

LBU10-P Series

Emergency LED Driver

Intelligent Device
ECOSYSTEM
dynamic

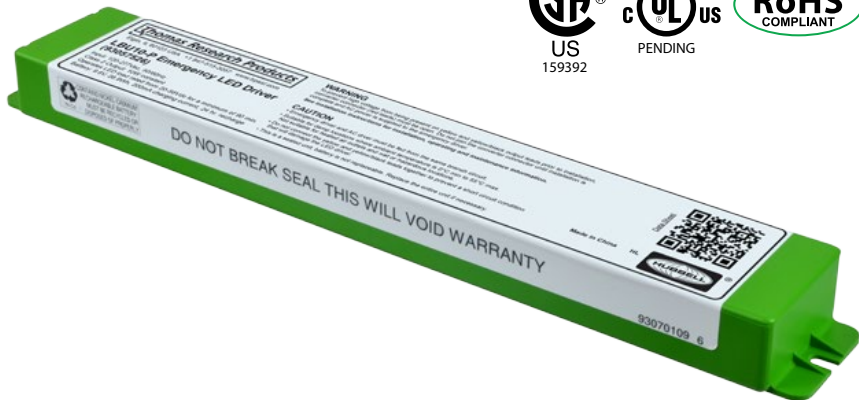
Electrical Specifications

Output Power:	10W (constant)
Input Power:	4.2 W (Max)
Input Voltage Range:	120-277 Vac (Universal)
Frequency:	60 Hz
Output Voltage:	20-56 VDC (Class 2 Compliant)
Output Current:	0.50 A @ 20Vdc; 0.17 Amps @ 56Vdc
Emergency Operation:	90 Minutes (Min)
Recharge Time:	24 Hrs (Max)
Battery Type:	High temperature Nickel-Cadmium
Battery Life:	7-10 Yrs

Environmental Specifications

Operating Temperature:	0°C to +55 °C
Case Material:	PVC
Weight:	1.9 lbs. (0.86 kg)

- Provides 90 minutes of emergency lighting
- Use with normally-on, normally-off or switched fixtures
- Constant 10W emergency output operates an LED load that normally operates at 10W or greater.
- Auto-sensing output voltage full Vf range (20-56V)
- Suitable for Dry & Damp Location
- 2-wire input simplifies wiring
- Long-life, maintenance-free Nickel-Cadmium battery
- Electronic AC lockout and low voltage disconnect (LVD) circuit
- UL924 Classified for both factory and field installation
- Suitable for use in sealed or gasketed fixtures
- Designed to meet California's Title 20 Energy Efficiency requirements
- Includes 2-wire test switch and LED charging indicator
- Remote test switch/charge indicator module fits in a single-gang box, available separately
- 5 year warranty



Application

The LBU10-P is a universal input (120-277V) emergency LED battery pack that works with an AC LED driver to allow an LED lighting load to be used in both normal and emergency operation. When normal AC power is lost, the LBU10-P operates to provide 10 watts of constant emergency power at a rated output voltage of 20-56Vdc. The constant power design provides backup for a minimum of 90 minutes with no loss of emergency lumen output. When used with emergency-only LED fixtures, no AC driver is needed. The UL924 Classification allows for both field and factory installations of suitable LED loads including LED luminaires, DC voltage driven LED replacements for fluorescent lamps and others.

Construction

The LBU10-P consists of a compact case constructed of a PVC thermoplastic. The unit contains a solid-state charger with automatic transfer circuit, a 2-wire test switch and LED charging indicator light, and a high-temperature, Nickel-Cadmium battery.

Part	Model	Current Out (mA ±5%)	Voltage Out (Vdc)	Max Power (W)	Wire Entry
93057526	LBU10-P		20-56	10	End

