

### AC02R Features

- **Co2 measure range: 0 to 2000 ppm**
- **4-20 mA output**
- **Selectable 0-5 or 0-10 VDC outputs**
- **Optional temperature setpoint**
- **Optional temperature override**
- **Five year limited warranty**

The ACI Carbon Dioxide Room Series (A/CO2-R2) monitors the carbon dioxide (CO2) levels in commercial, school, and office-type environments. This series sensor includes temperature measurement with optional setpoint and override. The A/CO2 Series is based on a single beam, non-dispersive infrared technology and is a cost-efficient solution for measuring carbon dioxide levels for building climate control. In addition, ABC software eliminates the need for manual calibration. Carbon Dioxide concentration is measured up to 2,000 ppm and is converted into proportional analog outputs. The factory default output is 4-20 mA, whereas 0-5 VDC and 0-10 VDC outputs are also selectable via integral dip switches. Thermistor temperature outputs, along with setpoint and override, are available as options for this configuration as well. Please see the order grid for the available sensor options. The A/CO2-R2 Series provides data which can be used in conjunction with a Building Automation System or Demand Control Ventilation to decrease energy consumption while creating a healthier indoor climate.



### Ordering Options

<i>Part</i>	<i>Part #</i>	<i>Description</i>
AC02-R2-3k	30-ACO2R23K	Temp/CO2 combo room sensor
AC02-R2-SP	30-ACO2R2SP	Temp/CO2 combo room sensor with slide bar adjustment
AC02-R2-OV	30-ACO2R2OV	Temp/CO2 combo room sensor with override button
AC02-R2-SPOV	30-ACO2R2SPOV	Temp/CO2 combo room sensor with slide bar adjustment and override button

## Technical Specifications

Supply Voltage:	24 VAC +/-20%, 50/60 Hz (half-wave rectier)   16.5-40 VDC Max.
Power Consumption:	3 VA for 24 VAC, 3W for 24 VDC (peak); <0.9W (average)
Sensing Technology:	Single beam infrared sensing technology (NDIR)
Sensing Method:	Diffusion
Measurement Range Default:	0 to 2,000 ppm
Extended CO2 Ranges:	Up to 10,000 ppm (factory set)
Extended Range Accuracy:	+/- 30 ppm and +/- 5% of reading
CO2 Output Signal:	Output 1: 0-5 VDC or 0-10 VDC (Default)   Output 2: 4-20 mA (500 Ohm Load maximum)
Fail Safe:	Polarity protected
CO2 Accuracy :	+/- 40 ppm +/- 3% of reading (@ 15-35°C; 20-70% RH and 101.3 kPa)
Pressure Dependence:	+ 1.6% reading per kPa (deviation from standard pressure 101.3 kPa)
Response Time:	2 minutes, diusion
Warm-Up Time:	< 1 minute (@ full specs < 15 minutes)
Temperature Output Range:	Various (see ordering grid)
Temperature Accuracy:	+/- 1°F (+/- 0.6°C)
Operating Temperature Range:	32 to 122°F (0 to 50°C)
Operating Humidity Range:	0 to 95%, non-condensing
Enclosure:	ABS, Plastic, White, UL94-HB
Sensor Coverage Area:	7,500 sq. ft maximum
Mounting Height:	4-6 ft
Sensor Life :	> 15 years (typical)
Calibration	ABC algorithm (Automatic Baseline Correction)
Product Dimensions:	(H) 4.50" (114.30 mm) x (W) 2.75" (69.85 mm) x (D) 1.12" (28.45 mm)
Product Weight:	0.230 lbs (0.104 kg)