

LED

MODEL NO: _____
TYPE: _____
PROJECT: _____
COMMENTS: _____

LED OPERATION:
10 Watt LED Load
@ 10-60 VDC nominal¹

OUTPUT:
10 Watts [Constant]

DESCRIPTION

The **ILB-CP10-L** from IOTA Engineering is a UL Component Recognized LED emergency driver that allows the same LED fixture to be used for both normal and emergency operation. In the event of a power failure, the **ILB-CP10-L** switches to the emergency mode and operates the existing fixture for **90 minutes**. The unit includes a charger, and converter circuit assembly and separate battery pack component. The **ILB-CP10-L** will operate an LED array load at **10 watts** with **constant power** at a rated output voltage of **10V-60V**. The Constant Power design of the **ILB-CP10-L** maintains the output wattage to the LED array even as the system voltage diminishes.

SPECIFICATIONS

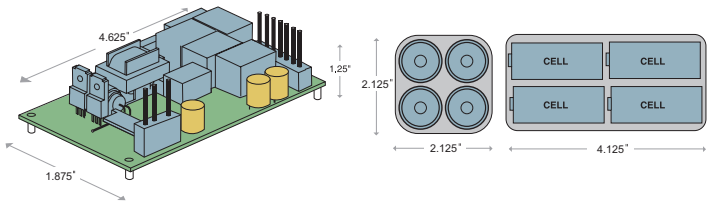
Input Voltage	(Universal) 120-277VAC, 50/60Hz
Input Rating (120V/277V).....	3.7 Watts (max)
Output Voltage ¹	10-60VDC Class 2 Compliant
Output Current	1.0A (@10VDC) - 0.16A (@60VDC)
Output Power	10 Watts (constant)
Power Factor	≥ 0.9
Emergency Operation	90 minutes
Operating Temp	0° to 55° C
THD	< 20%
Battery.....	High Temp Nickel-Cadmium 24 Hour Recharge 7-10 Year Life Expectancy
Weight	3.5 lbs.
UL Conditions of Acceptability	Must be factory wired Battery temperature must not exceed 55° C



¹Max. output voltage in emergency mode is 58.5 VDC with a + tolerance of 1.5 volts

DIMENSIONS

ILB-CP10-L Circuit Board: 4.625" x 1.875" x 1.25"
ILB-CP10-L Battery: 2.125" x 2.125" x 4.125"



PRODUCT ADVANTAGES

- Flexible Open Board and Battery Design
- Constant Power Design maintains illumination throughout the 90-minute runtime with no light degradation
- Two-wire universal AC input
- Self-sensing output voltage allows the CP Series to operate various product types, such as downlights, troffers, or strips, reducing product SKUs for emergency options.

FEATURES

- UL 1310 Certified, Output Class 2 Compliant
- Long life high temperature recyclable Ni-Cad battery
- Includes single-piece TBTS test switch and charge indicator accessory kit
- For use with switched or unswitched fixtures
- 5-Year Warranty. See Warranty Page for details.
- Meets or exceeds all NEC and Life Safety Code Emergency Lighting Requirements
- Suitable for use in Damp Locations
- RoHS Compliant



ILB-CP10-L

CONSTANT POWER OPEN BOARD LED EMERGENCY DRIVER KIT

BATTERY CONFIGURATION

- CUBE

ILB-CP10-L SAMPLE SPECIFICATION

Install IOTA ILB-CP10-L Constant Power emergency LED driver kit as indicated on the plans. The emergency driver kit shall be designed for internal mounting to the luminaire including a charger and converter circuit board assembly and a high-temperature, sealed, maintenance-free nickel cadmium battery rated for a 10-year service life. The unit shall be provided complete with an illuminated push to test switch. The emergency driver system shall be UL class 2 certified in accordance with UL 1310 and shall be suitable for use in damp locations with a temperature range of 0° to 55° C.

The AC input shall be a two-wire, universal voltage capable 120 thru 277 VAC, 50/60 Hz with a maximum input power of 3.7 watts.

The unit charger shall consist of a two-stage charging system which samples the battery in relation to its temperature, state of charge and input voltage fluctuations. The charger shall be current limited, temperature compensated, short-circuit protected with reverse polarity protection. A low voltage battery disconnect (LVD) circuit shall be provided and will disconnect the load and circuitry from the battery when it reaches approximately 80 to 85% of its nominal terminal voltage, preventing a non-recoverable, deep-discharge condition as well as equipment initialization failure when utility power is restored. The unit shall achieve a full recharge in 24-hours.

The emergency driver shall accommodate an LED load with a forward voltage requirement ranging from 10 to 60 VDC. The output voltage sensing shall be automatic and instantaneous with a resulting, inversely-proportional current to maintain constant power to the LED array with an output tolerance of +/- 3%. The unit shall supply the rated load for a minimum of 1 1/2 hours or to 87 1/2% of rated battery terminal voltage. The output power to the LED load during emergency operation shall be held constant 10 watts from minute one throughout the entire emergency run time resulting in no loss or degradation of the light source during emergency operation.

The unit shall be furnished with an electronic, AC-lockout circuit which will connect the battery when the AC circuit is activated, and an electronic brownout circuit which will enable a transfer to emergency operation when utility power dips below an acceptable level.

Emergency Lumen Performance - ILB-CP10-L

Approx. Luminaire Efficacy	Minute 1	Minute 45	Minute 90
100 lm/W	1000	1000	1000
110 lm/W	1100	1100	1100
120 lm/W	1200	1200	1200
130 lm/W	1300	1300	1300



Visit www.iotaengineering.com/cptools to access our on-line CP performance calculator for assistance when determining lumen output and operating specifications for your unit.