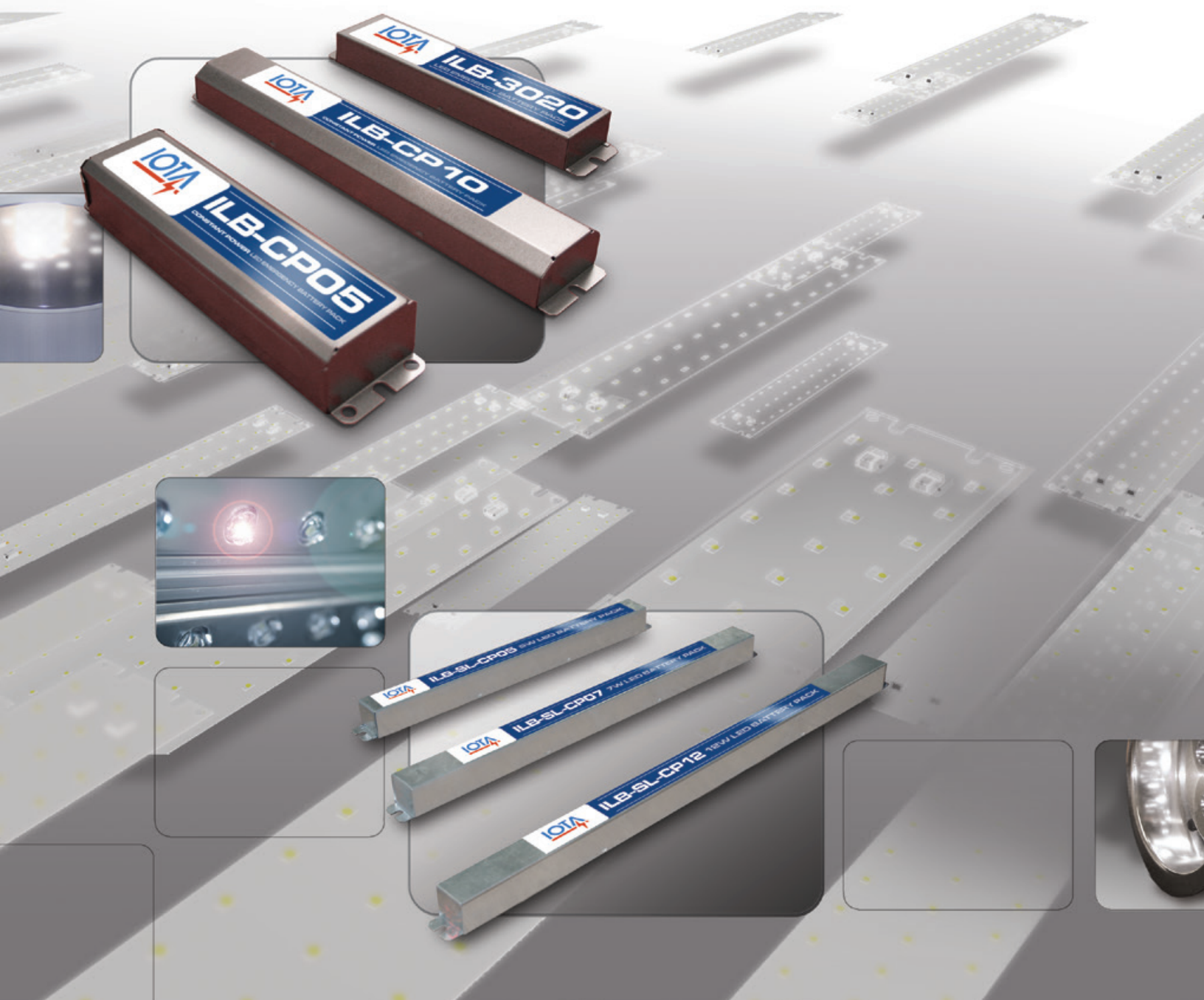




# LED EMERGENCY DRIVER SOLUTIONS



# WHAT HAPPENS WHEN THE LIGHTS GO OUT?



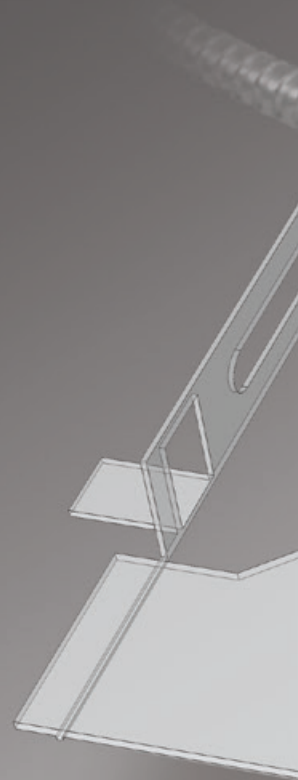
## IOTA ILB-CP SERIES

IOTA's **ILB-CP Series** Emergency Drivers bring dependable emergency lighting solutions for today's LED fixture designs. The IOTA ILB-CP Series operates in conjunction with the AC LED driver and array to provide code-required emergency illumination for both factory and field-install applications, delivering the added value of safety and compliance to a world of LED applications...

## POWERFUL SOLUTIONS FOR LED DESIGNS...



The innovative and patented design of the IOTA ILB-CP Series combines 10-60 volt Class 2 output with IOTA's unrivaled Constant Power design, providing constant emergency illumination with no degradation of light output for the full 90-minute runtime. The innovative characteristics of the ILB-CP Series allows for both UL Classified field and factory installation.







WITH



YOU'LL SEE...

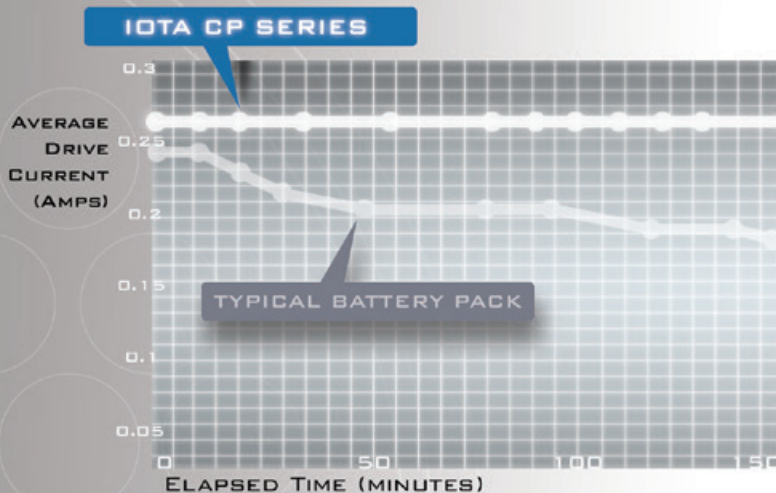
# IOTA ILB-CP SERIES

## UNRIVALED EMERGENCY SOLUTIONS FOR LEDs

### CONSTANT POWER PERFORMANCE

The Constant Power design of the IOTA **ILB-CP Series** delivers constant wattage to the LED array during emergency operation, maintaining illumination at a consistent level, with no degradation of emergency output for the full 90-minute runtime.

This unique and innovative design eliminates concerns of insufficient foot candles along the path of egress at the end of the required 90-minute duration which can be caused by the gradual depletion of the system battery and also by loss in normal operating performance over the lifespan of the LED array.



