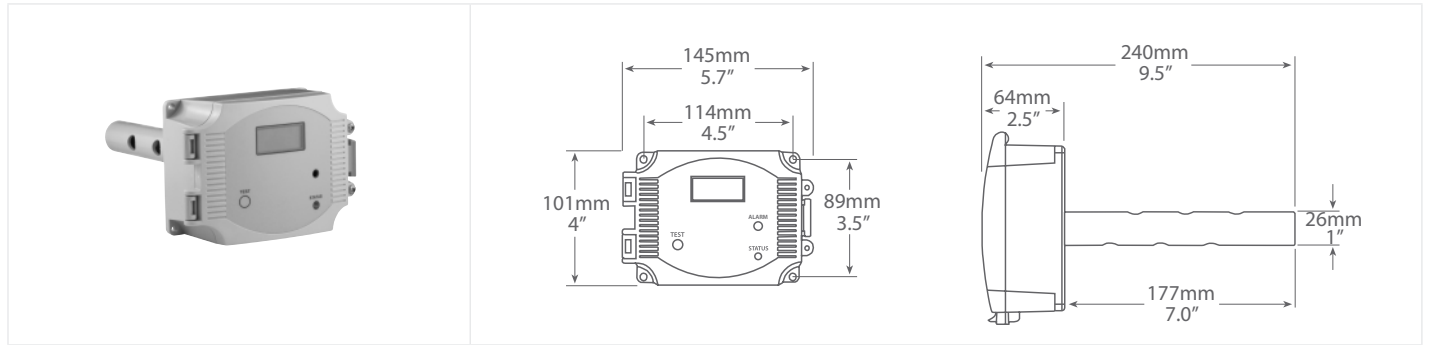




## DUCT CARBON MONOXIDE DETECTOR



### CMD5B5 SERIES

### PRODUCT DESCRIPTION

The CMD5B5 series carbon monoxide detector uses an electrochemical sensor to monitor the carbon monoxide level and outputs a field-selectable 4-20 mA or voltage signal. The voltage signal may also be set to 0-5 or 0-10 Vdc. The sensing range and output may be scaled to either 100, 150, 300, 400 or 500 ppm via the on-board menu. A front panel LCD is standard to ensure easy setup and operation.

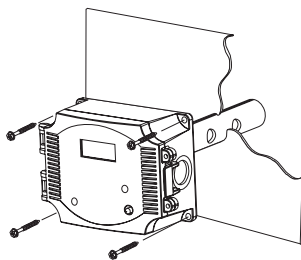
Other standard features include a back light for the LCD, a front panel test switch, status indication and an alarm buzzer. The test function may also be controlled remotely with a digital input signal. The on-board menu allows for local configuration of all device parameters.

Optional features include one or two alarm relays and/or RS-485 network communications configured for either ModBus or BACnet® protocol.

### TYPICAL INSTALLATION

**For complete installation and wiring details, please refer to the product installation instructions.**

The CMD Duct is installed through the side of the duct, and fastened securely to the duct through the mounting holes provided.

