



CTS-M5

Toxic Sensor Series

The CTS-M5 Series has a microprocessor based transmitter that uses an Electrochemical gas sensor to monitor Oxygen or Ammonia. The CTS-M5 Series offers great value since it includes many standard features. 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 exibility 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. Refer to all applicable Federal, State, Provincial and Local Health and Safety laws and regulations before using these products. **CTS-M5 is not compatible with the Q4C-II, M-Controller 2, or Q-controllers. Not compatible with Modbus RTU communication**

Applications: Parking Garages, Arenas, Kitchens, Laundry Rooms, Warehouses, Loading Docks, Service Garages, School Bus Parking Areas

The CO Room Series Gas Transmitters are covered by ACI's Two (2) Year Limited Warranty against defects in material and workmanship from the date of shipment with the exception of the Sensor Modules (Electrochemical/Toxic: Six Months and Catalytic/Combustible: One Year). The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's website, workaci.com.

PRODUCT SPECIFICATIONS

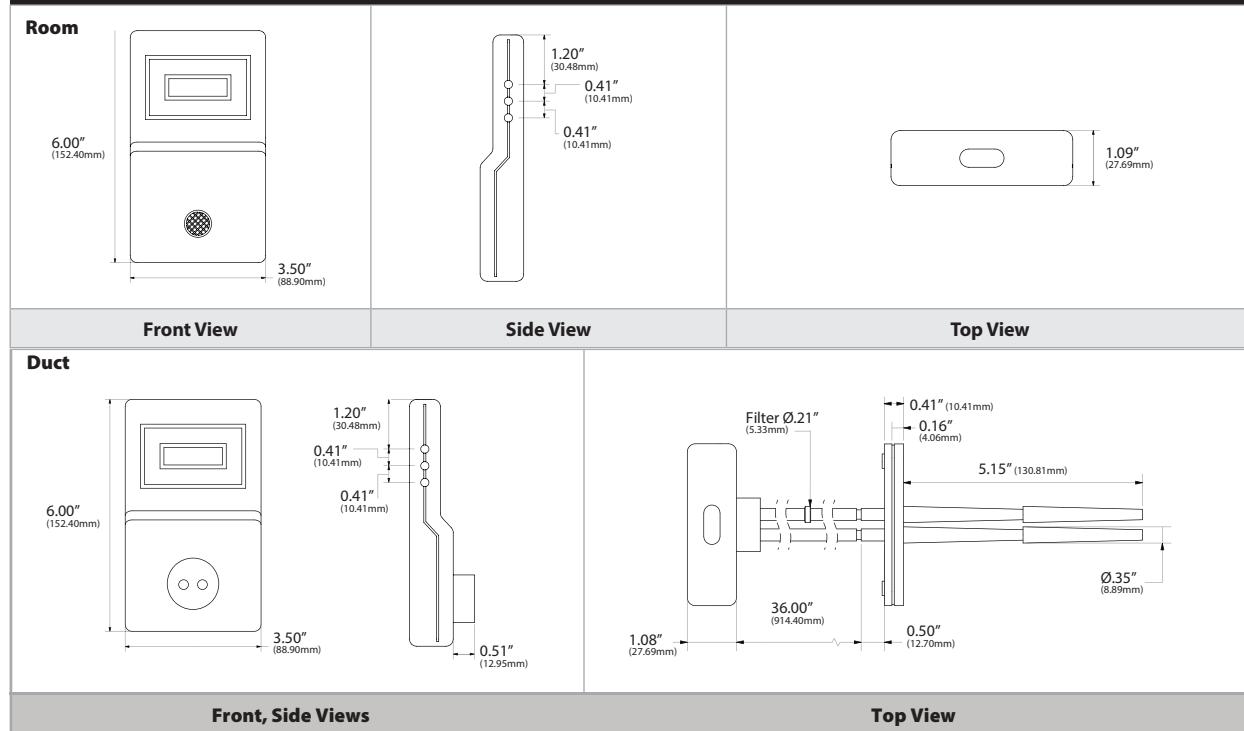
Supply Voltage:	24 VAC +/- 10% Floating; 24 VAC +/- 10%, One side Grounded; 24 VDC
Supply Current:	100 mA nominal 250 mA maximum
Power Usage:	6.6 Watts maximum
Operating Temperature:	-4°F to 104°F (-20°C to 40°C)
Operating Humidity:	15 to 90% RH Continuous, non-condensing; 0 to 99% RH Intermittent, non-condensing
Accuracy:	+/- 2.5% of Reading
Repeatability:	+/- 1% of Reading
Operating Pressure:	Atmospheric +/- 10%
Response Time:	Less than 60 Seconds for 90% of step change
Sensor Type:	Electrochemical
Sensor Life:	2-3 years typical for Ammonia 18 months typical for Oxygen
Factory Set Range:	NH3: 0-100 ppm O2: 0-25% v/v
Coverage Area:	7500 sq. ft; 49' Radius
Indicators:	Alphanumeric, 2 line X 8 digit LCD / (2) Red LED's for Relay Status
Mounting Height:	O2: 4-6' Above Floor NH3: 6-18" Below Ceiling
Outputs:	4 - 20mA, 2 - 10VDC
Relay & Buzzer (Optional):	Two SPDT Form C, Dry Contact, 1A @ 30 VDC/0.5A @ 125 VAC (Resistive Load), Buzzer Rating 85 dB @ one foot
Relay Life Expectancy:	200,000 cycles minimum with 1A @ 30 VDC
Time Delays:	Actuation / De-Actuation: 0 to 60 Minutes in 5 minute Increments
Storage:	32° to 68°F (0°C to 20°C)
Unit Shelf Life:	6 Months from date of purchase
Enclosure:	Room: Polycarbonate/ABS Blend
Terminal Blocks:	Power wiring: 16 to 26 AWG (0.2 to 1.00 nm ²) Shielded Twisted Pair
Terminal Block Torque Rating:	0.37 ft-lbs (0.5n-3m) Nominal
Product Dimensions:	Room: (H) 6.00" (152.4 mm) x (W) 3.50" (88.9 mm) x (D) 1.09" (27.87 mm) Duct: (H) 6.00" (152.4 mm) x (W) 3.5" (88.9 mm) x (D) 1.6" (40.6 mm)
Product Weight:	Room: 0.62 lbs (281.2 g) Duct: 1.00 lbs (0.45 kg)