The ILB-SL-CP12  
Slim Profile LED Emergency Driver

### SLIM PROFILE DESIGNS

IOTA's **ILB-SL-CP Series** combines the advantages of constant power performance with the integral capabilities of a slim profile housing. The narrow design of the ILB-SL-CP Series allows for installation within LED strip fixtures and other luminaire types with limited compartment space.

IOTA's innovative slim profile **ILB-SL-CP12** LED emergency driver was recognized at the *Light-fair Innovation Awards* as well as selected for the *2014 IES Progress Report*.

### CLASS 2 OUTPUT COMPLIANCE WITH AUTO-SENSE FORWARD VOLTAGE

The IOTA ILB-CP Series features UL1310, Class 2 compliant output of 10-60 volts. The ILB-CP operates the LED array safely by automatically adjusting the forward voltage to accommodate any voltage fluctuations caused by temperature, age, or manufacturer component variances within the LED system. This means wider compatibility with normal LED driver designs and fewer required SKUs for your emergency solutions inventory.



### RESPONSIBLE DESIGN

IOTA ILB-CP products are designed and manufactured in compliance with adopted RoHS standards to minimize environmental impact of our electronic equipment through its complete life-cycle - from the initial production process to end-of-life recycling. The responsible design of the ILB-CP Series restricts the presence of specified chemicals and substances by utilizing quality-driven and verified components that support both our commitment to the environment and life safety product performance.





