



The LPT-B is a full featured, 1, 2 or 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, solid state, catalytic and PID. The LPT-B may be configured to operate as a standalone fixed system or be part of a digital network. 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. An optional heater is available for continued operation in cold environment applications.

The LPT-B is not compatible with CETCI's Controllers. It is intended to be used alone 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
- » Optional display heater for cold environment applications
- » Standard water / dust tight, corrosion resistant enclosure (drip proof); IP54 rated with optional splash guard installed.
- » RoHS compliant circuit board
- » Thermal resetting fuses

APPLICATIONS

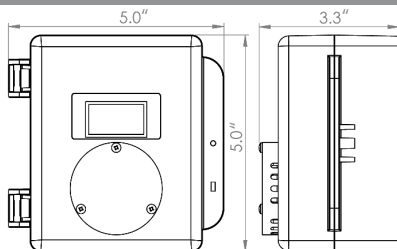
- » Parking Garages/Car Parks
- » Vehicle Repair Shops
- » Ice Arenas
- » Ice Cleaning Machine Rooms
- » Commercial Indoor Swimming Pools
- » Manufacturing Plants
- » Maintenance Facilities
- » ... and many more

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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)

LPT-B-[GROUP 1] Add the Part Number of the internal electrochemical sensor from (example: LPT-B-TCO)

[GROUP 1] Part Number	Lifespan
NH3 Ammonia (NH ₃) sensor (0 - 500 ppm)	2 yrs
TCO Carbon Monoxide (CO) sensor (0 - 200 ppm)	6 yrs
ClO2 Chlorine Dioxide (ClO ₂) sensor (0 - 10 ppm)	3 yrs
Cl2 Chlorine (Cl ₂) sensor (0 - 5 ppm)	3 yrs
C2H4 Ethylene (C ₂ H ₄) sensor (0 - 200 ppm)	2 yrs
EET0 Ethylene Oxide (C ₂ H ₄ O) sensor (0 - 20 ppm)	2 yrs
F2 Fluorine (F ₂) sensor (0 - 2 ppm)	1-2yrs
CH2O Formaldehyde (CH ₂ O) sensor (0 - 5 ppm)	2 yrs
EH2 Hydrogen (H ₂) sensor (0 - 2,000 ppm)	2 yrs
H2SB Hydrogen Sulphide (H ₂ S) sensor (0 - 50 ppm)	5+ yrs
HCL Hydrogen Chloride (HCl) sensor (0 - 20 ppm)	2 yrs
HCN Hydrogen Cyanide (HCN) sensor (0 - 100 ppm)	2 yrs
HF Hydrogen Fluoride (HF) sensor (0 - 10.0 ppm)	1-2yrs
NO Nitric Oxide (NO) sensor (0 - 100 ppm)	2 yrs
NO2A Nitrogen Dioxide (NO ₂) sensor (0 - 10 ppm)	3 yrs
NO2B Nitrogen Dioxide (NO ₂) sensor (0 - 10 ppm)	6 yrs
O2 Oxygen (O ₂) sensor (0 - 25% volume)	3 yrs
O3 Ozone (O ₃) sensor (0 - 1.0 ppm)	2 yrs
PH3 Phosphine (PH ₃) sensor (0 - 5 ppm)	2 yrs
SiH4 Silane (SiH ₄) sensor (0 - 20 ppm)	2 yrs
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] Part Number LPT-B-R and add the Part Number of the ESH-A Remote Sensor from [GROUP 2] below.
(example: LPT-B-R + ESH-A-SR410A)

Solid State Refrigerants & TVOCs	Lifespan
ESH-A-SR22 Refrigerants (R22) sensor (0 - 2,000 ppm)	5 yrs
ESH-A-SR134A Refrigerants (R134A) sensor (0 - 2,000 ppm)	5 yrs
ESH-A-SR402A Refrigerants (R402A) sensor (0 - 2,000 ppm)	5 yrs
ESH-A-SR404A Refrigerants (R404A) sensor (0 - 2,000 ppm)	5 yrs
ESH-A-SR407C Refrigerants (R407C) sensor (0 - 2,000 ppm)	5 yrs
ESH-A-SR410A Refrigerants (R410A) sensor (0 - 2,000 ppm)	5 yrs
ESH-A-SR422D Refrigerants (R422D) sensor (0 - 2,000 ppm)	5 yrs
ESH-A-SR438A Refrigerants (R438A) sensor (0 - 2,000 ppm)	5 yrs
ESH-A-SR507A Refrigerants (R507A) sensor (0 - 2,000 ppm)	5 yrs
ESH-A-STVOC TVOCs sensor (0 - 50 ppm)	5 yrs

Catalytic Combustibles

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

PRODUCT CODES... continued

TVOC PIDs

** usage and application dependant

ESH-A-SPL TVOC PID sensor (0 - 50 ppm)	**
ESH-A-SPH TVOC PID sensor (0 - 300 ppm)	**
<i>Infrared</i>	
ESH-A-JET Propane (C ₃ H ₈) sensor (0 - 100% LEL)	8 yrs

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]	

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]
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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 (not available for O ₂ , HCl, Cl ₂ sensors) May be added to the LPT-B and/or the ESH-A Remote Sensor, as required.

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
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