Note: Sensors and system should be scheduled to be tested for accuracy and functionality every 6 months for toxic, and every 3 months for combustible | Recalibrate or replace sensor boards if necessary | When installed @ > 3000' above sea level, the gas transmitters must be verified for accuracy & re-calibrated as needed after installation





DIMENSIONAL DRAWING



STANDARD ORDERING

Model # Example: CTS-M5130X-D000000 -OR- 128250

Model #	Item #	Description
CTS-M5130X-D000000	125963	Oxygen Duct Mount, Standard Enclosure
CTS-M5130X-D0R0000	142994	Oxygen Duct Mount with Display, Relay, Buzzer, Standard Enclosure
CTS-M5130X-Q000000	125956	Oxygen Room Mount, Standard Enclosure
CTS-M5130X-Q0R0000	125955	Oxygen Room Mount with Display, Relay, Buzzer, Standard Enclosure
CTS-M5220X-Q000000	125950	Ammonia Room Mount, Standard Enclosure
CTS-M5220X-Q0R0000	132505	Ammonia, Room Mount with Display, Relay, Buzzer, Standard Enclosure

ACCESSORIES ORDERING

Model #	Item #	Description
83830-020-000	127649	Calibration Adapter
GAS CAL KIT*	148426	Gas Cal Kit includes Carry Case, 0.5lpm regulator, C10 to CGA-600 adapter, tubing
6300-0037	128250	O2 Sensor for CTS-M5 130
6300-0038	138529	NH3 Replacement Sensor for CTS-M5

Note*: Refer to GAS CAL KIT data sheet for specific's

