ILBLP CP12 HE SD LC CW

Constant Power Emergency LED Driver Kit for Cold Weather Applications

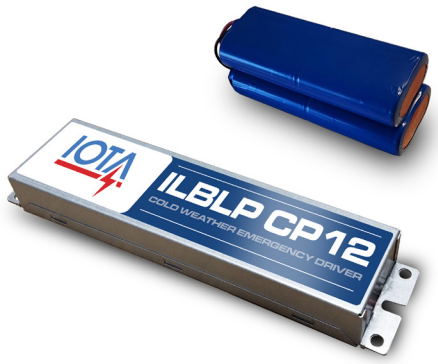
CONSTANT POWER EMERGENCY OUTPUT

EXTENDED TEMP. RANGE

SELF-DIAGNOSTIC AUTOMATIC MONTHLY & ANNUAL TESTING

FEATURES AC ACTIVATE FOR SIMPLER INSTALLATION

CERTIFIED IN TITLE 20 Appliance Efficiency Database - Battery Charger



MODEL NO: _____

TYPE: _____

PROJECT: _____

COMMENTS: _____

DESCRIPTION

The **ILBLP CP12 HE SD LC CW** from IOTA is a UL Recognized LED emergency driver that allows the same LED fixture to be used for both normal and emergency operation in ambient temperatures of **-20° to 60°C**. In the event of a power failure, the **ILBLP CP12 HE SD LC CW** switches power from the normal LED driver and operates the LEDs in the emergency mode for **90 minutes**. The unit includes a charger and converter circuit in a reduced-profile housing and a separate flexible $LiFePO_4$ battery component. The **ILBLP CP12 HE SD LC CW** will operate an LED array load at **12 watts** with **constant power** at a rated output voltage of **20V-58V**. The Constant Power design of the **ILBLP CP12 HE SD LC CW** maintains the output wattage to the LED array resulting in non-diminishing illumination for the entire runtime. Includes single-piece IP67 rated test switch and charge indicator accessory and includes automatic monthly and annual **self-testing** features as standard.

SPECIFICATIONS

Input Voltage	(Universal) 120-277VAC, 50/60Hz
Input Rating (120/277)	65 mA (max)
Output Voltage	20-58VDC Class 2 Compliant
Output Current	0.6A (@20VDC) - 0.206A (@58VDC)
Output Power	12 Watts (constant)
Max. AC Driver Output Current	5Adc
Power Factor	≥ 0.9*
Surge Protection	Meets or Exceeds ANSI/IEEE C62.41.2-2002
Emergency Operation	90 minutes
Operating Temp	-20° to 60° C
THD	< 10%
EMI	Complies to FCC commercial limits
Battery	$LiFePO_4$ 24 Hour Recharge
Weight (incl. batteries)	2.6 lbs
Certifications	UL Recognized Component for factory installation in the U.S. and Canada CA T20 Appliance Efficiency Database

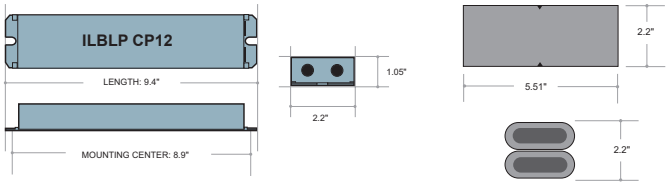
* PF is ≥0.6 for 277Vac

c UL us

BC

DIMENSIONS

ILBLP CP12 HE SD LC CW Component Housing: 9.4″ x 1.05″ x 2.2″
ILBLP CP12 HE SD LC CW Battery: 5.51″ x 2.2″ x 2.2″



LUMEN PERFORMANCE

Fixture Efficacy	Minute 1	Minute 45	Minute 90
100 lm/W	1200	1200	1200
110 lm/W	1320	1320	1320
120 lm/W	1440	1440	1440
130 lm/W	1560	1560	1560

PRODUCT ADVANTAGES

- **Auto-Sensing Class 2 Output**
  Auto-adjusting 20-58VDC output range accommodates a wide range of Class 2 forward voltage LED designs
- **Constant Power Performance**
  Constant wattage delivery maintains illumination for the full emergency runtime with no degradation
- **Extended Temperature Performance**
  -20° to 60°C ambient temperature performance is ideal for outdoor paths of egress and freezing environments.
- **AC Activate**
  Automatically engages battery charging circuitry when AC power is detected, eliminating need for physical battery connection when power is supplied at initial installation.

FEATURES

- UL 1310 Certified, Output Class 2 Compliant
- Circuitry enclosed in galvanized steel housing
- Includes single-piece IP67 rated test switch and charge indicator accessory kit
- Adaptable two-part, maintenance-free, high temperature $LiFePO_4$ lithium battery designed for long life
- For use with switched or unswitched fixtures
- **5-Year Warranty.**
- Meets or exceeds all NEC, IBC, and Life Safety Code Emergency Lighting Requirements
- Certified for CA Title 20
- Suitable for use in damp location and IP67 rated enclosed and gasketed luminaires (no venting valve required.)
- RoHS Compliant RoHS COMPLIANT

IOTA®

Patented. See **www.iotaengineering.com/patents** for details.

Product specifications are subject to change without notice

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ORDERING GUIDE

ILBLP	CP12	HE	SD	LC	CW	ILBLP CP12 HE SD LC CW	

Understanding Your IOTA Driver Model:

ILBLP = IOTA Emergency LED Driver with Lithium Battery Technology
CP** = Constant Power Output Performance at the rated wattage
HE = High efficiency charging control for CA Title 20 requirements
SD = Self-diagnostic capability
LC = Electronics enclosure with separate battery
CW = (Cold Weather) Extended Temperature Performance

ILBLP CP12 HE SD LC CW Sample Specification

Supply and install IOTA ILBLP CP12 HE SD LC CW emergency LED driver system as indicated on the plans. The emergency driver shall be designed for internal 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 suitable for use in damp location fixtures with a temperature range of -20° to 60° 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. Maximum input power of the emergency driver shall be 65mA.

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 83 to 86% 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 red 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 20 to 58VDC. 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 87.5% of rated battery terminal voltage. Primary output power to the LED load during emergency operation shall be held at 12 watts for the full emergency runtime of the unit.

The unit shall be furnished with electronic AC-Activate circuitry 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 CP12 HE SD LC CW

Approx. Luminaire Efficacy	Minute 1	Minute 45	Minute 90
100 lm/W	1200	1200	1200
110 lm/W	1320	1320	1320
120 lm/W	1440	1440	1440
130 lm/W	1560	1560	1560

DIAGNOSTIC CODES

The charge indicator (IPS) LED will **STEADY RED** when charging or standby mode indicating AC power is present and no faults are detected. If a problem is encountered during charging or after a test cycle, the IPS will **FLASH RED** according to the diagnostic codes below:

STATUS INDICATION	CONDITION
STEADY RED	AC PRESENT / NO FAULTS DETECTED
FLASHING RED (ONCE PER SECOND)	UNABLE TO CHARGE
1 RED FLASH (EVERY 6 SECONDS)	DISCONNECTED BATTERY / LOW BATTERY
2 RED FLASHES (EVERY 6 SECONDS)	EMERGENCY LED LOAD FAILURE
OFF	EMERGENCY MODE / TESTING

Attention: Refer to the IATA website at https://www.iata.org for air transporation 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*

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