



Enabled with Self-Testing /
Automated Reporting (STAR)



DESCRIPTION

The IOTA ILB CP10 HE AELR emergency driver allows the same LED fixture to be used for both normal and emergency operation. In the event of a power failure, the ILB CP10 HE AELR switches from the existing normal driver to operate the LED load from the ILB CP10 HE AELR battery supply for **90 minutes**. The ILB CP10 HE AELR will operate the LED array load at **10 watts** with **constant power** at a rated output voltage of **10V-60V**. The Constant Power design of the ILB CP10 HE AELR maintains the output wattage to the LED array, providing consistent illumination for the entire emergency runtime. The integrated self-diagnostic circuitry will **automatically conduct monthly 60-second and annual 90-minute tests** to verify proper emergency capability per Life Safety Code requirements. The wireless connectivity enables communication of all diagnostic information to **Atrius®** or **Clairity+™** applications. The ILB CP10 HE AELR features high-efficiency performance and is certified in the CA Title 20 Appliance Efficiency Database as a small battery charger.

SPECIFICATIONS

Input Voltage	(Universal) 120-277VAC, 50/60Hz
Input Rating (120/277)	3.7 Watts (max)
Output Voltage ¹	10-60VDC Class 2 Compliant
Output Current	1.0A (@10VDC) - 0.16A (@60VDC)
Output Power	10 Watts (constant)
Max. AC Driver Output Current	3Adc
Power Factor	≥ 0.9 at 120VAC ²
Surge Protection	Meets ANSI/IEEE C62.41.2-2002
Emergency Operation	90 minutes
Operating Temp	0° to 55° C
THD	< 20%
EMI	Complies to FCC commercial limits
Battery	High Temp Nickel-Cadmium 24 Hour Recharge 7-10 Year Life Expectancy
Weight (configuration)	4.0 lbs. (A) 3.5 lbs (B)
Certifications	UL Listed for factory and field installation CSA C22.2 No 141 CA T20 Appliance Efficiency Database Certified wireless module: FCC ID BRM1, Model BRM1-3

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

²PF ≥ 0.75 at 277VAC

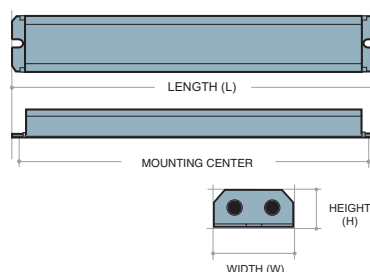


DIMENSIONS

"A" (Flex) Configuration
(L) 15.37" x (W) 2.24" x (H) 1.30"
(mounting center 15.0")

"B" (Non-Flex) Configuration
(L) 15.0" x (W) 2.2" x (H) 1.2"
(mounting center 14.64")

Radio Dimensions
(L) 2.16" x (W) 0.59"



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

- **Blue-Tooth Enabled for Wireless Reporting**
Automatically conducts required monthly and annual tests and communicates results to the Self-Testing Automated Reporting (STAR) tool in the Clairity+ app.
- **Auto-Sensing Class 2 Output**
Auto-adjusting 10-60 VDC output range accommodates a full range of Class 2 forward voltage LED designs
- **Constant Power Performance**
Constant wattage delivery maintains illumination for the full emergency runtime with no degradation
- **Listed for Field or Factory Installation**
UL Listed for both field or factory installation in United States and Canada
- **Certified for CA Title 20**
High Efficiency Performance meets CA Title 20 battery charger efficiency standards

FEATURES

- UL 924 Listed, UL Listed and Classified to FTBV
- UL 1310 Certified, Output Class 2 Compliant
- Long life high temperature recyclable Ni-Cad battery
- Galvanized steel case
- Available in Flex and non-flex mounting configurations
- Includes single-piece three-color test switch and charge indicator
- For use with switched or unswitched fixtures
- **5-Year Warranty.**
- Meets or exceeds all NEC, IBC, and Life Safety Code Emergency Lighting Requirements
- Suitable for use in Plenum, Damp Location, Recessed Type IC Luminaires
- RoHS Compliant



ORDERING GUIDE

ILB

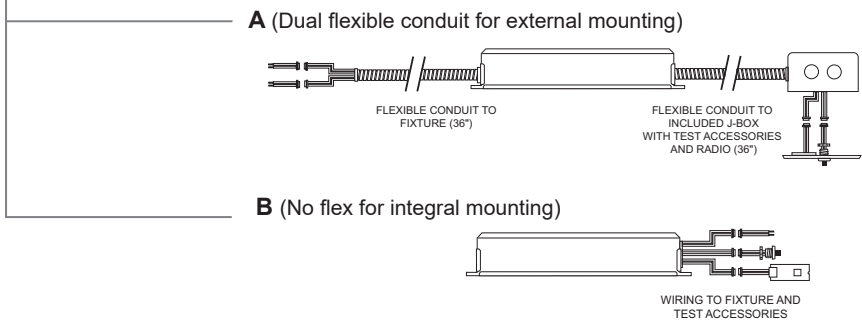
CP10

HE

AELR

QDKIT

Understanding Your IOTA Driver Model:
ILB = IOTA Emergency LED Driver
CP** = Constant Power Performance at the rated wattage
HE = High Efficiency for CA Title 20
AELR = Self-Diagnostic with wireless radio communication to Self-Testing Automated Reporting (STAR) reporting tool in Clarity+™
QDKIT = Includes specialized Blue-Tooth radio hardware and test accessory featuring a Quick-Disconnect harness



ILB CP10 HE AELR Sample Specification

Supply and install IOTA ILB CP10 HE AELR [enter mounting configuration] Constant Power Self Diagnostic 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 nickel cadmium battery rated for a 10-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 and in enclosed and gasketed 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 3.7 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 unit charger shall consist of a two-stage charging system which samples the battery state of charge and input voltage fluctuations. The charger shall be current limited and short-circuit protected. 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 input shall be designed to automatically test the emergency lighting capability for no less than 60 seconds monthly and 90 minutes annually, shall monitor battery charge and battery discharge current and load performance, and will be capable of wirelessly communicating diagnostic status to a compatible data platform. A three-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 10 to 60 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 +/- 3%. 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 AC circuit is activated, and an electronic brownout circuit which will enable a transfer to emergency operation when utility power dips below an acceptable level.

Emergency Lumen Performance - ILB CP10 HE AELR

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 **ILB CP10 HE AELR** 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.

Self-Testing Automated Reporting (STAR) Tool

Use the automated reporting tool on your mobile device to connect wirelessly to your IOTA emergency driver to view monthly and annual test data and download and send testing logs. Reporting app connects to all AELR emergency devices in the facility for easier Life Safety compliance. Access the reporting tool in the Clarity+ app launcher. Available for both iOS and Android devices.

IOTA emergency driver test results can still be diagnosed via the illuminated test switch. If a problem is encountered during the test cycle, the TCTS will flash RED. Refer to the user’s manual for complete diagnostic codes.

Remote Mounting

The emergency LED driver may be remote mounted from the fixture up to 50 feet. If used in conjunction with an AC driver, the maximum distance is up to half the distance the AC driver manufacturer recommends remote mounting the AC driver from the LED load. Use 18 gauge wire or larger to maintain output power and minimize loss. Remote mounting can result in reduced power output of the AC driver. For more information, contact IOTA Technical Services.

Warranty: 5-Year Limited Warranty
Complete warranty terms located at www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

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