



ESENSE OUTDOOR

CO2 Outdoor Sensor

Carbon Dioxide Sensor The ESENSE-OUTDOOR combines excellent performance with a straightforward design to provide an analog output based on 0 to 2,000 ppm of carbon dioxide. The ESENSE-OUTDOOR is complete with a IP65 housing with side ventilation to support the flow of outdoor air. The ESENSE-OUTDOOR includes an in-line thermostat in order that heating of the housing only takes place when the outdoor temperature warrants the use of the energy to maintain an above freezing temperature in the housing. This device can be mounted to a wall, or other supporting structures, using the four corner mounting holes or the top and bottom mounting holes.

Applications: Outdoor or Non-Heated Structures

The ESENSE-OUTDOOR Series is covered by ACI's Five (5) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's website, www.workaci.com.

PRODUCT SPECIFICATIONS

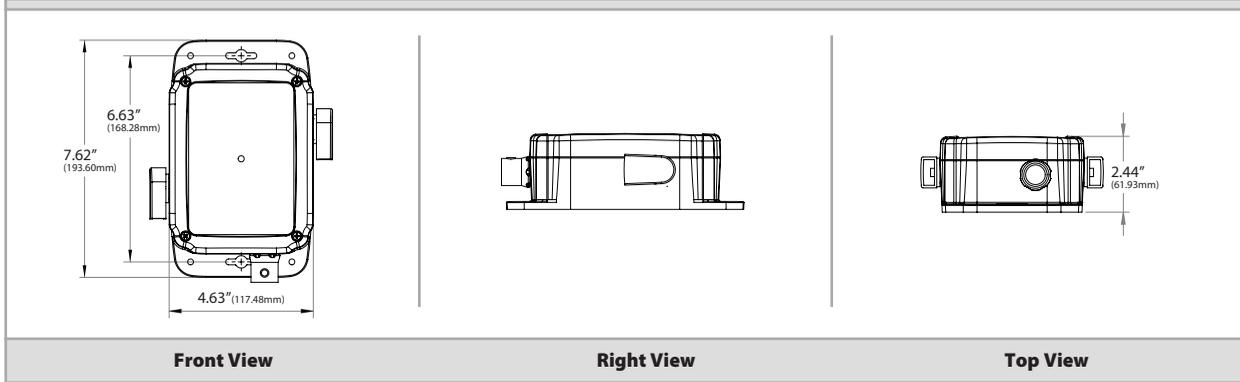
Supply Voltage:	24 VAC/VDC ±20%; 50/60Hz (Half-wave rectified)
Power Consumption:	Sensor: <1W Heater: 10W Maximum Total Power: 11W
Enclosure Heater:	24 VAC Turns on @ 39°F (4°C) and below
Electrical Connections:	0.00232 in ² (1.5 mm ²) screw terminals
Operating Temperature:	-22°F to 115°F (-30°C to 46°C)
Operating RH:	0 - 95% RH Non-condensing
Warm-Up Time:	1 minute (@ full specs 15 minutes)
Accuracy¹:	±30 ppm and ±3% of reading
Repeatability:	±20 ppm ±1% of measured value
Annual Zero Drift:	± 0.3% of measurement range
Operating Pressure:	+1.6% per 0.145 psi (1 kPa) deviation from normal pressure (1 Atmosphere = 14.7 psi (1.013 KPa))
Sensing Method:	Single beam Non-dispersive Infrared (NDIR)
Sensor Life²:	>15 years
Response Time (T1/e):	<10 seconds @ 30 cc/min flow rate, < 3 minutes diffusion time
Operating Environment:	Outdoor or Non-Heated Structures
Sensing Range:	0 to 2000 ppm
Extended CO2 Ranges:	Up to 10,000 ppm (factory set or SADK Kit required)
Extended Range Accuracy >2,000 PPM:	+/- 30 ppm and +/- 5% of reading
Calibration³:	Senseair ABC algorithm (Automatic Baseline Correction)
Outputs:	Standard: Out 1: 0-10V for 0 to 2000 ppm Out 2: 2-10V or 4-20mA for 0 to 2000 ppm
Storage:	-4 to 122°F (-20 to 50°C)
Enclosure:	IP65, Flammability Rating UL94V-0 Poly Carbonate
Room Dimensions:	(H) 7.62" (193.55 mm) x (W) 4.63" (117.60 mm) x (D) 2.44" (61.98 mm)
Product Weight:	1.4 lbs (0.64 Kg)
Agency Approvals:	EMC Directive 2014/30/EC RoHS Directive 2011/65/EU RoHS 3 Directive 2015/863/EU

Note 1: Accuracy is defined after minimum three (3) ABC periods (1 period = 8 days) of continuous operations | **Note 2:** In normal Indoor Air Quality (IAQ) applications | Corrosive environments are excluded | Changes can be made using the SADK Calibration Kit and UIP5 software | **Note 3:** Building CO2 levels must drop to 400 ppm some time during the week for ABC to work properly. If the building is occupied 24 hrs/day, ABC must be turned off





DIMENSIONAL DRAWING



STANDARD ORDERING

Model # Example: **ESENSE-OUTDOOR** -OR- **135028**

Model #	Item #	Description
ESENSE-OUTDOOR	135028	ESENSE-OUTDOOR / CO2 Heated Outdoor Sensor

ACCESSORIES ORDERING

Model # Example: **A/CUSTOM CAL GAS** -OR- **140970**

Model #	Item #	Description
A/CUSTOM CAL GAS*	140970	Custom Calibration (IP54 only)
SADK	130502	SADK Calibration Kit
UIP5	---	Free Software Download (Contact ACI)

Note*: Contact ACI's Technical Support for custom calibration ranges