# THE FIRST LED EMERGENCY DRIVER UL CLASSIFIED for FIELD INSTALLATION

The unrivaled performance capabilities of the IOTA ILB-CP Series LED Emergency Drivers allow for consistent and predictable operation with Class 2 LED systems, and has made the ILB-CP Series the first LED emergency drivers to be UL Certified for field installation projects.

With 5-watt, 7-watt, 10-watt, and 12-watt constant power output, auto-sense 10-60 forward voltage, and a variety of mounting configurations, the ILB-CP Series brings reliable emergency lighting solutions to a wide range of new and retrofit applications.



*Features Innovative  
Patented Technology!*



## THE ILB-CP SPECIFIER'S TOOLKIT

Visit [www.iotaengineering.com/cptools](http://www.iotaengineering.com/cptools) to access our on-line resources that can assist in selecting and specifying the ILB-CP product that meets your application requirements. Our **ILB-CP Performance Calculator** will easily provide the operating current and lumen output for your LED luminaire system, and our on-line sample specifications provide simple Copy and Paste specs for use with your project documentation.

### **ILB-CP Series Compatibility and Suitability of Use**

While accessing the ILB-CP Toolkit, be sure to reference the *Compatibility and Suitability of Use* Guidelines when specifying IOTA ILB-CP LED emergency drivers for field installation.

Need further assistance? You can always give our Customer Service team a call at 1-800-866-4682.

IOTA ILB-CP LED emergency driver models provide solutions for 5, 7, 10, and 12 watt applications. Each unit is available in six different mounting configurations to accommodate your luminaire design...



## CONSTANT POWER OUTPUT

Provides constant wattage to the LED array, preventing degradation of emergency illumination for the required runtime.



## UL CLASSIFIED FOR FIELD INSTALLATION

UL 924 Listed, UL Classified to FTBV for field installation in accordance with project, as-installed code requirements.



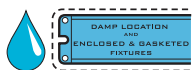
## UNIVERSAL VOLTAGE INPUT

Two wire input accepts voltages from 120 to 277 VAC, 50/60Hz.



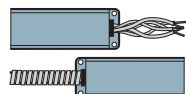
## AUTO-SENSE CLASS 2 COMPLIANT OUTPUT

10-60VDC output is UL1310 Certified Output Class 2 compliant and automatically senses the LED array forward voltage requirements. Adjustments to the forward voltage are real-time to accommodate fluctuations caused by temperature, age, or component manufacturer variances.



## DAMP LOCATION, IC RATED, AND ENCLOSED AND GASKETED FIXTURES

Suitable for Plenum, Damp Location, Recessed Type IC, and Enclosed and Gasketed Fixtures.



## MOUNTING CONFIGURATIONS

A full selection of mounting styles are available for accommodating LED fixture designs. Refer to page 11 for detailed mounting descriptions.



## ROHS COMPLIANT

Responsibly designed and manufactured for minimal environmental impact.

## ADDITIONAL FEATURES

- Includes single-piece TBTS test switch and charge indicator accessory
- Long-life high temperature recyclable Ni-Cad battery
- Galvanized steel housing
- For use with switched or unswitched fixtures
- Meets or exceeds all IBC, NEC, and Life Safety Code emergency lighting requirements
- 5-Year Warranty
- Patented. See [www.iotaengineering.com/patents](http://www.iotaengineering.com/patents) for details

# ILB-CP05

5 WATT OUTPUT



## Input Voltage

120-277VAC, 50/60Hz (Universal)

## Input Rating

2.7 Watts (max)

## Output Voltage Range

10-60VDC Class 2 Compliant

## Output Current

0.5A (@ 10VDC) - 0.08A (@ 60VDC)

## Output Power (constant)

5 Watts

## Power Factor

≥ 0.9

## Emergency Operation

90 minutes

## Operating Temp

0° to 55° C

## THD

< 20%

## Battery

Nickel-Cadmium

24 Hour Recharge

7-10 Year Life Expectancy

## Weight

(-A, -R) 3.0 lbs.

(-B, -TM) 2.5 lbs.

(-J, -RJ) 2.75 lbs.

