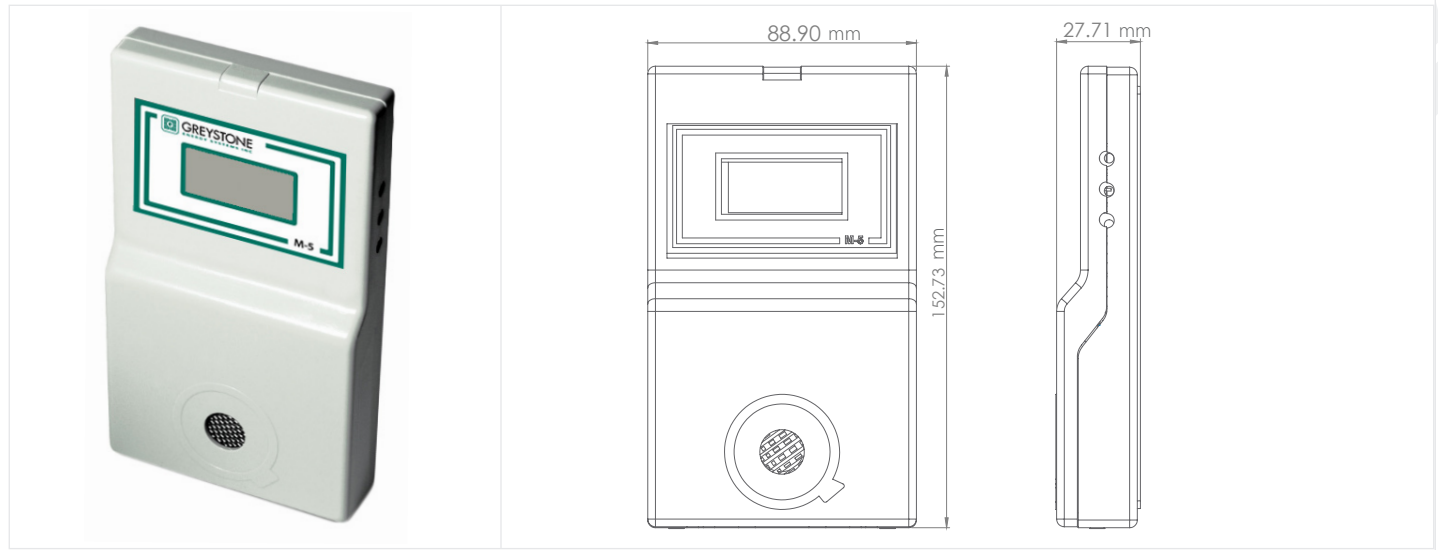


## ANALOG TOXIC GAS SENSOR TRANSMITTER



CTS-M5 SERIES

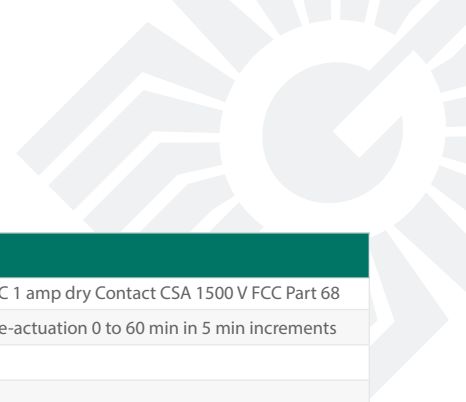
### PRODUCT DESCRIPTION

The CTS-M5 Series is a microprocessor-based transmitter with an electrochemical gas sensor for detecting various gases. Key features include:

- **Applications:** Suitable for enclosed parking facilities, refrigeration rooms, and oxygen storage rooms.
- **Design:** Engineered for high performance and value by our engineer team.
- **Standard Features:** Includes a digital display (LCD), push-button programming, and on-board meter jacks.
- **Outputs:** Provides analog output (4-20 mA DC or 2-10 VDC) for Building Automation Systems (BAS) or other controllers.
- **User-Configurable:** Signal range and relay setpoints can be adjusted for rising or falling gas concentrations.
- **Power:** Accepts 24 VDC or 24 VAC input voltages.
- **Calibration:** Easy calibration with a potentiometer and calibration gas.
- **Enclosure:** Made from a fire-retardant Polycarbonate/ABS blend.