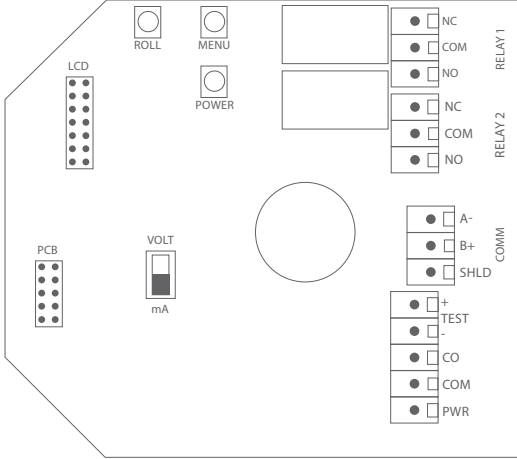


### SPECIFICATIONS

MEASUREMENT	Electrochemical
SENSOR AGENCY APPROVALS	Sensor is UL Recognized for ANSI/UL-2034 and UL-2075, E240671
MEASUREMENT RANGE	0-100, 150, 300, 400, or 500 ppm (selectable)
ACCURACY	±5 ppm or ±5% of reading (whichever is greater)
ACCURACY RATED	0 to 50°C (32 to 122°F), 15 to 95 %RH
LIFE EXPECTANCY	5-7 years in air
TYPICAL COVERAGE AREA	700m <sup>2</sup> (7500ft <sup>2</sup> ) or 15m (50ft) radius
OPERATING CONDITIONS	-20 to 50°C (-4 to 122°F), 15 to 95 %RH, 0.9 to 1.1 atm
SAMPLE METHOD	Diffusion or flow through sample tube for duct mounted models
STABILITY	<5% signal loss/year
RESPONSE TIME	<35 seconds for 90% step change
POWER SUPPLY	24 Vdc ±20% or 24 Vac ±10% (non-isolated half-wave rectified)
CONSUMPTION	100 mA maximum with all options on
PROTECTION CIRCUITRY	Reverse voltage protected and output limited
OUTPUT SIGNAL	4-20 mA (Active), 0-5 or 0-10 Vdc (Selectable)
OUTPUT DRIVE AT CAPABILITY	<b>Current:</b> 450Ω maximum <b>Voltage:</b> 10 KΩ minimum
OUTPUT RESOLUTION	10 bit PWM (±0.4ppm)
LCD DISPLAY	Displays PPM and menu parameters 1ppm, 35mm W x 15mm H (1.5" x 0.6") Alpha-numeric 2 line x 8 character with backlight
STATUS LED	2 color (re/green) on front panel
TEST SWITCH	Performs I/O tests, front panel and remote connection
BUZZER ALARM	85 db @ 10 cm
BUZZER TRIP POINT	Programmable 20-500 ppm in 10 ppm increments
BUZZER DELAY	Programmable 0-10 minutes in 1 minute increments
OPTIONAL RELAY OUTPUT	One or two Form C (N.O. and N.C.) 5 Amps @ 250 Vac, 5 Amps @ 30 Vdc, p.f. = 1 <b>Relay 1 Trip Point:</b> Programmable 20-500 ppm in 10 ppm increments <b>Relay 2 Trip Point:</b> Programmable 20-500 ppm in 10 ppm increments <b>Relay Hysteresis:</b> Programmable 10-100 ppm in 5 ppm increments <b>Relay Delay:</b> Programmable 0-10 minutes in 1 minute increments
OPTIONAL COMMUNICATIONS	BACnet® or Modbus (Refer to installation instructions for full details)
WIRING CONNECTIONS	Screw terminal block (14 to 22 AWG)
ENCLOSURE	ABS, UL94-V0, IP65 (NEMA 4)
ENCLOSURE DIMENSIONS	145mm W x 101mm H x 240mm D (5.7" x 4" x 9.4")
FIELD CALIBRATION	By applying calibration gas standard (contact Greystone for calibration kit)
COUNTRY OF ORIGIN	Canada



## WIRING INFORMATION



TERMINAL	FUNCTION
+ TEST	Digital Input
- TEST	Common
CO	Analog Output
COM	Common
PWR	Power Supply
A -	Network Output
B +	Network Output
SHLD	Network Output
RELAY 1	
NC	Digital Output
COM	Common
NO	Digital Output
RELAY 2	
NC	Digital Output
COM	Common
NO	Digital Output

## ORDERING

PRODUCT	CMD5B5	Carbon Monoxide Detector
CIRCUIT BOARD RELAY	000 100 110	No relay One Relay Two Relays
OPTIONAL COMMUNICATIONS	- BAC MOD	None (leave blank) BACnet® communications Modbus communications

## PART NUMBER

CMD5B5

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