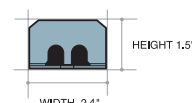
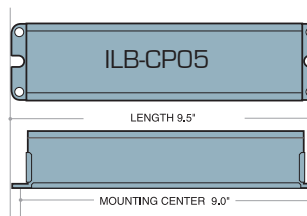
## Approval

UL Classified LED Emergency Driver for U.S. and Canada

## Dimensions

9.5" x 2.4" x 1.5"

(mounting center 9.0")



## ILB-CP07

7 WATT OUTPUT



### Input Voltage

120-277VAC, 50/60Hz (Universal)

### Input Rating

3.5 Watts (max)

### Output Voltage Range

10-60VDC Class 2 Compliant

### Output Current

0.7A (@10VDC) - 0.12A (@60VDC)

### Output Power (constant)

7 Watts

### Power Factor

≥ 0.9

### Emergency Operation

90 minutes

### Operating Temp

0° to 55° C

### THD

< 20%

### Battery

Nickel-Cadmium

24 Hour Recharge

7-10 Year Life Expectancy

### Weight

(-A, -R) 3.0 lbs.

(-B, -TM) 2.5 lbs.

(-J, -RJ) 2.75 lbs.

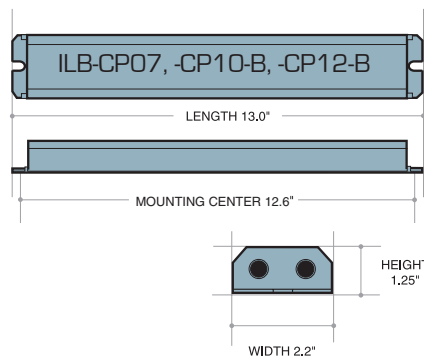
### Approval

UL Classified LED Emergency Driver  
for U.S. and Canada

### Dimensions

13.0" x 2.2" x 1.25"

(mounting center 12.6")



## ILB-CP10

10 WATT OUTPUT



### Input Voltage

120-277VAC, 50/60Hz (Universal)

### Input Rating

3.7 Watts (max)

### Output Voltage Range

10-60VDC Class 2 Compliant

### Output Current

1.0A (@10VDC) - 0.16A (@60VDC)

### Output Power (constant)

10 Watts

### Power Factor

≥ 0.9

### Emergency Operation

90 minutes

### Operating Temp

0° to 55° C

### THD

< 20%

### Battery

Nickel-Cadmium

24 Hour Recharge

7-10 Year Life Expectancy

### Weight

(-A, -R) 4.0 lbs.

(-B, -TM) 3.5 lbs.

(-J, -RJ) 3.75 lbs.

### Approval

UL Classified LED Emergency Driver  
for U.S. and Canada

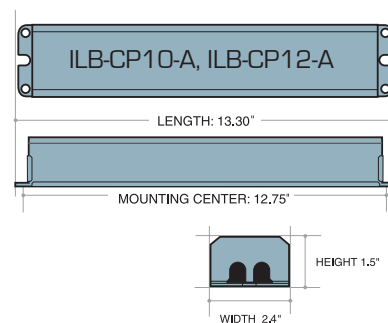
### Dimensions\*

13.3" x 2.375" x 1.5"

(mounting center 12.75")

\*ILB-CP10-B: 13.0" x 2.2" x 1.25"

(mounting center 12.8")



## ILB-CP12

12 WATT OUTPUT



### Input Voltage

120-277VAC, 50/60Hz (Universal)

### Input Rating

3.7 Watts (max)

### Output Voltage Range

10-60VDC Class 2 Compliant

### Output Current

1.2A (@10VDC) - 0.2A (@60VDC)

### Output Power (constant)

12 Watts

### Power Factor

≥ 0.9

### Emergency Operation

90 minutes

### Operating Temp

0° to 55° C

### THD

< 20%

### Battery

Nickel-Cadmium

24 Hour Recharge

7-10 Year Life Expectancy

### Weight

(-A, -R) 4.0 lbs.

(-B, -TM) 3.5 lbs.

(-J, -RJ) 3.75 lbs.

### Approval

UL Classified LED Emergency Driver  
for U.S. and Canada

### Dimensions\*

13.3" x 2.375" x 1.5"

(mounting center 12.75")

\*ILB-CP12-B: 13.0" x 2.2" x 1.25"

(mounting center 12.8")

# ILB-SL-CP SLIM LINE SERIES

IOTA Slim Line ILB-SL-CP Series provides constant power performance in a narrow profile housing for installation in LED luminaire designs with restrictive compartment space.

