GREYSTONE
ENERGY SYSTEMS INC

The CMD 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. It is available in either space or duct mount configurations.

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.

PART NUMBER SELECTED

SPECIFICATION:

Sensor Type ....Electrochemical
Sensor Agency Approvals ....Sensor is UL Recognized Component for ANSI/UL-2034, 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 ....700 m^2 (7500 ft^2) or 15 m (50 ft) 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 max. 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.......450 ohms max for current output, 10 Kohms min for voltage output
Output Resolution ....10 bit PWM (±0.4 ppm)
LCD Display...................................Displays PPM and menu parameters 1 PPM resolution, 35 mmW x 15 mm H (1.4" x 0.6") Alpha-numeric 2 line X 8 character with backlight
Status LED ....2 color (red/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

PRODUCT SELECTION INFORMATION:

MODEL	Product Description
CMD5B	Carbon Monoxide Detector

CODE	Options
4	Space ABS
5	Duct ABS

CODE	Circuit Board Relay
000	No relay
100	One Relay
110	Two Relays

CODE	Optional Communications
BAC	BACNet Communications
MOD	Modbus Communication

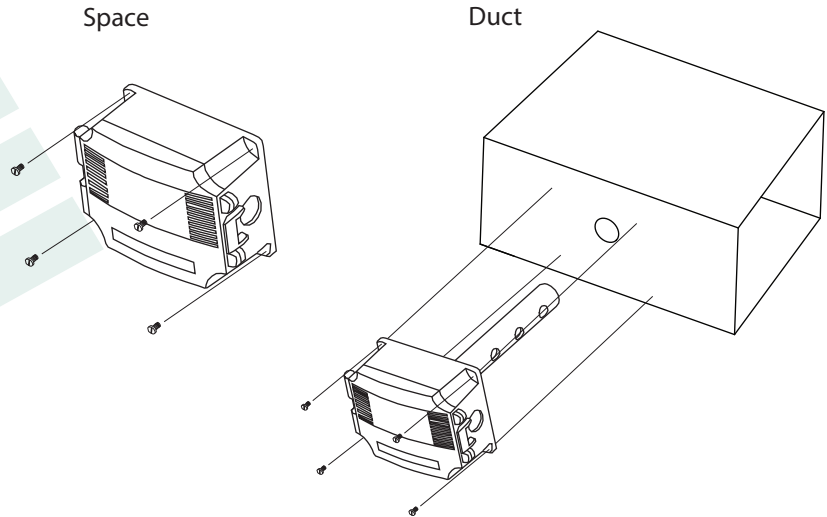Greystone Energy Systems, Inc. reserves the right to make design modifications without prior notice.

Optional Relay Output ....One or two Form C contact (N.O. and N.C.) 5 amps @ 250 Vac, 5 amps @ 30 Vdc, p.f. = 1 Relay 1 Trip Point - Programmable 20-500 PPM in 10 PPM increments Relay 2 Trip Point - Programmable 20-500 PPM in 10 PPM increments Relay Hysteresis - Programmable 10-100 PPM in 5 PPM increments Relay Delay - 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)
External Dimensions ....Space, 145 x 101 x 64mm (5.7"w x 4"h x 2.5"d) Duct, 145 x 101 x 240mm, (5.7"w x 4"h x 9.5"d) includes probe
Enclosure Ratings.........................Space (4) - ABS - UL94-V - IP65 (NEMA 4X) Duct (5) - ABS - UL94-V - IP65 (NEMA 4X)
Field Calibration...........................By applying calibration gas standards (Contact Greystone for calibration kit)
Accessories ....Calibration kit, model# CMD-CALKIT-GS

GREYSTONE ENERGY SYSTEMS, INC.

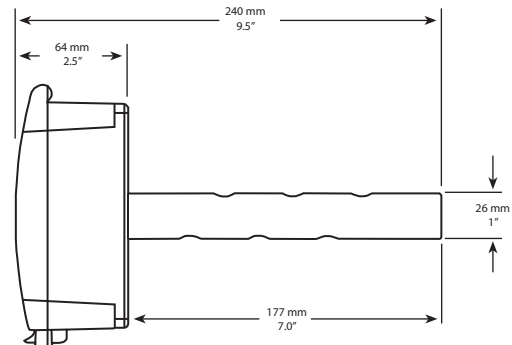RoHS COMPLIANT

MADE IN CANADA

ISO9001
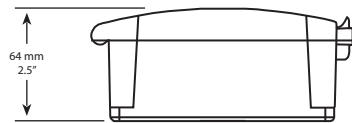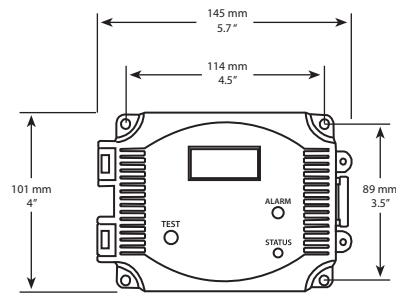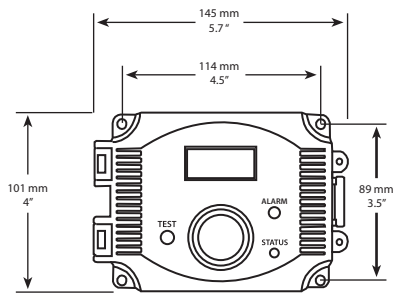
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TYPICAL INSTALLATION:

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

The CMD Space can be mounted directly to a wall using the 4 mounting holes provided.

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

Space

Duct

DIMENSIONS:

145 mm
5.7 "

114 mm
4.5"

101 mm
4"

89 mm
3.5"

ALARM

TEST

STATUS

64 mm
2.5"

145 mm
5.7 "

114 mm
4.5"

101 mm
4"

89 mm
3.5"

ALARM

TEST

STATUS

240 mm
9.5"

64 mm
2.5"

26 mm
1"

177 mm
7.0"

GREYSTONE

ENERGY SYSTEMS INC

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RoHS
COMPLIANT

GREYSTONE
5
Warranty

MADE
IN CANADA

Certified System
ISO9001

CE

Greystone Energy Systems Inc. is one of North America's largest ISO registered manufacturers of HVAC sensors and transmitters 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, assuring our customers of consistent product reliability.

GREYSTONE HAS AN ISO 9001 REGISTERED QUALITY SYSTEM

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