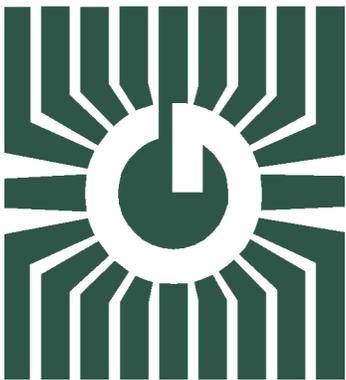


GREYSTONE
ACCURACY BY DESIGN



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 IS AN ISO 9002 REGISTERED COMPANY

CO DETECTOR

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

APPLICATION:

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



ABS Duct Enclosure for CO

FEATURES:

- Setup/calibration fully menu driven (requires LCD option)
- 0-300ppm for electrochemical (7%), 0-500ppm for electrochemical (3%).
- 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.
- Easy to calibrate in the field

SPECIFICATIONS	CO DETECTOR – Product # CMD
Gas Detected	Carbon Monoxide (CO)
Range	0 – 300 ppm electrochemical (7%), 0-500 ppm electrochemical (3%)
Standard Accuracy	±7% of reading for 0 – 300 ppm with electrochemical (7%) ±3% of reading for 0 – 500 ppm with electrochemical (3%) 5-45 C (41-113F), 15 – 95% RH
Sensing Element	Electrochemical
Operation Conditions	0-50 °C (32-122 °F), 15 - 95% RH non-condensing
Sample Method	Diffusion or flow through, sample tube for duct
Stability	< 5% signal loss/year
Manufacturing Process	ISO 9002 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 10 Kohm min for voltage output
Output Resolution	10 bit PWM
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 200 mA max @ 24 Vac with all options on
Input Voltage Effect	Negligible over specified operating range
Protection Circuitry	Reverse voltage protected and output limited Transient protection and resettable fuse
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 10, 15, 25, 50 or ppm increments Relay Hysteresis – Programmable 25-200 ppm in 25 ppm increments
Programming and Selection	Via internal push-buttons and jumper
Wiring Connections	Screw terminal block (14 to 22 AWG)

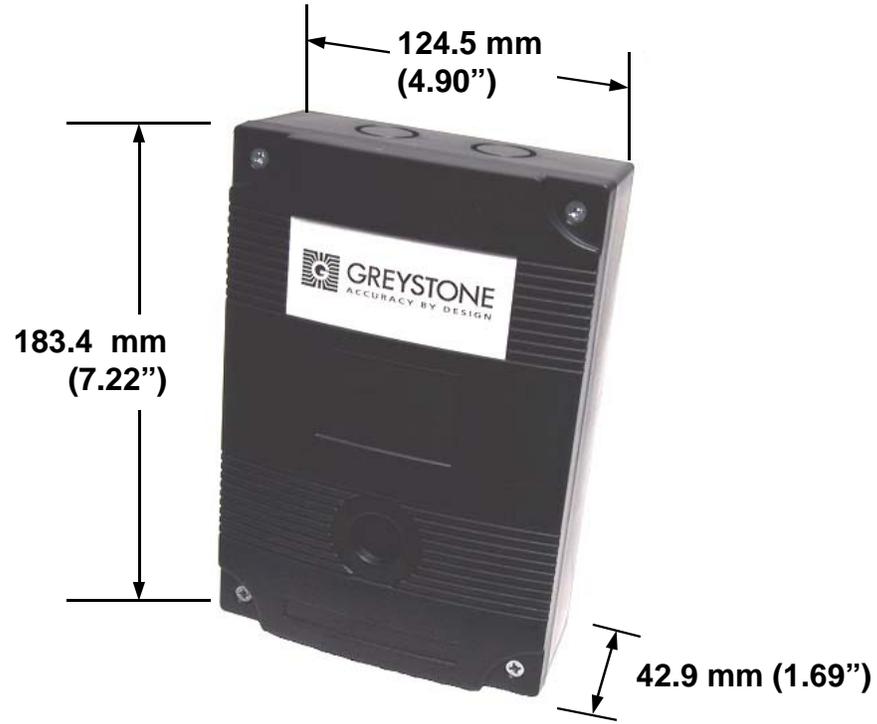
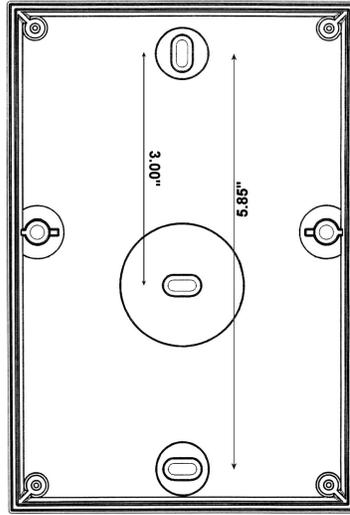
CARBON MONOXIDE (CO): PRODUCT ORDERING INFORMATION

MODEL	Description					
CMD	Carbon Monoxide Detector (CO)					
	CODE	Sensing Element and Accuracy	CO			
	3	Electrochemical	3%			
	5	Electrochemical	7%			
	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				
	3	RS-485 Communication (Please contact Greystone)				
	CMD	5	B	2	00	0
	← Typical Model Number					

Example: ^{Electro-}chemical CO ABS No Relay No Relay No Options

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

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 9002 certified, assuring our customers of consistent product reliability.

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