

DESCRIPTION

The IOTA ILBLP CP30 HE SD HV is a UL Listed emergency LED driver for field and factory installation that allows a fixture with **40-250 VDC Non-Class 2 LED lighting loads** to be used for both normal and emergency operation. In the event of a loss of normal power, the ILBLP CP30 HE SD HV 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 enclosure with the option of either single or dual flexible conduit for wiring to the fixture and test accessories. The ILBLP CP30 HE SD HV will operate the **40-250 VDC LED load at 30 watts with Constant Power**. The patented Constant Power design of the unit maintains the rated output wattage to the LED array even as the battery voltage diminishes, resulting in a constant illumination level for the entire emergency runtime. Features lithium battery technology for significantly decreased weight and includes **automatic monthly and annual self-testing** features as standard. Self-diagnostic status is communicated via the illuminated single-piece test accessory, which can be mounted up to 25 ft. from the unit.

SPECIFICATIONS

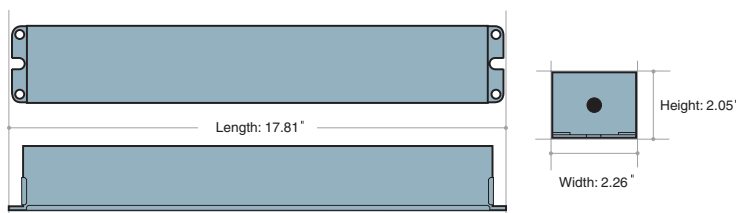
Input Voltage	(Universal) 120-277VAC, 50/60Hz
Input Current (120V/277V)	.065A (max)
Output Voltage	40-250Vdc (nom)
Output Current	0.12A (@200VDC) to 0.545A (@55VDC)
Output Power	30 Watts (constant)
Max. AC Driver Neutral Current	(120Vac) 5 Amps (277Vac) 3 Amps
Power Factor	≥ 0.99*
Surge Protection	Meets or Exceeds 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	Maintenance-free LiFePO ₄ Lithium Iron Phosphate (no heavy metals) 24 Hour Recharge 5-7 Year Life Expectancy
Weight	(single flex) 4.4 lbs. (dual flex) 5.5 lbs.
Certifications	UL Listed for factory and field installation CSA C22.2 No 141 CA Title 20 Appliance Efficiency Database

* PF is ≥0.9 for 277Vac



DIMENSIONS

17.81" x 2.26" x 2.05" (mm: 452 x 57 x 52)
Mounting center: 17.43" x 1.60" (mm: 443 x 41)



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

LED OPERATION:
40-250 VDC LED Load

EMERGENCY OUTPUT:
30 Watts (Constant)

PRODUCT ADVANTAGES

- **Auto-Sensing Non-Class 2 Output**
Auto-adjusting 55-250 VDC output range accommodates a wide range of Non-Class 2 forward voltage designs
- **Constant Power Performance**
Constant wattage delivery maintains illumination level for the full emergency runtime with no degradation
- **Self-Diagnostic / Self-Testing**
Monthly and annual testing self-test feature satisfies the periodic testing requirements in accordance with NFPA 101 while the on-board diagnostics provides system readiness with visual displays.
- **High Output for Increased Illumination**
30W emergency output is ideal for elevated mounting heights and high-bay fixtures
- **Certified for CA Title 20**
High Efficiency Performance meets CEC energy efficiency standards for small battery chargers

ADDITIONAL FEATURES

- UL 924 Listed for U.S. and Canada
- Three available mounting configuration options
- AC-Activate circuitry simplifies wiring by eliminating the need for manual battery connection during installation.
- Maintenance-free, high-temp recyclable LiFePO₄ for significantly reduced space requirements.
- Durable, galvanized steel enclosure
- Single-piece test switch and charge indicator can be remote-mounted up to 25 ft.
- For use with switched or unswitched fixtures
- **5-Year Warranty.** See Warranty Page for details.
- 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



ILBLP CP30 HE SD HV

CONSTANT POWER LED EMERGENCY DRIVER for NON-CLASS 2 LEDs

ORDERING GUIDE

ILBLP

CP30

HE

SD

HV

Understanding Your IOTA Driver Model:

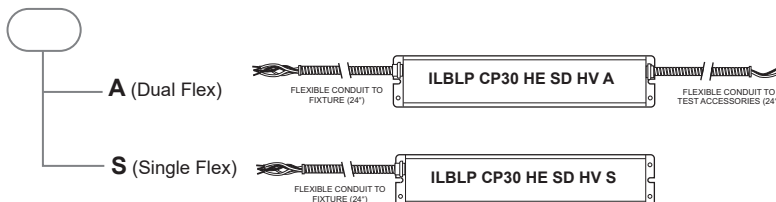
ILBLP = IOTA Emergency LED Driver with lithium battery technology

CP** = Constant Power Performance at the rated wattage

HE = High efficiency charging control for CA Title 20 requirements

SD = Self-diagnostic capability

HV = High voltage output for non-class 2 LED loads



SAMPLE SPECIFICATION

Supply and install IOTA **ILBLP CP30 HE SD HV [select mounting option]** Constant Power emergency LED driver system as indicated on the plans. The emergency driver shall include a self-contained, high-temperature, sealed, maintenance-free LiFePO₄ battery rated for a 5-7 year service life designed for external mounting to the luminaire. The unit shall be provided complete with an illuminated dual-color push to test switch. The dual color LED provides AC status, charge status and diagnostic fault status. The emergency driver system shall be UL listed for use in damp locations 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 6.6 watts. The unit shall monitor and adjust the input power consumption and be certified in the CA Title 20 Modernized Appliance Efficiency Database System (MAEDBS) as a small battery charger.

The charger shall be current limited, 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 <87% 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 40 to 250 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 +/- 10%. 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 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. Maximum remote mounting distance of the emergency driver shall be 20 feet.

Emergency Lumen Performance - ILBLP CP30 HE SD HV

Approx. Luminaire Efficacy	Minute 1	Minute 45	Minute 90
100 lm/W	3000	3000	3000
110 lm/W	3300	3300	3300
120 lm/W	3600	3600	3600
130 lm/W	3900	3900	3900
140 lm/W	4200	4200	4200
150 lm/W	4500	4500	4500



This unit 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 be **RED** when charging and remain lit solid **GREEN** when fully charged and in the standby mode. 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

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