

# IR-300 Series

## Carbon Dioxide (CO<sub>2</sub>) Transmitter

### Cost Effective IAQ Indoor Air Quality Monitoring for Fresh Air Make-up



The IR-300 series are infrared sensor transmitters for monitoring the carbon dioxide levels in ambient air. In commercial applications, the outputs are typically interlocked with ventilation systems to control the amount of fresh air introduced to a room. Industrial applications include ventilation make-up air but may also be for alarms of CO<sub>2</sub> leaks or high concentrations from process excursions.

- Wall mount or duct mount versions
- Single point calibration
- Long term stable readings
- Humidity sensor option

Applications include offices, gyms, water purification plants, pools, food and beverage, greenhouses, oil and gas, etc.; anywhere carbon dioxide is stored or generated. This transmitter by DCS can be installed as a stand-alone transmitter/controller or used with the Arjay 4300-PG, EC-Gold Dual or 4200-IG control panels.

# IR-300 Series

## Standard Features

- Wall and duct mount versions
- LCD display of ppm concentration standard
- Relay contact and analog output standard
- Optional humidity sensor with discrete analog output
- Single point calibration
- NDIR non-dispersive infrared on-board sensor
- Factory calibrated

## Technical Specifications

Power Input	18-28 vac/vdc, 2.5 VA
Operating Humidity	0-99 % R.H., non-condensing
Operating Temperature	0°-50°C
Signal Output	4-20mA
Relay Output	SPST dry, 24 vac, 2.5 amp maximum setpoint at 2,000 ppm
Display	LCD of ppm concentration
Measurement Range	0-2000 ppm E90440B 0-5000 ppm E90440A or duct mount version E90440D 0-5% E90699
Accuracy	Greater of +/- 30 ppm or +/- 2 % of reading
Sensor Life	5 years typical

## RH Humidity Sensor Option

Measurement Range	0-99%
Signal Output	4-20mA

## Ordering Part Numbers

E90440A	Model 310e, 0-5000 ppm, wall mount with display, 4-20 mA, SPST relay (shipped at 4000 ppm, field adjustable) (typical for pool and industrial applications)
E90440B	Model 350, 0-2000 ppm with display, 1000 ppm setpoint (typical for offices, schools, etc)
E90440D	Model 310e, 0-5000 ppm, duct mount with display, 4-20 mA, SPST relay (shipped at 4000 ppm, field adjustable) (typical for industrial applications)
E90699	0-5% Version Industrial Grade Version (no humidity or duct mount option available)
E90783	Calibration Kit (does not include cylinder of gas)
E90344	Gas Cannister (2000 ppm CO <sub>2</sub> disposable cylinder) - One cylinder will do approximately 10 calibrations - Units are factory calibrated at shipment
E90367	Gas Cannister (5000 ppm CO <sub>2</sub> disposable cylinder) - One cylinder will do approximately 10 calibrations - Units are factory calibrated at shipment



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