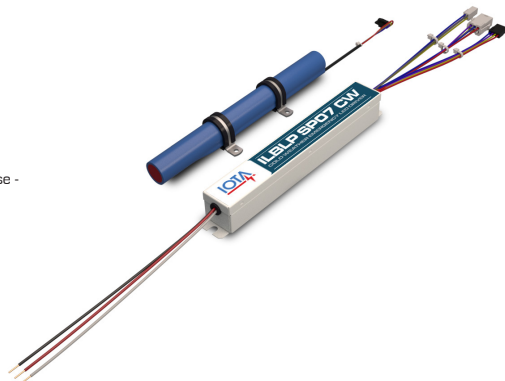


# ILBLP SP07 HE SD LC CW



Certified in CA TITLE 20 Appliance Efficiency Database - Battery Charger



MODEL NO: \_\_\_\_\_  
 TYPE: \_\_\_\_\_  
 PROJECT: \_\_\_\_\_  
 COMMENTS: \_\_\_\_\_

## DESCRIPTION

The IOTA® **ILBLP SP07 HE SD LC CW** 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 55°C**. In the event of a power failure, the **ILBLP SP07 HE SD LC CW** 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 charger and converter circuit in a narrow profile enclosure with separate battery for installation within the channel space or wireway. The **ILBLP SP07 HE SD LC CW** will operate an LED load at **7 watts** of power during the primary stage of operation at a rated output voltage of **15V-55V**. After the primary operation stage, the ILBLP SP07 will deliver a secondary wattage output compliant to Life Safety Code requirements. Includes automatic monthly and annual **self-testing** features as standard.

## SPECIFICATIONS

Input Voltage .....	(Universal) 120-277VAC, 50/60Hz
Input Rating .....	0.072A (max)
Output Voltage <sup>1</sup> .....	15-55VDC Class 2 Compliant
Output Current .....	0.467A (@15VDC) - 0.127A (@55VDC)
Output Power .....	7 Watts (primary)
Max. AC Driver Output Current .....	3A <sub>dc</sub>
Surge Protection .....	Meets ANSI/IEEE C62.41.2-2002
Emergency Operation .....	90 minutes
Operating Temp .....	-20° 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 .....	1.5 lbs.
Certifications .....	UL Recognized Component for both United States and Canada CA T20 Appliance Efficiency Database

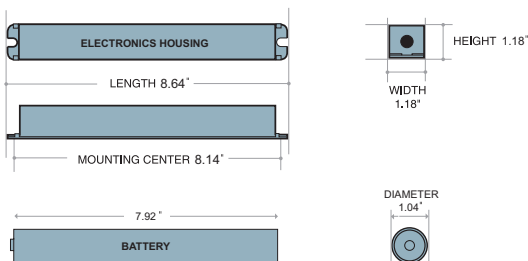
<sup>1</sup>Max. output voltage in emergency mode is 58.5 VDC with a + tolerance of 1.5 volts



## DIMENSIONS

Electronics Housing:  
8.64" x 1.18" x 1.18"

Battery (length, diameter):  
7.92" x 1.04"



## LUMEN PERFORMANCE

Fixture Efficacy	Primary Stage Output
100 lm/W	700 Lumens
110 lm/W	770 Lumens
120 lm/W	840 Lumens
130 lm/W	910 Lumens

## PRODUCT ADVANTAGES

- **Consistent Performance Across Voltages**  
Will auto-sense and deliver consistent dual stage wattage performance across the full Class 2 15-55VDC forward voltages.
- **Extended Temperature Performance**  
-20° to 55°C ambient temperature performance is ideal for cold applications and freezing environments.
- **Versatile Component Design**  
Minimal enclosure and separate lithium battery design provides installation flexibility within fixture compartment spaces.
- **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.

## FEATURES

- Auto-Sense 15-55VDC output is UL 1310 Certified, Output Class 2 Compliant
- Circuitry enclosed in white painted steel case
- Long life high temperature recyclable Lithium Iron-Phosphate battery
- AC-Activate circuitry simplifies wiring by eliminating the need for manual battery connection during installation
- Includes single-piece IP67-rated 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, Recessed Type IC, and Enclosed and Gasketed Luminaires
- RoHS Compliant



# ILBLP SP07 HE SD LC CW

Emergency LED Driver Kit with Dual Stage Output for Cold Weather Applications

## ORDERING GUIDE

ILBLP

SP07

HE

SD

LC

CW



### Understanding Your IOTA Driver Model:

- ILBLP** = IOTA Emergency LED Driver with Lithium Battery Technology
- SP\*\*** = Dual Stage 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** = Rated for cold-weather and freezing applications

### ILBLP SP07 HE SD LC CW Sample Specification

Supply and install IOTA ILBLP SP07 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 that is IP67-rated. 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 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 60mA.

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. Primary output power to the LED load during emergency operation shall be held at 7 watts for a pre-determined period before delivering a consistent secondary wattage for the remainder of operation compliant with Life Safety Code egress illumination requirements.

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 SP07 HE SD LC CW

Approx. Luminaire Efficacy	Primary Stage Output
100 lm/W	700 Lumens
110 lm/W	770 Lumens
120 lm/W	840 Lumens
130 lm/W	910 Lumens

## DIAGNOSTIC CODES

The charge indicator (TBTS) LED will be **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	BATTERY IS FULLY CHARGED
STEADY RED	BATTERY IS CHARGING
FLASHING GREEN	UNIT IS PERFORMING A TEST
OFF	EMERGENCY MODE
FLASHING RED/GREEN	INSUFFICIENT CHARGE
1 RED FLASH	BATTERY FAILURE
2 RED FLASHES	EMERGENCY LED LOAD FAILURE
3 RED FLASHES	ELECTRONICS FAILURE
4 RED FLASHES	TEMPERATURE OUT OF RANGE

**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](http://www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx)