Yes	
ZS2EPF-M-BNK	BNK	Pro-F	European	Yes	Yes			

Branding Examples

These sensors are offered in Automated Logic brand or unbranded.

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