

DESCRIPTION

The **ILBDW 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 wet and damp indoor environments. In the event of a power failure, the **ILBDW 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 enclosed within an IP66-rated enclosure with a single PVC flexible conduit for connection to the fixture. The **ILBDW CP10 HE SD** will operate an LED load at **10 watts** with **constant power** at a rated output voltage of **15V-55V**. The patented Constant Power design of the **ILBDW CP10 HE SD** maintains the output wattage to the LED array even as system voltage diminishes, providing a consistent illumination level for the full 90-minute runtime. Includes automatic monthly and annual **self-testing** features as standard.

SPECIFICATIONS

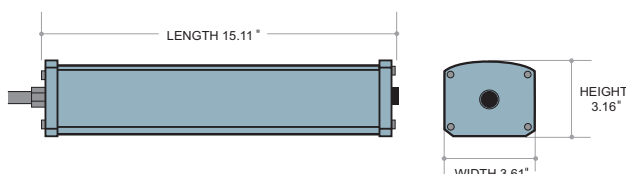
Input Voltage	(Universal) 120-277VAC, 50/60Hz
Input Rating	.053A (max)
Output Voltage ¹	15-55VDC Class 2 Compliant
Output Current	0.67A (@15VDC) - 0.18A (@55VDC)
Output Power	10 Watts (constant)
Max. AC Driver Output Current	3Adc
Surge Protection	Meets ANSI/IEEE C62.41.2-2002
Emergency Operation	90 minutes
Operating Temp	0° to 48° 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)	4.14 lbs
Certifications	UL Listed for factory and field installation CSA C22.2 No 141 NSF Component for Food and Beverage Safety CA T20 Appliance Efficiency Database

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



DIMENSIONS

15.11" x 3.61" x 3.16"



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

PRODUCT ADVANTAGES

- **Heavy Duty Enclosure Design**
Specialized enclosure with PVC conduit is IP66-rated for wet and damp locations and NSF-rated for use in food preparation areas.
- **Constant Power Performance**
Constant wattage delivery maintains illumination for the full emergency runtime with no degradation
- **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 manual battery connection at installation
- IP66-rated die-cast aluminum enclosure
- Includes single-piece IP-rated test switch and charge indicator accessory
- 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 Wet and Damp Location Luminaires and in food preparation areas (NSF)
- Separate mounting bracket accessories allow for top, wall, ceiling, or suspended mounting.
- RoHS Compliant



ILBDW CP10 HE SD

Wet/Damp-Rated Constant Power Emergency LED Driver

ORDERING GUIDE

ILBDW

CP10

HE

SD

FBS

Understanding Your IOTA Driver Model:

ILBDW = IOTA Emergency LED Driver with IP-rated enclosure

CP** = Constant Power Performance at the rated wattage

HE = High efficiency charging for CA Title 20 requirements

SD = Self-diagnostic capability

FBS = Food and Beverage Safe

S (Single Flex with Test Accessory)



ILBDW CP10 HE SD Sample Specification

Supply and install IOTA ILBDW CP10 HE SD Constant Power emergency LED driver system as indicated on the plans. The emergency driver shall be designed for 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 IP-rated enclosure and IP-rated 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 with wet and damp location fixtures with a temperature range of 0° to 48° C. The unit will feature NSF rating for use in food preparation and service areas.

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 60 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 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 - ILBDW 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 **ILBDW 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.

IP66

Dust tight. No ingress of dust.

Ingress-protected against powerful jets of water.

DIAGNOSTIC CODES

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

STATUS INDICATION	CONDITION
RED	BATTERY IS CHARGING
GREEN	BATTERY IS FULLY CHARGED
OFF	EMERGENCY MODE
FLASHING GREEN	UNIT IS PERFORMING A TEST
FLASHING RED/GREEN	INSUFFICIENT CHARGE
FLASHING RED (ONCE PER 0.5 SEC.)	BATTERY MAY BE MISSING
FLASHING RED (ONCE PER 6 SEC.)	BATTERY FAILURE
TWO RED FLASHES	LOAD FAILURE
THREE RED FLASHES	ELECTRONICS FAILURE
FOUR 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.

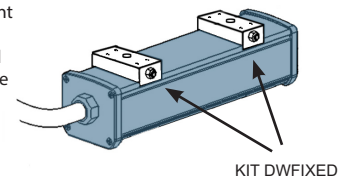
Warranty: 5-Year Limited Warranty

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

ACCESSORIES

KIT DWFIXED (fixed brackets)

Use with the ILBDW to mount the unit to the ceiling. Can also be used with additional "L" brackets for mounting the unit to the wall.



KIT DWSUSP (suspension brackets)

Use with the ILBDW to suspend the emergency unit alongside a suspended luminaire.

