

SLIM PROFILE
FOR NARROW COMPARTMENTS

DESCRIPTION

The **ILBSL CP05** from IOTA Engineering is a UL Listed and Classified 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 **ILBSL CP05** switches to the emergency mode and operates the existing fixture for **90 minutes**. The unit contains a battery, charger, and converter circuit in a single slim profile enclosure for installation within the channel space or wireway. The **ILBSL CP05** will operate an LED array load at **5 watts** with **constant power** at a rated output voltage of **10V-60V**. The Constant Power design of the **ILBSL CP05** maintains the output wattage to the LED array even as the system voltage diminishes, providing a consistent illumination level for the full 90-minute runtime.

SPECIFICATIONS

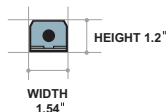
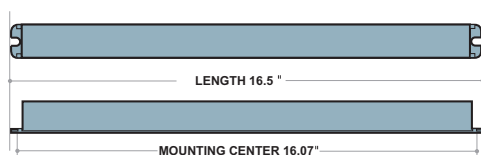
Input Voltage	(Universal) 120-277VAC, 50/60Hz
Input Rating (120/277)	2.7 Watts (max)
Output Voltage ¹	10-60VDC Class 2 Compliant
Output Current	0.5A (@10VDC) - 0.083A (@60VDC)
Output Power	5 Watts (constant)
Max. AC Driver Output Current	3A _{dc}
Power Factor	≥ 0.9
Emergency Operation	90 minutes
Operating Temp.	0° to 55° C
THD	< 20%
Battery	High Temp Nickel-Cadmium 24 Hour Recharge 7-10 Year Life Expectancy
Weight	2.4 lbs.
Approval	UL Listed for factory and field installation CSA C22.2 No 141

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



DIMENSIONS

16.5" x 1.54" x 1.2" (mounting center 16.07")



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

LUMEN PERFORMANCE

Fixture Efficacy	Minute 1	Minute 45	Minute 90
100 lm/W	500	500	500
110 lm/W	550	550	550
120 lm/W	600	600	600
130 lm/W	650	650	650

PRODUCT ADVANTAGES

- **Auto-Sensing Class 2 Output**
Auto-adjusting 10-60 VDC output range accommodates a full range of Class 2 forward voltage LED designs
- **Constant Power Performance**
Constant wattage delivery maintains illumination for the full emergency runtime with no degradation
- **Slim Profile Design**
Slim profile enclosure allows integral installation within restrictive and narrow channel spaces
- **Listed for Field or Factory Installation**
UL Listed for both field or factory installation in United States and Canada

FEATURES

- UL 924 Listed, UL Listed and Classified to FTBVI
- UL 1310 Certified, Output Class 2 Compliant
- Long life high temperature recyclable Ni-Cad battery
- Galvanized steel case
- Includes single-piece TBTS test switch and charge indicator accessory kit
- For use with switched or unswitched fixtures
- **5-Year Warranty.**
- Meets or exceeds all NEC, IBC, and Life Safety Code Emergency Lighting Requirements
- Suitable for use in Plenum, Damp Location, Recessed Type IC, and Enclosed and Gasketed Luminaires
- RoHS Compliant



ILBSL CP05

Constant Power Emergency LED Driver

ORDERING GUIDE

ILBSL

CP05



Understanding Your IOTA Driver Model:

ILBSL = Slim Profile IOTA Emergency LED Driver

CP** = Constant Power Performance
at the rated wattage

ILBSL CP05 Sample Specification

Supply and install IOTA ILBSL CP05 Constant Power emergency LED driver system as indicated on the plans. The emergency driver shall be designed for [Select "Internal" or "External"] mounting to the luminaire including a self-contained, 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 UL listed for use in damp locations and in enclosed and gasketed fixtures 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 and be UL Listed to Category Control Number (CCN) FTBR, Emergency Lighting and Power Equipment, and FTBV, Emergency Light-Emitting-Diode Drivers for field installation. Maximum input power of the emergency driver shall be 2.7 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 5 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. Maximum remote mounting distance of the emergency driver shall be 50-feet.

Emergency Lumen Performance - ILBSL CP05

Approx. Luminaire Efficacy	Minute 1	Minute 45	Minute 90
100 lm/W	500	500	500
110 lm/W	550	550	550
120 lm/W	600	600	600
130 lm/W	650	650	650



The **ILBSL CP05** is UL Listed and Classified for Field Installation. Refer to the "**CP Series Compatibility and Suitability of Use Guidelines**" addendum for complete project installation requirements.

ACCESSORIES

☐ TMKISL Top Mount Cover

When top-mounting ILBSL units, the TMKISL is used to cover the exposed wiring that goes from the battery pack into the fixture.

Warranty: 5-Year Limited Warranty

Complete warranty terms located at www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx