

GREYSTONE
ACCURACY BY DESIGN



CARBON MONOXIDE (CO) DETECTORS



**Air quality starts
with sensing the problem**

Greystone's Carbon Monoxide (CO) detectors provide unsurpassed accuracy, reliability, and selection.

*Peace of mind
through reliable
gas sensors*

GREYSTONE HAS AN **ISO 9001** REGISTERED QUALITY SYSTEM

CO DETECTOR

Environmental, industrial and commercial indoor Carbon Monoxide (CO) gas detector. Available in both a space and duct mount version.



ABS Duct Enclosure for CO

APPLICATION:

To sense and transmit to any compatible electronic analog control, DDC/PLC controller or automation system for the control of ventilation equipment.

FEATURES:

- Setup/calibration fully menu driven (requires LCD option)
- 0-300ppm for electrochemical (5% or 10 PPM), 0-500ppm for electrochemical (3% or 10 PPM).
- Electrochemical sensing elements
- Optional on board relays with field adjustable trip point.
- Optional LCD for displaying PPM level and menu options.
- Powered by either AC or DC source with no change to circuit required.
- Choice of three field adjustable analog output signals, linearized over full range.
- Modbus communication option.
- Field replaceable calibrated sensor module.

SPECIFICATIONS	CO DETECTOR – Product # CMD
Gas Detected	Carbon Monoxide (CO)
Range	0 – 300 ppm electrochemical (5%), 0-500 ppm electrochemical (3%)
Standard Accuracy	±10 PPM or ±5% of reading for 0 – 300 ppm (Whichever is greater) ±10 PPM or ±3% of reading for 0 – 500 ppm (Whichever is greater) 5-45 C (41-113F), 15 – 95% RH
Sensing Element	Electrochemical
Operation Conditions	0-50 °C (32-122 °F) standard, -20-50 °C (-4-122 °F) optional low temp (LT), 15 - 95% RH non-condensing
Sample Method	Diffusion or flow through, sample tube for duct
Stability	< 5% signal loss/year
Manufacturing Process	ISO 9001 certified
Output Signal	4-20 mA active or passive, 0-5Vdc or 0 – 10 Vdc jumper selectable
Output Drive Capability	Active current output – 750 ohms max Passive current output – 1000 ohms max @ 24 Vdc
Output Resolution	10 bit PWM (+/- 0.4 ppm)
LCD Display (optional)	LCD for displaying PPM 1 ppm resolution, 1.1” w x 0.5” h (28 x 13 mm) alpha-numeric 2 line x 8 characters
Field Calibration	Calibration, applying calibration gas standards (Contact Greystone for Calibration kit)
External Dimensions	ABS Space – 124.5 W x 183.5 H x 43 mm D (7.2” x 4.9” x 1.7”) Duct ABS – 124.5 x 183.5 x 250.5 mm (7.2” x 4.9” x 9.9”) includes duct insertion tube



SPECIFICATIONS (Con't)	CO DETECTOR – Product # CMD
Pressure Coefficient	0.020 ± 0.008% signal/mBar
Typical Coverage Area	700 m2 (7500 ft2)
Response Time	< 30 seconds for 90% step change
Warm-up Time	200 seconds
Power Supply	20-30 Vac/dc (non-isolated half-wave rectified)
Consumption	100 mA max @ 24 Vdc with all options on
Input Voltage Effect	Negligible over specified operating range
Protection Circuitry	Reverse voltage protected and output limited
Optional Relay Output	One or two Form C contact (N.O. and N.C.), status LED's, 5 amps @ 250 Vac, 5 amps @ 30Vdc, p.f. = 1 Relay Trip Point – Programmable 25, 40-400 ppm in 10 ppm increments Relay Hysteresis – Programmable 10, 15, 25, 50 or 75 ppm
Programming and Selection	Via internal push-buttons and jumper
Wiring Connections	Screw terminal block (14 to 22 AWG)