## ILB-SL-CP05

5 WATT OUTPUT



### CONSTANT POWER OUTPUT

Provides constant wattage to the LED array, preventing degradation of emergency illumination for the required runtime.



### UL CLASSIFIED FOR FIELD INSTALLATION

UL 924 Listed, UL Classified to FTBV for field installation in accordance with project, as-installed code requirements.



### SLIM PROFILE DESIGN

Narrow profile housing for integral installation within narrow and restrictive LED luminaire applications.



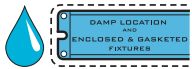
### UNIVERSAL VOLTAGE INPUT

Two wire input accepts voltages from 120 to 277 VAC, 50/60Hz.



### AUTO-SENSE CLASS 2 COMPLIANT OUTPUT

10-60VDC output is UL1310 Certified Output Class 2 compliant and automatically senses the LED array forward voltage requirements. Adjustments to the forward voltage are real-time to accommodate fluctuations caused by temperature, age, or component manufacturer variances.



### DAMP LOCATION, IC RATED, AND ENCLOSED AND GASKETED FIXTURES

Suitable for Damp Location, Recessed Type IC, and Enclosed and Gasketed, and Plenum Fixtures (TMK accessory required for plenum applications).



### ROHS COMPLIANT

Responsibly designed and manufactured for minimal environmental impact.

### Input Voltage

120-277VAC, 50/60Hz (Universal)

### Input Rating

2.7 Watts (max)

### Output Voltage Range

10-60VDC Class 2 Compliant

### Output Current

0.5A (@10VDC) - 0.08A (@60VDC)

### Output Power (constant)

5 Watts

### Power Factor

≥ 0.9

### Emergency Operation

90 minutes

### Operating Temp

0° to 55° C

### THD

< 20%

### Battery

Nickel-Cadmium

24 Hour Recharge

7-10 Year Life Expectancy

### Weight

2.4 lbs.

### Approval

UL Classified LED Emergency Driver for U.S. and Canada

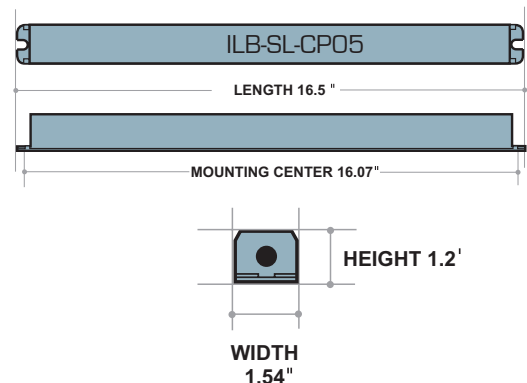
### Dimensions

16.5" x 1.54" x 1.2"

(mounting center 16.07")

## ADDITIONAL FEATURES

- Includes single-piece TBTS test switch and charge indicator accessory
- Long-life high temperature recyclable Ni-Cad battery
- Galvanized steel housing
- For use with switched or unswitched fixtures
- Meets or exceeds all IBC, NEC, and Life Safety Code emergency lighting requirements
- 5-Year Warranty
- Patented. See [www.iotaengineering.com/patents](http://www.iotaengineering.com/patents) for details





## ILB-SL-CP07

7 WATT OUTPUT



### Input Voltage

120-277VAC, 50/60Hz (Universal)

### Input Rating

3.5 Watts (max)

### Output Voltage Range

10-60VDC Class 2 Compliant

### Output Current

0.7A (@10VDC) - 0.12A (@60VDC)

### Output Power (constant)

7 Watts

### Power Factor

≥ 0.9

### Emergency Operation

90 minutes

### Operating Temp

0° to 55° C

### THD

< 20%

### Battery

Nickel-Cadmium  
24 Hour Recharge  
7-10 Year Life Expectancy

### Weight

3.0 lbs.