### SPECIFICATIONS

VOLTAGE	24V AC Floating 24 AC One side grounded 24 V DC
SUPPLY CURRENT   POWER CONSUMPTION	Max 6.6 W
SENSING ELEMENT TECHNOLOGY	Electrochemical
SENSOR LIFE	Typical 2 to 3 years, 5 years CO
ACCURACY	± 2.5% of reading
REPEATIBILITY	± 1% of reading
SHELF LIFE	6 months from date of purchase
RESPONSE TIME	Less than 60 Seconds for 90% of step change
COVERAGE AREA	7500 sq. ft; 49' Radius
MOUNTING HEIGHT	4' to 6' above the floor
FACTORY CALIBRATION RANGE	(see table of gas)
DISPLAY	Alphanumeric - 2 line x 8 Digits LCD



## SPECIFICATIONS

RELAYS OUTPUTS	Two Single pole double throw (SPDT) Form C 1 amp dry Contact CSA 1500 V FCC Part 68
TIME DELAYS	Actuation 0 to 60 min in 5min increments De-actuation 0 to 60 min in 5 min increments
RELAYS LIFE EXPECTANCY	200,000 cycles minimum with 1A @ 30 VDC
ANALOG OUTPUTS	4-20mA or 2-10VDC ( linear)
BUZZER	Buzzer Rating 85 dB @ 1Ft
OPERATING ENVIRONMENT	Indoor Use only
OPERATING TEMPERATURE	- 20 deg C to 40 deg C
STORAGE TEMPERATURE	32° to 68°F (0°C to 20°C)
OPERATING HUMIDITY	Continuous 15 to 90%RH , non condensing Intermittent 0 to 99%RH , non condensing
OPERATING PRESSURE	Atmospheric +/-10%
ENCLOSURE	Polycarbonate /ABS Blend Fire Retardant For Duct Mounting See accessories table
WIRING	Fixed terminal blocks, Power wiring: 16 to 26 AWG (0.2 to 1.00 nm <sup>2</sup> ) Shielded Twisted Pair
DIMENSIONS	(H) 6.00" (152.4 mm) x (W) 3.5" (88.9 mm) x (D) 1.09" (27.87 mm)
WEIGHT	0.62 lbs (281.2 g)

Ensure a complete understanding of all applicable Federal, State, Provincial and Local Health and Safety laws and regulations before using these products.

### \* FULLY ASSIGNABLE 4-20 MA OR 2-10 VDC OVER CHOSEN RANGE

4 mA / 2VDC may be set anywhere in range, 20 mA / 10 VDC may be set anywhere in range Signal is assigned linearly between the two points Signal may be rising or falling with gas concentration

## ORDERING CODE

C T S - M 5 X - Q 0 0 0 0 - G

**Gas Ordering Code**  
(See Below for Code)

**Revision** (Factory Provided)

**Enclosure** - Wall Mount ..... **Q**

**Enclosure** - Duct Mount ..... **D**

**Nema** 4X ..... **N**

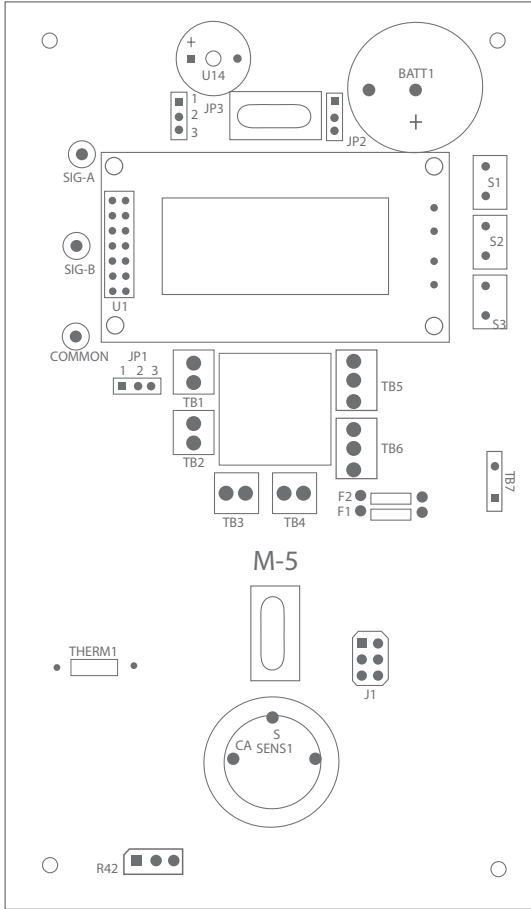
**Relays** (2 X SPDT & Buzzer) ..... **R**

Greystone Product ..... **G**

GAS TYPE	NUMBER	MAXIMUM RANGE
Oxygen – O2	130	0 - 25% VOL
Nitrogen Dioxide – NO2	150	0 - 10 ppm
Carbon Monoxide – CO	160	0 - 250 ppm
Nitric Oxide – NO	190	0 - 200 ppm
Ammonia – NH3	220	0 - 100 ppm



## WIRING INFORMATION



## CTS-M5

TERMINAL	FUNCTION
TB5 TB6	NC: Normally Close COM: Common NO: Normally Open 2x Relays Outputs
TB1	COMMON14 OUPUT13 Analog Output Port
TB4	+24VAC/VDC -GND Power IN Half Wave
TB3	24 VAC floating Power IN Full Wave
S1 S2 S3	Switch 1 Switch 2 Switch 3 UP Down Enter/Accept