Class 2: US/Canada

Accessories

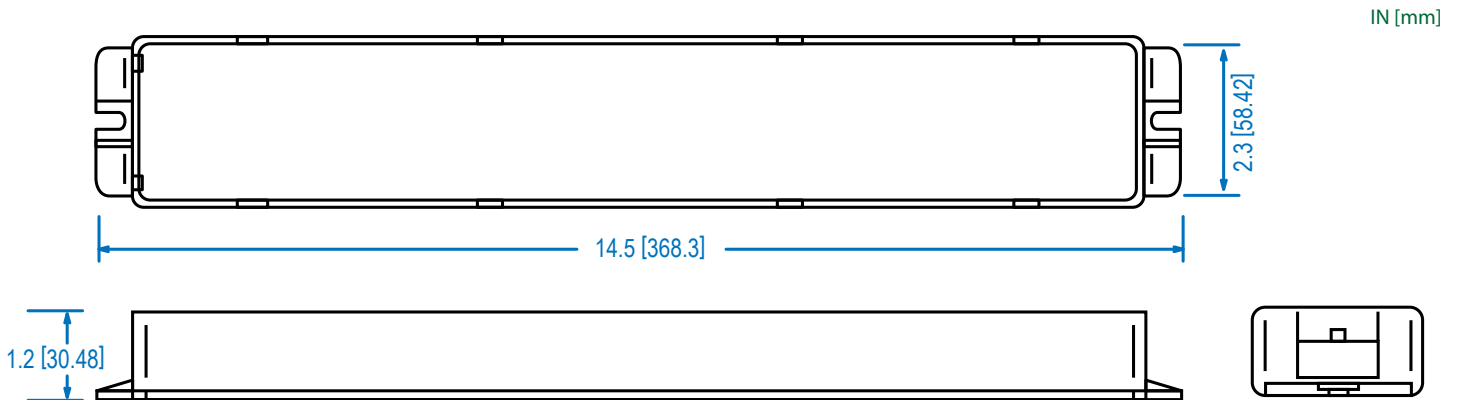
Part	Model	Description
	PLRTS	Remote Test Switch/Indicator

Safety Compliances Standard

CSA/UL	UL924 Damp Location Classified for field installation, UL1310 for UL Class 2 & CAN/CSA C22.2 No. 250.13
NFPA	NFPA 101 (Life Safety Code), NFPA 70 (National Electrical Code)



Dimensions



Specifications

Operation

The LBU10-P emergency LED driver and battery pack is designed to provide a minimum of 90 minutes of emergency lighting to commercial or industrial LED fixtures. Operation is fully automatic. A solid-state charger maintains the battery at full charge as long as utility power is present. Upon interruption of utility power, the unit will activate and the automatic transfer circuit will switch to the emergency mode, keeping the LED load illuminated for a minimum of 90 minutes. Lumen output during emergency mode is estimated as described below. Upon restoration of utility power, the LBU10-P emergency LED driver and battery pack will return to the charging mode. Full battery recharge is accomplished within 24 hours. A test switch and LED status indicator light is provided for testing and monitoring of unit performance.

You can estimate the egress lighting illumination levels by doing the following:

- A) Find the efficacy of the LED load, which will be found in the Design Lights Consortium database. This number will be given in lumens per watt (lm/w).
- B) Lumens can be calculated by multiplying the output power of the emergency LED driver (10W) by the efficacy of the LED load. In many cases the actual lumen output in emergency mode will be greater than this calculation yields, however it will provide a good estimate for beginning the lighting design of the system.

$$\text{Lumens In Emergency Mode} = \text{Lumens Per Watt of Fixture} * \text{Output Power of Chosen Product}$$

$$\text{(LUMENS)} = \text{(LM/W)} * \text{W}$$

- C) Using the results of this calculation and industry standard lighting design tools, calculate the anticipated illumination levels in the path of egress.

NOTE: After installation, it will be necessary to measure the egress lighting illumination levels to ensure compliance with national, state and local code requirements.

Installation

The LBU10-P Emergency LED Driver does not affect normal LED fixture operation and may be used with either switched or unswitched fixtures. If a switched fixture is used, an unswitched hot lead must be connected to the emergency ballast. The Emergency LED Driver must be fed from the same branch circuit as the AC driver. Due to its thermoplastic construction, the LBU10-P must either be installed inside of the fixture, or enclosed if remote mounted outside the fixture.

The LBU10-P Emergency LED Driver is suitable for use in damp locations where the ambient temperature is between 0°C (32°F) and 55°C (131°F), and is also suitable for installations in sealed and gasketed fixtures. It is not suitable for installation in heated air outlet fixtures and wet or hazardous location fixtures.