

Nitrogen Dioxide Transmitters



ACI/NO₂



Product Description

The ACI/NO₂ transmitters are intended to be used for the continuous monitoring of exhaust in non-hazardous areas such as underground parking facilities, service garages, mining environments, loading docks, arenas, and refrigerant machinery rooms. Guidelines provided by NIOSH/OSHA 1987 p. 176 state that current levels are 1 ppm (1.8mg/m³) over a 15 minute period. Indoor concentrations above 0.5 ppm indicate the need for additional ventilation.

The ACI/NO₂ uses a wide spectrum, long life electrochemical sensor to measure the amount of Nitrogen Dioxide in the environment. It is offered with a range of 0 to 10 ppm with an

accuracy of +/- 2.5% of reading. The nitrogen dioxide transmitter provides a linear 4 to 20 mA output on a 3-wire system when using a DC voltage to power the transmitter. When using AC power, the transmitter can be connected using either 3 or 4-wires. The input voltage may be either +24 VDC or 24 VAC.

Both the Room and Duct NO₂ transmitters are offered in a standard NEMA 1 rated plastic enclosure. An optional NEMA 4X rated enclosure is available upon request. All ACI/NO₂ sensors come with a two year factory warranty. Other options may be available upon request. Please contact ACI for more information regarding any of these products.

Product Specifications

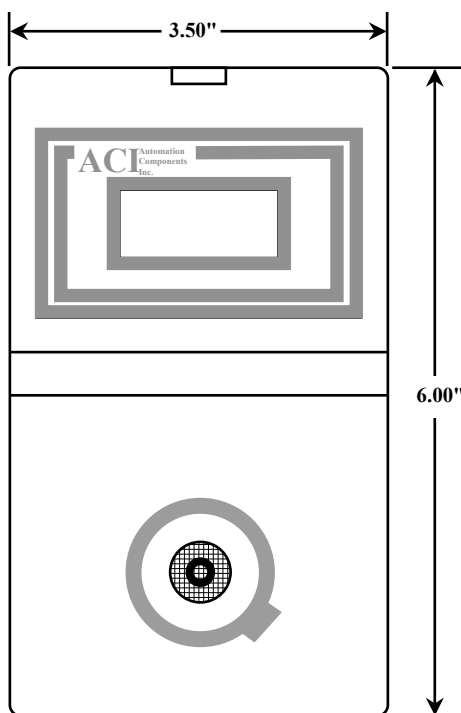
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|-------------------------------|-----------------------------------------------|--------------------------------|----------------------------------------------------|
| Supply Voltage | +24 VDC or 24 VAC 3 wire or 4-Wire (Floating) | Response Time | Less than 60 Seconds typical for a 90% step change |
| Supply Current | 80 mA maximum | Temperature Range | -20 to 40°C (-4 to 104°F) |
| Transmitter Range | 0 to 10 ppm | Operating Humidity | 15 to 95% non-condensing |
| Output | 4 to 20mA, 2 to 10 VDC, or RS485 digital | Enclosure Materials | Polycarbonate/ABS blend (Fire Retardant) |
| Accuracy | +/- 2.5% of reading | Sensor Life Span | 2 to 3 years Typical |
| Repeatability | +/- 1.0% of reading | Sensor Mounting Height | 4 to 6' from floor |
| Sensor Type | Electrochemical | Approvals | CSA (Pending) |
| Coverage Area | 5,000 to 7,500 Sq. Ft. (max) | Relay Output (Optional) | (2) SPDT Form 1C Relays @ 1A |
| LCD Display (Optional) | Alphanumeric 2 line x 8 Digit | Buzzer (Optional) | 85 dB @ 1 Foot |

Dimensions

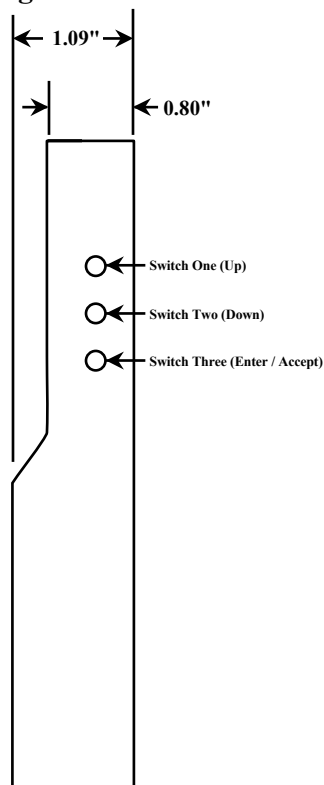
All Dimensions are in Inches

Room

Front



Right Side



Ordering Information

Model
ACI/NO₂ -[]
↑

Display
-[]
↑

R- Room Configuration

() - No Relay (Standard)

D- Duct Configuration

(LCD)- LCD Display, (2) SPDT Form 1C Relay, and a Buzzer

Cal Kit- Calibration Kit (Includes: (1) 58 Liter Cylinder of 6 ppm. NO₂ span test gas,
(1) 58 liter cylinder gas regulator, (1) Calibration Adapter, and a carrying case)

Example: ACI/NO₂-R or ACI/NO₂-R-LCD or ACI/NO₂-Cal Kit