CARBON MONOXIDE (CO): PRODUCT ORDERING INFORMATION

MODEL	Description					
CMD	Carbon Monoxide Detector (CO)					
	CODE	Sensing Element and Accuracy				
	3	Electrochemical				
	5	Electrochemical				
		CO				
		3%				
		5%				
	CODE	Gas Type				
	B	CO – Carbon Monoxide Detector				
	CODE	Enclosure				
2	Space ABS					
6	Duct ABS					
9	Space ABS, weather proof					
CODE	Circuit Board Relay (s)					
00	No Relay					
10	One Relay, Form C contact (N.O. and N.C.), status LED's, 5 amps @ 250 Vac, 5 amps @ 30Vdc, p.f. = 1					
11	Two Relay's, Form C contact (N.O. and N.C.), status LED's, 5 amps @ 250 Vac, 5 amps @ 30Vdc, p.f. = 1					
CODE	Options					
0	No options					
1	LCD					
2	Audible Alarm					
MOD	Modbus Communications					
LT	Low Temperature option down to -20 °C (-4 °F)					
CMD	5	B	2	00	0	← Typical Model Number

Example: Electro-chemical CO Space ABS No Relay No Options

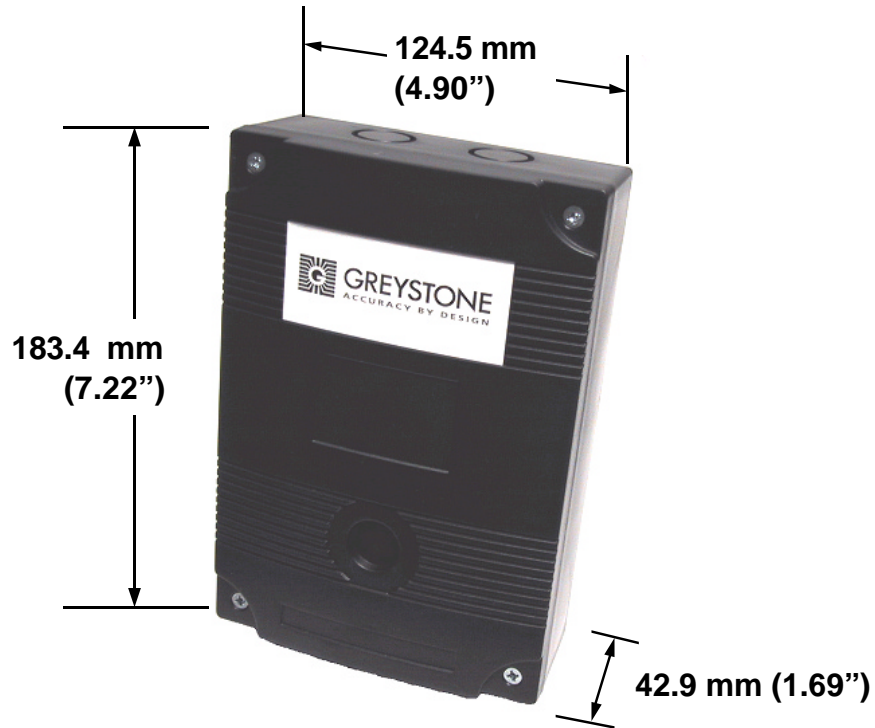
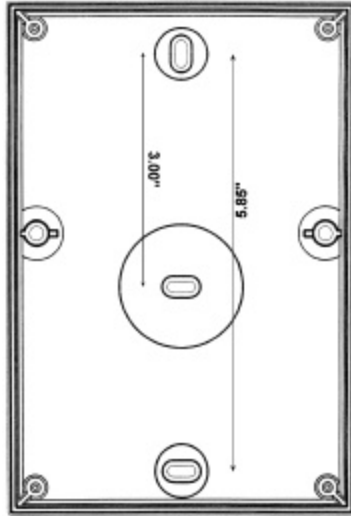
Greystone Energy Systems, Inc. reserves the right to make design modifications without prior notice.



GREYSTONE ENERGY SYSTEMS INC.



DIMENSIONS: nts



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Greystone Energy Systems Inc. is one of North America's largest ISO registered manufacturers of HVAC sensors and transducers for Building Automation Management Systems.

We have conscientiously established a worldwide reputation as an industry leader by maintaining leading-edge design technology, prompt technical support, and a commitment to on-time deliveries. We take pride in our Quality Management System which is ISO 9001 certified,

V.06/06

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