



The LPT is an economical, single sensor, analog transmitter available with either a carbon monoxide (CO) or nitrogen dioxide (NO₂) sensor which are ideal for vehicle exhaust type applications such as parkades. It features a two-wire loop power, three-wire VDC or four-wire VAC power, 4 - 20 mA linear output signal, automatic thermal resetting fuse, temperature compensation, and visual LED indication for power and fault conditions, all in a RoHS compliant package. All models in the LPT series of transmitters come standard with a water / dust tight, corrosion resistant ABS / polycarbonate enclosure with a hinged, secured door. With the optional splash guard installed, the enclosure is IP54 rated - ideal for use in water spray or wash down applications.

Automated calibration and other maintenance procedures are simple and easily performed in the field, and our proprietary Calibration Extending Firmware (CEF) takes into account the aging of the sensors so that less frequent calibrations are acceptable in non-critical applications.

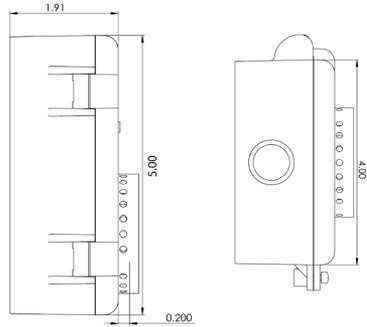
KEY FEATURES

- » Linear 4 - 20 mA output signal
- » 2-wire loop, 3-wire VDC or 4-wire VAC power
- » Standard water / dust tight corrosion enclosure (drip proof); IP54 certified with optional splash guard installed
- » Single sensor: carbon monoxide (CO) or nitrogen dioxide (NO₂)
- » RoHS compliant package
- » Easy maintenance
- » Economical
- » Auto resetting fuse
- » Includes sensor CEF (calibration extending firmware)
- » Automated calibration procedure

APPLICATIONS

- » Parking Garages
- » Repair Shops
- » Ice Cleaning Machine Rooms
- » Manufacturing plants
- » Maintenance facilities
- » ... and many more

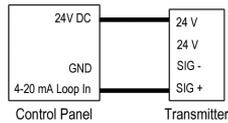
TECHNICAL DRAWING



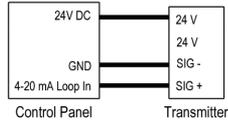
Note: Drawings above are shown with an optional splash guard installed.

WIRING

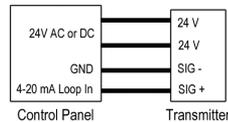
2-Wire Loop



3-Wire VDC



4-Wire VAC



LPT-TCO-5 model, contains a splash guard, is featured with a metal protective guard (picture to left).



Transmitters - GAS DETECTION DATASHEET

LPT Low Power Transmitter

FIXED SYSTEM DATASHEET

TECHNICAL SPECIFICATIONS

GAS TYPE

Carbon Monoxide (CO)

Nitrogen Dioxide (NO₂)

MECHANICAL

Enclosure ABS / Polycarbonate, IP54 certified with splash guard installed

Weight 200 g (7 oz)

Size 5.0" x 4.0" x 1.9" (127 mm x 102 mm x 48 mm)

ELECTRICAL

Power Requirement

2-wire mode 16 - 30 VDC, 1 W, Class 2

3-wire mode 16 - 30 VDC, 1 W, Class 2

4-wire mode 12 - 27 VAC, 50-60 Hz, 1 VA, Class 2

Current Draw Typical 25 mA

Outputs Linear 4 - 20 mA
Maximum 216 Ω load
(wiring plus termination resistor) at 16 VDC
Maximum 316 Ω load
(wiring plus termination resistor) at 12 VAC

Wiring VDC 2-conductor shielded 18 awg stranded
VDC 3-conductor shielded 18 awg stranded
VAC 4-conductor shielded 18 awg stranded

Fuse Automatic resetting thermal

USER INTERFACE

Indicator LED Single color status LED

ENVIRONMENTAL (sensor dependent)

Operating Temperature -20°C to 40°C (-4°F to 104°F)

Humidity 15 - 90% RH non-condensing

CERTIFICATION

Conforms to: CSA-C22.2 No. 205-M1983 (R2009)
UL508 (Edition 17):2007

Conforms to: EMC Directive 2004/108/EC
EN 50270:2006, Type 1, EN61010

Conforms to: FCC. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



SENSOR SPECIFICATIONS

CARBON MONOXIDE (CO)

Resolution 0.5 ppm

Repeatability < 2% of signal

Sensor Response Time (T₉₀) 60 seconds

Cross Sensitivity H₂S @ 20 ppm = < -40 ppm
Cl₂ @ 10 ppm = 100 ppm
NO @ 50 ppm = < 0.5 ppm
SO₂ @ 20 ppm = < -2.5 ppm
CO @ 400 ppm = < 0.1 ppm
H₂ @ 400 ppm = < 0.1 ppm
C₂H₆ @ 50 ppm = < 0.1 ppm
NH₃ @ 20 ppm = < 0.1 ppm
CO₂ @ 5% volume = < 0.1 ppm

Life Span 6+ years

NITROGEN DIOXIDE (NO₂)

Resolution 0.02 ppm

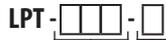
Repeatability < 2% of signal

Sensor Response Time (T₉₀) < 30 seconds

Cross Sensitivity H₂S @ 20 ppm = < -40 ppm
Cl₂ @ 10 ppm = 100 ppm
NO @ 50 ppm = < 0.5 ppm
SO₂ @ 20 ppm = < -2.5 ppm
CO @ 400 ppm = < 0.1 ppm
H₂ @ 400 ppm = < 0.1 ppm
C₂H₆ @ 50 ppm = < 0.1 ppm
NH₃ @ 20 ppm = < 0.1 ppm
CO₂ @ 5% volume = < 0.1 ppm

Life Span 5 - 6 years

PRODUCT CODES



Single Channel Sensor: _____

Electrochemical

TCO CO sensor (0 - 200 ppm)

END NO₂ sensor (0 - 10 ppm)

Options: _____

- None

S Splash Guard (not available for O₃ or Cl₂ sensors)

ACCESSORIES

CET-715A-CK1 Calibration kit for 17, 34, 58, 74, 103 L cylinders, 0.5 LPM flow regulator & adapter to fit 17 L cylinder

SCS-8000-RSG Metal protective guard, small, 16 gauge, galvanized metal guards for transmitters