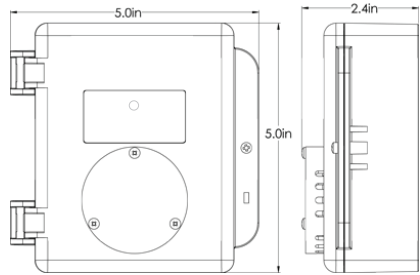




ANALOG GAS DETECTORS DATASHEET

LPT Low Power Transmitter

TECHNICAL DRAWING



Note: Drawings above are shown with an optional splash guard. Without splash guard, thickness of unit is 53.34 mm (2.1 inches).

The LPT is an economical, single sensor, analog transmitter available with either a Carbon monoxide (CO) or Nitrogen dioxide (NO₂) sensor for non-hazardous, non-explosion proof rated commercial and light industrial applications. This basic transmitter is ideal as part of a fixed system with a controller for vehicle exhaust type applications such as car parks. It features a two-wire loop power, three-wire VDC or four-wire VAC power, 4 - 20 mA linear output signal, thermal resetting fuses, temperature compensation, and visual LED indication for power and fault conditions, all in a RoHS compliant package. Comes 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 and 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

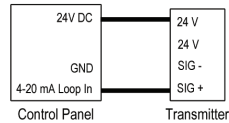
- » Single sensor: Carbon monoxide (CO) or Nitrogen dioxide (NO₂)
- » Linear 4 - 20 mA output signal
- » 2-wire loop, 3-wire VDC or 4-wire VAC power
- » Standard water / dust tight corrosion resistant enclosure (drip proof); IP54 rated with optional splash guard installed.
- » RoHS compliant package
- » Auto resetting fuses
- » Includes sensor CEF (calibration extending firmware)

APPLICATIONS

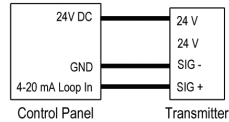
- » Parking Garages/Car Parks
- » Vehicle Repair Shops
- » Manufacturing Plants
- » Maintenance Facilities
- » ... and many more

WIRING

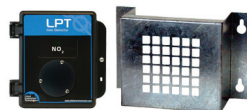
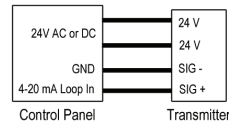
2-Wire Loop



3-Wire VDC



4-Wire VAC



LPT-END-5 with factory installed splash guard, is featured with a metal protective guard (picture to left).

TECHNICAL SPECIFICATIONS

GAS TYPE

Carbon Monoxide (CO) (electrochemical)
 Nitrogen Dioxide (NO₂) (electrochemical)

MECHANICAL

Enclosure ABS / Polycarbonate, IP54 rated with splash guard installed. Copper coated interior to reduce RF interference.
 Weight 200 g (7 oz)
 Size 127 x 102 x 48 mm
 5.0 x 4.0 x 1.9 inches

USER INTERFACE

Indicator LED Single color status LED

INPUT / OUTPUT

Output 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

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
 Wiring VDC 2-conductor shielded 18 awg stranded
 VDC 3-conductor shielded 18 awg stranded
 VAC 4-conductor shielded 18 awg stranded
 Fuses Thermal, resetting

ENVIRONMENTAL (sensor dependant)

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.



SENSOR SPECIFICATIONS

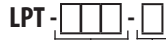
CARBON MONOXIDE (CO)

Resolution 0.5 ppm
 Repeatability < 2% of signal
 Sensor Response Time (T₉₀) 60 seconds
 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
 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: _____
S Splash guard

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