



CTS-M5

Toxic Sensor Series

The CTS-M5 Series has a microprocessor based transmitter. It uses an Electrochemical gas sensor to monitor a variety of gases. The CTS-M5 Series offers great value since it includes many standard features that can only be found as expensive options in other manufacturer's models. A digital display (LCD), push-button programming and on-board meter jacks are all standard. The transmitter provides an analog output of 4-20 mA or 2-10 VDC, proportional to the measured gas range, for transmission to the building management system. The CTS-M5 Series offers flexibility and simplicity in one package. The relay setpoints may be seen as increasing or decreasing actuation simply by adjusting the deadband relationship. Set the deactuation point above the actuation setpoint and the CTS-M5 will automatically alarm on decreasing concentrations. Plus, calibration is extremely simple. First, apply the calibration gas and then adjust the potentiometer to the desired reading on the display.

The CTS-M5 Series are covered by ACI's Two (2) Year Limited Warranty, which is located in the front of ACI's Sensors & Transmitters catalog or can be found on ACI's web site, which is: www.workaci.com.



SPECIFICATIONS

Supply Voltage	+24 VDC or 24 VAC floating or one side ground
Supply Current	100 mA nominal/250 mA maximum
Sensor Type	Electrochemical
Sensor Life Span	2 to 3 years typical (under normal conditions)
Gas Measurement Range	O ₂ , 0 to 25% v/v NO, 0 to 100 ppm NH ₃ , 0 to 50 ppm
Outputs	4-20 mA, +2-10 VDC, Digital RS-485, (2) SPDT Form 1C Relay
Accuracy/Repeatability	+/- 2.5% of Reading/+/- 1.0% of Reading
Relay Rating	(2) SPDT Form 1C rated @1 Amp dry contact
Time Delays	Actuation: 0-60 minutes in 5 minute increments, De-Actuation: 0-60 minutes in 5 minute increments
Buzzer Rating	Rated for 85 dB @ one foot
Response Time	Less than 60 seconds typical for a 90% step change
Indicators	Two line 8 digit Alpha Numeric LCD (2) Red LED's for Relay Status
Operating Temperature Range	-4° to 104°F (-20 to 40°C)
Operating Humidity Range	15 to 90%, non-condensing, 0 to 99% Intermittent (non-condensing)
Operating Pressure Range	Atmospheric +/- 10%
Maximum Sensor Coverage Area	7,500 ft ² (O ₂ , NH ₃): 5,000 ft ² (NO, NO ₂)
Mounting Height Above Floor	4 to 6' (NO, O ₂): 0.5 to 1.5' (NH ₃)

ORDERING

Select one Gas Type (A), one Enclosure (B), one Relay (C), & one Conformal Coating Option (D). **NOTE:** The LCD option is not available for NEMA 4X related configurations.

A Gas Type	B Enclosure	C Relays	D Conformal Coating
<input type="radio"/> 130 (Oxygen)	<input type="radio"/> Q0 (NEMA 1 Wall Mount)	<input type="radio"/> 0 (None) (Standard)	<input type="radio"/> 0 (No Coating) (Standard)
<input type="radio"/> 190 (Nitric Oxide)	<input type="radio"/> D0 (Duct Mount)	<input type="radio"/> R (2) SPDT Form 1C Relays, LCD & Buzzer	<input type="radio"/> W (Conformal Coating)
<input type="radio"/> 220 (Ammonia)	<input type="radio"/> N0 (NEMA 4X)		

BUILD PART NUMBER

After completing (A), (B), (C) & (D) from the above table, fill in the Part Number Table below. "Sensor Series" (CTS-M5), "Revision" (X) & "Factory Provided" (000) are factory defaults. An example part number is offered.

CTS-M5	X	-	000
SENSOR SERIES	A	REVISION	FACTORY PROVIDED

EXAMPLE: CTS-M5130X - Q0RW000