



The LPT-A is an economical, single sensor, analog transmitter available with a wide range of sensors and sensor types including electrochemical, solid state, and catalytic. It features 3-wire VDC or 4-wire VAC power, jumper selectable 4 - 20 mA or 0 - 10 VDC analog output, standard dry contact relay (2 amps @ 30V SPDT), automatic thermal resetting fuse, temperature compensation, back lit LCD digital display, and audible alarm, 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 NEMA 4X/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. For parking garage applications, our proprietary Calibration Extending Firmware (CEF) takes into account the aging of the sensors so that less frequent calibrations are required.

KEY FEATURES

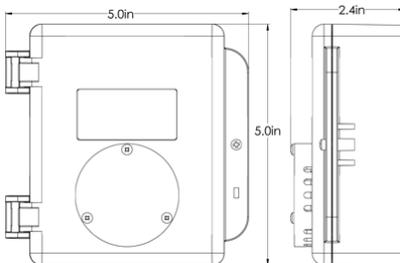
- » 3-wire VDC or 4-wire VAC power
- » 24 volt DC or AC power (nominal)
- » Linear 4 - 20 mA or 0 - 10 volt output signal
- » 1 dry contact relay, 30 volt 2 amp maximum
- » Standard water / dust tight, corrosion enclosure (drip proof); IP54 certified with optional splash guard installed
- » Available with an internal electrochemical sensor, or catalytic for combustibles (internal or remote) or solid state for refrigerants or TVOCs (internal or remote)
- » Graphic LCD display (user selectable function)
- » Audible alarm
- » Optional heater

APPLICATIONS

- » Parking Garages and Repair Shops
- » Arenas and Ice Cleaning Machine Rooms
- » Commercial Swimming Pools
- » Manufacturing Plants and Maintenance Facilities
- » ... and many more

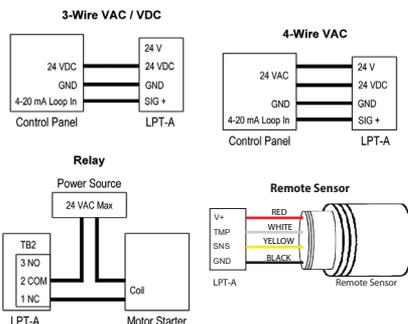


TECHNICAL DRAWING



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

WIRING



TECHNICAL SPECIFICATIONS

MECHANICAL	
Enclosure	ABS / Polycarbonate, NEMA 4X/IP54 certified with splash guard installed
Weight	400 g (14 oz)
Size	5.0" x 5.0" x 2.24" (127 mm x 127 mm x 57 mm)

USER INTERFACE	
Indicator	Graphic LCD. Text prompting for calibration operation and fault indications. Installer configurable to suppress all other displays.

ENVIRONMENTAL	
Operating Temperature	-20°C to 40°C (-4°F to 104°F) Low temperature option available to -40°C (-40°F) (sensor dependant)
Humidity	15 - 90% RH non-condensing

LPT-A Analog Transmitter

TECHNICAL SPECIFICATIONS continued

ELECTRICAL

Power Requirement	
3-wire mode	16-30 VDC, 3 W, Class 2
4-wire mode	12-27 VAC, 50-60 Hz, 3 VA, Class 2
Outputs	
	Linear 4 - 20 mA
	Maximum 216 Ω load (wiring plus termination resistor) @ 12 VDC
	Maximum 316 Ω load (wiring plus termination resistor) @ 12 VAC
	Voltage 0 - 10 volt
	Minimum 1k ohm load
Wiring	
	VDC (or ground referenced AC) three conductor shielded 18 awg stranded
	VAC four conductor shielded 18 awg stranded
Fuse	
	Automatic resetting thermal

