



The LPT-B is a full featured, 3 channel, digital transmitter for use in non-hazardous, non-explosion rated, commercial and light industrial applications. It is available with a wide range of internal and/or external sensors and sensor types including electrochemical, catalytic and PID TVOC. It offers a BACnet® MS/TP output signal for communicating with a Controller or Building Automation System, an audible internal alarm, one SPDT dry contact relay, LCD display with user selectable functions, temperature compensation and thermal resetting fuses all in a RoHS compliant package.

The LPT-B comes in a standard water / dust tight, corrosion resistant ABS / polycarbonate enclosure with a hinged, secured door. It is IP54 rated with the optional splash guard installed which provides protection in water spray or wash down applications.

The LPT-B is not compatible with CETCI's Controllers. It is intended to be used as a standalone system or integrated into an existing BACnet® network.

KEY FEATURES

- » 1, 2 or 3 channel operation
- » BACnet® MS-TP digital output signal
- » Many internal and/or remote sensor configurations
- » One SPDT dry contact relay
- » LCD display (with user selectable function)
- » Internal audible alarm
- » Standard water / dust tight, corrosion resistant enclosure (drip proof); IP54 rated with optional splash guard installed.
- » RoHS compliant circuit board
- » Thermal resetting fuses

APPLICATIONS

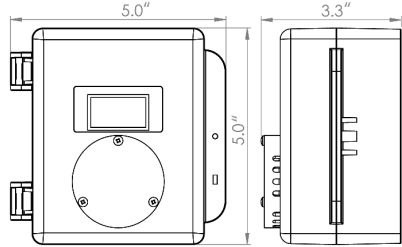
- » Parking Garages/Car Parks
- » Vehicle Repair Shops
- » Ice Arenas
- » Ice Cleaning Machine Rooms
- » Commercial Indoor Swimming Pools
- » Manufacturing Plants
- » Maintenance Facilities
- » ... and many more

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DIGITAL GAS DETECTORS DATASHEET

LPT-B BACnet® Transmitter

TECHNICAL DRAWING



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

TECHNICAL SPECIFICATIONS

MECHANICAL

Enclosure	ABS / Polycarbonate, IP54 rated with splash guard installed. Copper coated interior to reduce RF interference.
Weight	400 g (14 oz)
Size	127 x 127 x 71 mm (5.0 x 5.0 x 2.8 inches)

USER INTERFACE

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

INPUT / OUTPUT

Output	BACnet® MS/TP communications
Relay	1 SPDT dry contact, rated at 30 volts, 2 amps max
Audible Alarm	Standard internal buzzer; enable/disable

ELECTRICAL

Power Requirement	16-30 VDC, 3 W, Class 2 12-27 VAC, 50-60 Hz, 3 VA, Class 2
Current Draw	55 mA (buzzer & relay energized, 2 sensors)
Wiring	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 A: Single Channel (One Internal Electrochemical Sensor)

