



# ESENSE-OUTDOOR

## *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.

The ESENSE-OUTDOOR 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 web site, [www.workaci.com](http://www.workaci.com).



Specifications

Supply Voltage	24 VAC/VDC +/-20%, 50 Hz (half-wave rectifier)
Power Consumption	<1 Watt average (Heater Off)
Output Signal 1 Linear Conversion Range	0-10 VDC for 0-2000 ppm
Output Signal 2 Linear Conversion Range	4-20 mA or 2-10 VDC for 0-2000 ppm
Accuracy	+/- 30 ppm +/- 3% of reading
Repeatability	+/- 20 ppm +/- 1% of reading
Annual Zero Drift	< +/- 10 ppm
Pressure Dependence	+ 1.6% reading per kPa deviation from normal pressure 101.3 kPa
Response Time	<30 seconds @ 30 cc/minute flow rate      <3 minute diffusion time
Warm Up Time	<1 minute (@ full specs <15 minutes)
Operating Temperature/Relative Humidity Range	-22 to 115°F (-30 to 46.11°C)/0 to 95%, non-condensing
Life Expectancy	>15 years (typical)
Sensing Technology	Single beam infrared sensing technology (NDIR)
D/A Conversion Accuracy	+/- 2 % of reading +/- 50 mV
Electrical Characteristics	ROUT <100 Ohm, RLOAD >5k Ohm (Heater Off)
Maintenance Interval	No maintenance required
Self Diagnostics	Complete function-check

Ordering

Select ESENSE-OUTDOOR as a Sensor Series (A).

**A** Sensor Series

ESENSE-OUTDOOR (CO2 Sensor)

Build your part number

After completing (A) from the above table, fill in the Part Number Table below. An example part number is offered.

**A**

EXAMPLE: ESENSE-OUTDOOR

