Critical Environment Technologies™

DIGITAL GAS DETECTORS DATASHEET

LPT-P Digital Car Park Transmitter

FIXED SYSTEMS



The LPT-P is an economical, three channel, digital transmitter that is designed to be part of a gas detection system for enclosed parking garage/car park and vehicle repair shop applications. It is available with one internal carbon monoxide sensor plus one internal nitrogen dioxide sensor plus a remote sensor. The third sensor can be a combustible gas available in the ESH-A remoted sensor product line. Navigating the menu can be done unobtrusively with a magnetic wand or by using the internal programming buttons.

The LPT-P comes in a standard 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.

The LPT-P is not a standalone gas detection device, it operates on a local area network (LAN) using Modbus® RS-485 RTU serial communications with a Controller, a control panel, Direct Digital Control system (DDC) or a Building Automation System (BAS). The LPT-P does not have an internal alarm or relay.

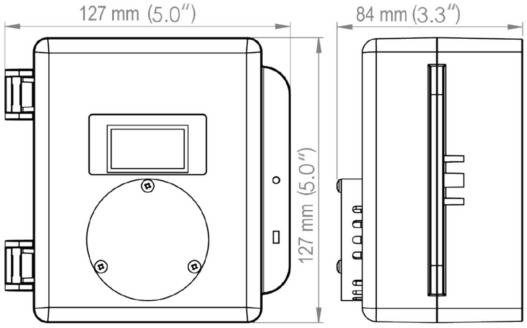
KEY FEATURES

» 3 channel operation
» Modbus® RS-485 RTU digital output signal
» LCD display (with user selectable function)
» 4-conductor shielded network wiring (daisy-chain)
» 24 volt DC power
» Standard water / dust tight, corrosion resistant enclosure (drip proof); IP54 rated with optional splash guard installed.
» Unobtrusive calibration and menu navigation using a magnetic wand
» RoHS compliant circuit board
» Auto resetting fuses

APPLICATIONS

» Parking Garages / Car Parks
» Vehicle Repair Shops
» Electric Car Charging Stations
» Battery Charging Rooms
» ...an many more

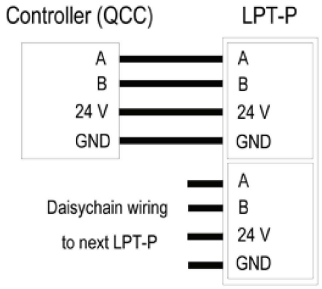
TECHNICAL DRAWING



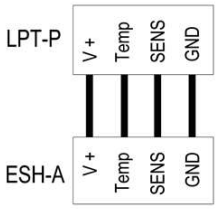
Note: Drawings above are shown with the optional splash guard. Without the splash guard, the thickness of the unit is 71 mm (2.8 inches).

WIRING

4-Wire 24 VDC



ESH-A Remote Sensor



TECHNICAL SPECIFICATIONS

GAS TYPE	
Electrochemical (internal)	Carbon Monoxide (CO) and Nitrogen Dioxide (NO_2)
Combustible (catalytic) (ESH-A Remote Sensor)	Hydrogen (H_2), Methane (CH_4), or Propane (C_3H_8)

MECHANICAL	
Enclosure	ABS / Polycarbonate, IP54 rated with splash guard installed. Copper coated interior to reduce RF interference.
Weight	400 g (14 oz)
Size	127 mm x 127 mm x 71 mm 5.0 x 5.0 x 2.8 inches
Conduit Entry Points	12.7 mm / 1/2 in diameter

LPT-P Digital Car Park Transmitter

TECHNICAL SPECIFICATIONS CONTINUED

Mounting Holes	4.47 mm / 0.175 in diameter with max head diameter 8 mm / 0.32 in #8 or 4 mm screw

USER INTERFACE

Display	Graphic LCD, white border
Magnetic Sensors	Using a magnetic wand, initiate calibration/ menu options without opening the enclosure

INPUT / OUTPUT

Input	4 - 20 mA analog, for ESH-A Remote Sensor
Output	Modbus® RTU RS-485

ELECTRICAL

Power Requirement	16-30 VDC, 3 W, Class 2
Wiring 4-wire VDC	Modbus® RTU (version 1.1b3) RS-485, 16 gauge, 4-conductor shielded network wiring (daisy-chain)
Fuses	Thermal, resetting

ENVIRONMENTAL

Operating Temperature	-20°C to 40°C (-4°F to 104°F), lower temperature option available
Humidity	15 - 90% RH non-condensing

PRODUCT CODES

Type F: Three Channel (Internal CO and NO_2 Sensors + One ESH-A Remote Sensor)

LPT-P-TCO-NO2B-R + ESH-A-CH2-100	Carbon Monoxide (CO) sensor (0 - 200 ppm) Nitrogen Dioxide (NO_2) sensor (0 - 10 ppm) Hydrogen (H_2) sensor (0 - 100% LEL)
LPT-P-TCO-NO2B-R + ESH-A-CCH4-100	Carbon Monoxide (CO) sensor (0 - 200 ppm) Nitrogen Dioxide (NO_2) sensor (0 - 10 ppm) Methane (CH_4) sensor (0 - 100% LEL)
LPT-P-TCO-NO2B-R + ESH-A-CC3H8-100	Carbon Monoxide (CO) sensor (0 - 200 ppm) Nitrogen Dioxide (NO_2) sensor (0 - 10 ppm) Propane (C_3H_8) sensor (0 - 100% LEL)

OPTIONS *(Factory installed) Add at the end of the "Part Number" above.*

H	Internal heater for cold environment applications down to -40°C / 40°F
S	Splash guard *(may be added to the LPT-P and/ or the ESH-A Remote Sensor, as required)*

PRODUCT CODES CONTINUED

ACCESSORIES

CET-SGC	Calibration clip for splash guard
CET-715A-CK1	Calibration Kit for 17, 34, 58, 74, 100 L cylinders, 0.5 LPM flow regulator & adapter to fit 17 L cylinder
CET-MW	Magnetic wand for non-intrusive calibration
SCS-8000-RSG	Small galvanized metal, 16 gauge protective guard for transmitters and/or ESH-A Remote Transmitter, as required.

CERTIFICATION

Conforms to: CSA-C22.2 No. 205-12 / 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.

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