Part Number		Lifespan
LPT-B-NH3	Ammonia (NH ₃) sensor (0 - 500 ppm)	2 yrs
LPT-B-TCO	Carbon Monoxide (CO) sensor (0 - 200 ppm)	6 yrs
LPT-B-ClO2	Chlorine Dioxide (ClO ₂) sensor (0 - 10 ppm)	3 yrs
LPT-B-Cl2	Chlorine (Cl ₂) sensor (0 - 5 ppm)	3 yrs
LPT-B-C2H4	Ethylene (C ₂ H ₄) sensor (0 - 200 ppm)	2 yrs
LPT-B-EETO	Ethylene Oxide (C ₂ H ₄ O) sensor (0 - 20 ppm)	2 yrs
LPT-B-F2	Fluorine (F ₂) sensor (0 - 1 ppm)	1-2yrs
LPT-B-CH2O	Formaldehyde (CH ₂ O) sensor (0 - 5 ppm)	2 yrs
LPT-B-EH2	Hydrogen (H ₂) sensor (0 - 2,000 ppm)	2 yrs
LPT-B-H2SB	Hydrogen Sulphide (H ₂ S) sensor (0 - 50 ppm)	5+yrs
LPT-B-HCL	Hydrogen Chloride (HCl) sensor (0 - 30 ppm)	2 yrs
LPT-B-HCN	Hydrogen Cyanide (HCN) sensor (0 - 30 ppm)	2 yrs
LPT-B-HF	Hydrogen Fluoride (HF) sensor (0 - 10 ppm)	1-2yrs
LPT-B-NO	Nitric Oxide (NO) sensor (0 - 100 ppm)	2 yrs
LPT-B-NO2A	Nitrogen Dioxide (NO ₂) sensor (0 - 10 ppm)	3 yrs
LPT-B-NO2B	Nitrogen Dioxide (NO ₂) sensor (0 - 10 ppm)	6 yrs
LPT-B-O2	Oxygen (O ₂) sensor (0 - 25% volume)	3 yrs
LPT-B-O3	Ozone (O ₃) sensor (0 - 2 ppm)	2 yrs
LPT-B-PH3	Phosphine (PH ₃) sensor (0 - 5 ppm)	2 yrs
LPT-B-SiH4	Silane (SiH ₄) sensor (0 - 20 ppm)	2 yrs
LPT-B-SO2	Sulphur Dioxide (SO ₂) sensor (0 - 20 ppm)	2+yrs

Type B: Single Channel (No Internal Sensor, ESH-A Remote Sensor only)

[GROUP 2] **LPT-B-R** and add the Part Number of the ESH-A Remote Sensor from [GROUP 2] below.
Part Number (example: LPT-B-R + ESH-A-CCH4-100)

Catalytic Combustibles		Lifespan
ESH-A-CH2-100	Hydrogen (H ₂) sensor (0 - 100% LEL)	5 yrs
ESH-A-CCH4-100	Methane (CH ₄) sensor (0 - 100% LEL)	5 yrs
ESH-A-CC3H8-100	Propane (C ₃ H ₈) sensor (0 - 100% LEL)	5 yrs

TVOC PIDs ** usage and application dependent

ESH-A-SPL	TVOC PID sensor (0 - 30 ppm)	**
ESH-A-SPH	TVOC PID sensor (0 - 300 ppm)	**

Infrared

ESH-A-JET	Propane (C ₃ H ₈) sensor (0 - 100% LEL)	8 yrs
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Type D: Dual Channel (One Internal Sensor + One ESH-A Remote Sensor)

LPT-B-TCO-R
+ [GROUP 2] — Choose one ESH-A Remote Sensor from [GROUP 2]
LPT-B-NO2B-R
+ [GROUP 2]

PRODUCT CODES... continued

Type E: Dual Channel (Two Internal Electrochemical Sensors)

LPT-B-TCO-NO2B	Carbon Monoxide (CO) sensor (0 - 200 ppm) & Nitrogen Dioxide (NO ₂) sensor (0 - 10 ppm)	6 yrs
LPT-B-TCO-O2	Carbon Monoxide (CO) sensor (0 - 200 ppm) & Oxygen (O ₂) sensor (0 - 25% volume)	6 yrs 3 yrs

Type F: Three Channel (Internal CO and NO₂ Sensors + One ESH-A Remote Sensor)

LPT-B-TCO-NO2B-R + [GROUP 2] — Choose one ESH-A Remote Sensor from [GROUP 2]

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

S Splash guard (not available for O₂, HCl, Cl₂ sensors)
May be added to the LPT-B and/or the ESH-A Remote Sensor, as required.

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
PID-KITA	Maintenance Kit for cleaning PID sensor bulb
SCS-8000-RSG	Metal protective guard, small, 16 gauge, galvanized metal guards 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.

Listed by BTL

