

ILBLP CP10 HE SD

Constant Power Emergency LED Driver

PRODUCT SPECIFICATION SHEET



REDUCED FOOTPRINT
WITH LITHIUM TECHNOLOGY

CERTIFIED IN TITLE 20
Appliance Efficiency Database -
Battery Charger

SELF-DIAGNOSTIC
AUTOMATIC MONTHLY & ANNUAL TESTING

AC-ACTIVATE
FOR SIMPLER INSTALLATION



MODEL NO: _____

TYPE: _____

PROJECT: _____

COMMENTS: _____

LUMEN PERFORMANCE

Fixture 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

LED

DESCRIPTION

The **ILBLP CP10 HE SD** from IOTA is a UL Listed 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 **ILBLP CP10 HE SD** switches power from the normal AC Driver and operates the fixture for **90 minutes** in the emergency mode from the unit's battery supply. The unit contains a battery, charger, and converter circuit is available in flexed or non-flex mounting configurations for individual fixture requirements. The **ILBLP CP10 HE SD** will operate an LED load at **10 watts** with **constant power** at a rated output voltage of **15V-55V**. The Constant Power design of the **ILBLP CP10 HE SD** 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. Features lithium battery technology for **significantly decreased form factor** and includes automatic monthly and annual **self-testing** features as standard.

SPECIFICATIONS

Input Voltage	(Universal) 120-277VAC, 50/60Hz
Input Rating053A (max)
Output Voltage ¹	15-55VDC Class 2 Compliant
Output Current	0.67A (@15VDC) - 0.18A (@55VDC)
Output Power	10 Watts (constant)
Max. AC Driver Output Current	3Adc
Surge Protection	Meets ANSI/IEEE C62.41.2-2002
Emergency Operation	90 minutes
Operating Temp	0° to 55° C
THD	< 10% (@ full charge)
EMI	Complies to FCC Commercial Limits
Battery	Lithium Iron-Phosphate 24 Hour Recharge 5-7 Year Life Expectancy
Weight (Configuration)	2.5 lbs. (A) 1.5 lbs (B)
Certifications	UL Listed for factory and field installation CA T20 Appliance Efficiency Database

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



PRODUCT ADVANTAGES

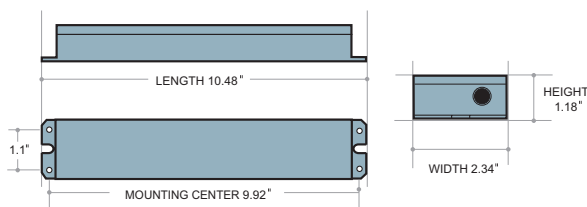
- Constant Power Performance**
Constant wattage delivery maintains illumination for the full emergency runtime with no degradation
- Minimum Mounting Footprint**
Lithium battery technology significantly decreases space requirements without sacrificing output performance
- Self-Diagnostic / Self-Testing**
Monthly and annual self-testing feature satisfies the periodic testing requirements in accordance with NFPA 101 while the on-board diagnostics provides system readiness with visual indicators.
- 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 FTBV
- Auto-Sense 15-55VDC output is UL 1310 Certified, Output Class 2 Compliant
- AC-Activate circuitry simplifies wiring by eliminating the need for manual battery connection during installation
- 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
- Certified to CA Title 20 and registered in the Modernized Appliance Efficiency Database (MAEDBS)
- Suitable for use in Plenum, Damp Location, and Recessed Type IC Luminaires
- RoHS Compliant

DIMENSIONS

10.48" x 2.34" x 1.18" (mounting center 9.92 x 1.1")



ILBLP CP10 HE SD

Constant Power Emergency LED Driver

ORDERING GUIDE

ILBLP

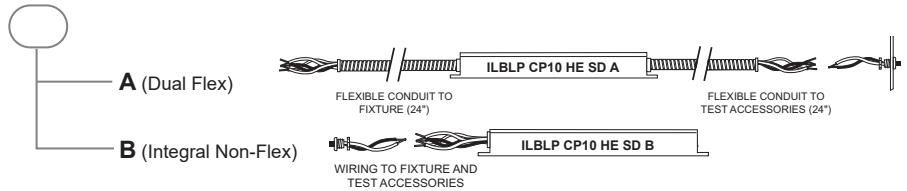
CP10

HE

SD

Understanding Your IOTA Driver Model:

- ILBLP** = IOTA Emergency LED Driver with Lithium Battery Technology
- CP**** = Constant Power Performance at the rated wattage
- HE** = High efficiency charging control for CA Title 20 requirements
- SD** = Self-diagnostic capability



ILBLP CP10 HE SD Sample Specification

Supply and install IOTA ILBLP CP10 HE SD 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 lithium iron-phosphate battery rated for a 5 to 7-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 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 0.053A.

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 unit shall be designed to automatically test the emergency lighting capability for no less than 30 seconds monthly and 90 minutes annually, and shall monitor battery charge and battery discharge current and load performance. A dual-color light-emitting LED shall be provided to indicate test results and charge status.

The emergency driver shall accommodate an LED load with a forward voltage requirement ranging from 15 to 55VDC. 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 +/- 5%. 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 branch circuit is energized, and an electronic brownout circuit which will enable a transfer to emergency operation when utility power dips below an acceptable level.

Emergency Lumen Performance - ILBLP CP10 HE SD

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



The **ILBLP CP10 HE SD** 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.

DIAGNOSTIC CODES

The charge indicator (TBTS) LED will flash **RED** when charging and remain lit solid **GREEN** when fully charged and in the standby mode. The TBTS will flash **GREEN** when self-testing. If a problem is encountered during the test cycle, the TBTS will flash **RED**, according to the diagnostic codes below:

STATUS INDICATION	CONDITION
STEADY GREEN	NORMAL MODE
STEADY RED	BATTERY IS CHARGING
FLASHING GREEN	SELF-TESTING
OFF	EMERGENCY MODE
FLASHING RED/GREEN	INSUFFICIENT CHARGE
1 RED FLASH	BATTERY PACK FAILURE
2 RED FLASHES	EMERGENCY LAMP FAILURE
3 RED FLASHES	FIXTURE DIAGNOSTIC FAILURE DETECTED

Attention: Refer to the IATA website at <https://www.iata.org> for air transportation requirements and restrictions for lithium batteries and products containing lithium batteries.

Contact IOTA Customer Service to learn more about IOTA standards and best practices for the shipping, handling, and storage of IOTA lithium battery products.

Warranty: 5-Year Limited Warranty

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