



Q5

Toxic & Combustible Sensor

The Q5 Series is a microprocessor based "smart" gas transmitter. It is paired with either an electrochemical gas sensor for toxic gases, or a catalytic bead sensor for combustible gases. Pre-calibrated sensors can be purchased and installed by the user, thereby reducing calibration costs and minimizing downtime. The user can select from numerous display options, including relay status, time, TWA, STEL, concentration, or nothing at all. All programming and calibration is nonproprietary and is accessed through a user selectable password which protects system integrity.

The Q5 series is covered by ACI's Two (2) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's web site, www.workaci.com.



Specifications

Supply Voltage DC	24 VDC nominal, range 18 to 30 VDC, 0.3A DC total maximum
Supply Voltage AC	24 VAC nominal, range 15 to 24 VAC, 0.3A AC Total maximum (AC must not be grounded)
Sensor Type	Electrochemical or Infrared (Toxic) or Catalytic Bead (Combustible) (see ordering grid below)
Sensor Life Span	2 to 3 years typical (toxic gas), >5 yrs in clean environment
Gas Measurement Range	See ordering information
Outputs	4-20 mA, 1-5 VDC, 2-10 VDC, Digital RS-485, Modbus
Sampling Method	Diffusion or flow through
Accuracy/Repeatability (Combustible)	+/- 2.0% of LEL/+/- 2.0% of LEL
Buzzer Rating	Rated for 80 dB @ 10 cm, 2,700 Hz with 3 programmable tones
Enclosure Rating	IP66 and NEMA 4, 4X, 12 and 13
Indicators	Backlit LCD graphic display (5) LED's for Relay and RS-485 Status
Operating Temperature Range	-40° to 70°C (-40° to 158°F), depends on sensor specification
Operating Humidity Range	5 to 95%, non-condensing
Relay Rating	(3) SPDT Form 1C; rated 1A @ 30 VDC
Maximum Sensor Coverage Area	7,500 ft ² (CH ₄ ,C ₃ H ₈ ,CO,O ₂ ,H ₂ ,NH ₃ ,NO,NO ₂) : 5,000 ft ² (CL ₂ ,CLO ₂ ,HCL,HCN,H ₂ S,O ₃ ,SO ₂)
Mounting Height Above Floor	Contact ACI or visit www.workaci.com
Product Dimensions	(H) 5.90" (W) 3.54" (D) 2.55"

Ordering

Select one Gas Type (A), and include "Span" when filling out Part Number. Choose one Enclosure (B).

A Gas Type

- | | |
|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| <input type="radio"/> CH ₃ CO-100L (Acetone, Catalytic Bead, 0-100% LEL) (Span: 100L) | <input type="radio"/> H ₂ (Hydrogen, Electrochemical, 0-1000 PPM) (Span: 1000P) |
| <input type="radio"/> NH ₃ (Ammonia, Electrochemical, 0-100 PPM) (Span: 100P) | <input type="radio"/> H ₂ (Hydrogen, Electrochemical, 0-2000 PPM) (Span: 2000P) |
| <input type="radio"/> NH ₃ (Ammonia, Electrochemical, 0-1000 PPM) (Span: 1000P) | <input type="radio"/> H ₂ (Hydrogen, Catalytic Bead, 0-100% LEL) (Span: 100L) |
| <input type="radio"/> ASH ₃ (Arsine, Electrochemical, 0-1 PPM) (Span: 1P) | <input type="radio"/> HBR (Hydrogen Bromide, Electrochemical, 0-30 PPM) (Span: 30P) |
| <input type="radio"/> C ₆ H ₆ (Benzene, Catalytic Bead, 0-100% LEL) (Span: 100L) | <input type="radio"/> HCL (Hydrogen Chloride, Electrochemical, 0-30 PPM) (Span: 30P) |
| <input type="radio"/> C ₄ H ₁₀ (Iso-Butane, Catalytic Bead, 0-100% LEL) (Span: 100L) | <input type="radio"/> HCN (Hydrogen Cyanide, Electrochemical, 0-50 PPM) (Span: 50P) |
| <input type="radio"/> BUTAN (Butanol, n-Butane, Catalytic Bead, 0-100% LEL) (Span: 100L) | <input type="radio"/> H ₂ S (Hydrogen Sulphide, Electrochemical, 0-25 PPM) (Span: 25P) |
| <input type="radio"/> CO ₂ (Carbon Dioxide, Infrared, 0-5000 PPM) (Span: 5000P) | <input type="radio"/> H ₂ S (Hydrogen Sulphide, Electrochemical, 0-100 PPM) (Span: 100P) |
| <input type="radio"/> CO ₂ (Carbon Dioxide, Infrared, 0-5% VO) (Span: 5V) | <input type="radio"/> CH ₄ (Methane, Catalytic Bead, 0-100% LEL) (Span: 100L) |
| <input type="radio"/> CO ₂ (Carbon Dioxide, Infrared, 0-20% VO) (Span: 20V) | <input type="radio"/> CH ₃ OH (Methanol, Catalytic Bead, 0-100% LEL) (Span: 100L) |
| <input type="radio"/> CO ₂ (Carbon Dioxide, Infrared, 0-100% VO) (Span: 100V) | <input type="radio"/> NO (Nitric Oxide, Electrochemical, 0-100 PPM) (Span: 100P) |
| <input type="radio"/> CO (Carbon Monoxide, Electrochemical, 0-250 PPM) (Span: 250P) | <input type="radio"/> NO ₂ (Nitrogen Dioxide, Electrochemical, 0-10 PPM) (Span: 10P) |
| <input type="radio"/> CO (Carbon Monoxide, Electrochemical, 0-1000 PPM) (Span: 1000P) | <input type="radio"/> O ₂ (Oxygen, Electrochemical, 0-25% VO) (Span: 25V) |
| <input type="radio"/> CL ₂ (Chlorine, Electrochemical, 0-5 PPM) (Span: 5P) | <input type="radio"/> O ₃ (Ozone, Electrochemical, 0-1 PPM) (Span: 1P) |
| <input type="radio"/> CLO ₂ (Chlorine Dioxide, Electrochemical, 0-2 PPM) (Span: 2P) | <input type="radio"/> C ₅ H ₁₂ (Iso-Pentane, Catalytic Bead, 0-100% LEL) (Span: 100L) |
| <input type="radio"/> GENL (Combustible, Catalytic Bead, 0-100% LEL) (Span: 100L) | <input type="radio"/> PH ₃ (Phosphine, Electrochemical, 0-1 PPM) (Span: 1P) |
| <input type="radio"/> B ₂ H ₆ (Diborane, Electrochemical, 0-2 PPM) (Span: 2P) | <input type="radio"/> PH ₃ (Phosphine, Electrochemical, 0-5 PPM) (Span: 5P) |
| <input type="radio"/> C ₂ H ₄ (Ethylene, Catalytic Bead, 0-100% LEL) (Span: 100L) | <input type="radio"/> C ₃ H ₈ (Propane, Catalytic Bead, 0-100% LEL) (Span: 100L) |
| <input type="radio"/> ETO (Ethylene Oxide, Electrochemical, 0-20 PPM) (Span: 20P) | <input type="radio"/> SIH ₄ (Silane, Electrochemical, 0-50 PPM) (Span: 50P) |
| <input type="radio"/> GEH ₄ (Germane, Electrochemical, 0-2 PPM) (Span: 2P) | <input type="radio"/> SO ₂ (Sulphur Dioxide, Electrochemical, 0-6 PPM) (Span: 6P) |

B Enclosure

- O (Standard Enclosure) P (Enclosure, Pump-Thru Cap Kit) S (Enclosure, Splash Guard Kit) D (Enclosure, Duct Mount Kit)

Build your part number

After completing (A) & (B) from the above table, fill in the Part Number Table below. The Sensor Series and "Revision" (X) are factory defaults. An example part number is offered.

Q5	—	—	—	X
Sensor Series	A	Span	B	Factory Provided

EXAMPLE: Q5 - CO - 250P - O - X