PRODUCT CODES

<i>Internal Electrochemical Sensor</i>		<i>Lifespan*</i>
LPT-A-NH3	Ammonia (NH ₃) sensor (0 - 500 ppm)	2 yrs
LPT-A-COA	Carbon Monoxide (CO) sensor (0 - 200 ppm)	3 yrs
LPT-A-COB	Carbon Monoxide (CO) sensor (0 - 200 ppm)	6 yrs
LPT-A-CL2	Chlorine (Cl ₂) sensor (0 - 5 ppm)	3 yrs
LPT-A-C2H4	Ethylene (C ₂ H ₄) sensor (0 - 1,500 ppm)	2 yrs
LPT-A-C2H4O	Ethylene Oxide (C ₂ H ₄ O) sensor (0 - 20 ppm)	2 yrs
LPT-A-CH2O	Formaldehyde (CH ₂ O) sensor (0 - 10 ppm)	2 yrs
LPT-A-EH2	Hydrogen (H ₂) sensor (0 - 2,000 ppm)	2 yrs
LPT-A-H2S	Hydrogen Sulphide (H ₂ S) sensor (0 - 50 ppm)	2-yrs
LPT-A-HCL	Hydrogen Chloride (HCl) sensor (0 - 20 ppm)	2 yrs
LPT-A-HCN	Hydrogen Cyanide (HCN) sensor (0 - 100 ppm)	2 yrs
LPT-A-NO	Nitric Oxide (NO) sensor (0 - 100 ppm)	2 yrs
LPT-A-NO2A	Nitrogen Dioxide (NO ₂) sensor (0 - 10 ppm)	3 yrs
LPT-A-NO2B	Nitrogen Dioxide (NO ₂) sensor (0 - 10 ppm)	6 yrs
LPT-A-O2	Oxygen (O ₂) sensor (0 - 25% volume)	3 yrs
LPT-A-O3	Ozone (O ₃) sensor (0 - 2 ppm)	2 yrs
LPT-A-PH3	Phosphine (PH ₃) sensor (0 - 5 ppm)	2 yrs
LPT-A-SiH4	Silane (SiH ₄) sensor (0 - 50 ppm)	2 yrs
LPT-A-SO2	Sulphur Dioxide (SO ₂) sensor (0 - 20 ppm)	2-yrs
<i>Internal Solid State Sensor</i>		<i>Lifespan*</i>
LPT-A-SR22	Refrigerants (R22) sensor (0 - 2,000 ppm)	5 yrs
LPT-A-SR134A	Refrigerants (R134A) sensor (0 - 2,000 ppm)	5 yrs
LPT-A-SR402A	Refrigerants (R402A) sensor (0 - 2,000 ppm)	5 yrs
LPT-A-SR404A	Refrigerants (R404A) sensor (0 - 2,000 ppm)	5 yrs
LPT-A-SR407C	Refrigerants (R407C) sensor (0 - 2,000 ppm)	5 yrs
LPT-A-SR410A	Refrigerants (R410A) sensor (0 - 2,000 ppm)	5 yrs
LPT-A-SR422D	Refrigerants (R422D) sensor (0 - 2,000 ppm)	5 yrs

PRODUCT CODES continued

LPT-A-SR507A	Refrigerants (R507A) sensor (0 - 2,000 ppm)	5
LPT-A-STVOC	TVOCs sensor (0 - 500 ppm)	5

<i>Internal Catalytic Sensor</i>		<i>Years*</i>
LPT-A-CH2	Hydrogen (H ₂) sensor (0 - 50% LEL)	5
LPT-A-CCH4	Methane (CH ₄) sensor (0 - 50% LEL)	5
LPT-A-CC3H8	Propane (C ₃ H ₈) sensor (0 - 50% LEL)	5

Remote Sensors

LPT-A-R + Remote Solid State OR Remote Catalytic Sensor Head

<i>Remote Solid State Sensor Head</i>		<i>Lifespan*</i>
ESH-SR22	Refrigerants (R22) sensor (0 - 2,000 ppm)	5 yrs
ESH-SR134A	Refrigerants (R134A) sensor (0 - 2,000 ppm)	5 yrs
ESH-SR402A	Refrigerants (R402A) sensor (0 - 2,000 ppm)	5 yrs
ESH-SR404A	Refrigerants (R404A) sensor (0 - 2,000 ppm)	5 yrs
ESH-SR407C	Refrigerants (R407C) sensor (0 - 2,000 ppm)	5 yrs
ESH-SR410A	Refrigerants (R410A) sensor (0 - 2,000 ppm)	5 yrs
ESH-SR422D	Refrigerants (R422D) sensor (0 - 2,000 ppm)	5 yrs
ESH-SR507A	Refrigerants (R507A) sensor (0 - 2,000 ppm)	5 yrs
ESH-STVOC	TVOCs sensor (0 - 500 ppm)	5 yrs

<i>Remote Catalytic Sensor Head</i>		<i>Lifespan*</i>
ESH-CH2	Hydrogen (H ₂) sensor (0 - 50% LEL)	5 yrs
ESH-CCH4	Methane (CH ₄) sensor (0 - 50% LEL)	5 yrs
ESH-CC3H8	Propane (C ₃ H ₈) sensor (0 - 50% LEL)	5 yrs

OPTION (To be added at the end of the "Part Number" above. ≥ 1 "Option" can be selected.)

H	Heater (for -40°C to 50°C (-40°F to 122°F))
S	Splash guard (not available for O ₂ or Cl ₂ sensors)

ACCESSORIES

CE7-715A-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

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.

* Approximate life span of the sensors, in years.