### Approval

UL Classified LED Emergency Driver  
for U.S. and Canada

### Dimensions

22.44" x 1.2" x 1.2"  
(mounting center 22.0")

## ILB-SL-CP10

10 WATT OUTPUT



### Input Voltage

120-277VAC, 50/60Hz (Universal)

### Input Rating

3.7 Watts (max)

### Output Voltage Range

10-60VDC Class 2 Compliant

### Output Current

1.0A (@10VDC) - 0.16A (@60VDC)

### Output Power (constant)

10 Watts

### Power Factor

≥ 0.9

### Emergency Operation

90 minutes

### Operating Temp

0° to 55° C

### THD

< 20%

### Battery

Nickel-Cadmium  
24 Hour Recharge  
7-10 Year Life Expectancy

### Weight

3.5 lbs.

### Approval

UL Classified LED Emergency Driver  
for U.S. and Canada

### Dimensions

24.17" x 1.2" x 1.2"  
(mounting center 23.78")

## ILB-SL-CP12

12 WATT OUTPUT



### Input Voltage

120-277VAC, 50/60Hz (Universal)

### Input Rating

3.7 Watts (max)

### Output Voltage Range

10-60VDC Class 2 Compliant

### Output Current

1.2A (@10VDC) - 0.2A (@60VDC)

### Output Power (constant)

12 Watts

### Power Factor

≥ 0.9

### Emergency Operation

90 minutes

### Operating Temp

0° to 55° C

### THD

< 20%

### Battery

Nickel-Cadmium  
24 Hour Recharge  
7-10 Year Life Expectancy

### Weight

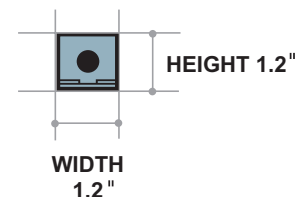
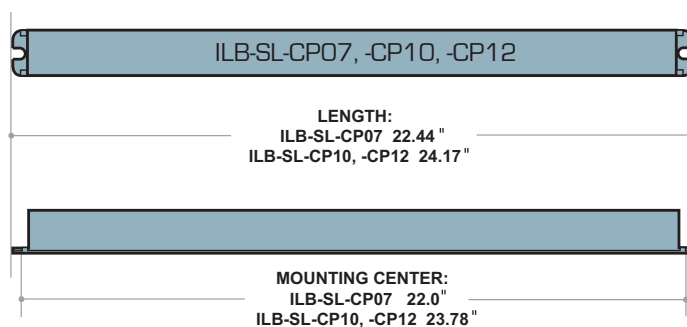
3.5 lbs.

### Approval

UL Classified LED Emergency Driver  
for U.S. and Canada

### Dimensions

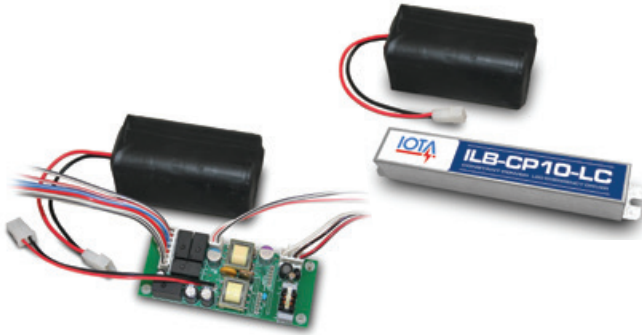
24.17" x 1.2" x 1.2"  
(mounting center 23.78")



## SPECIALTY DESIGNS

IOTA offers specialized emergency LED driver designs for two-hour FEMA, external battery, cold-weather, and constant current applications...

### ILB-CP10-L AND -LC



IOTA's ILB-CP10-L and ILB-CP10-LC provide Constant Power performance in a versatile external battery pack design. Electrical components are offered either as a circuit board assembly (-L) or enclosed in a galvanized metal housing (-LC). Both units connect easily to a 'cube' profile battery pack for providing the 10W constant power output to the LED array. The external battery configuration allows for added mounting versatility for installation in fixture designs with limited compartment space. UL Recognized Component for factory installation only.

**Input Voltage**  
(Universal) 120-277 VAC, 50/60Hz

**Input Rating**  
3.7W

**Output Voltage**  
(Class 2) 10-60 VDC

**Output Power**  
10W (Constant)

**Certification**  
UL Component Recognized  
See complete specifications at  
[www.iotaengineering.com](http://www.iotaengineering.com)

### ILB-CP07-2H

#### 2-HOUR FEMA OPERATION



The ILB-CP07-2H combines constant power performance with an extended 2-hour runtime to meet FEMA tornado safe room requirements. The non-diminishing light output of the ILB-CP07-2H is well-suited for these types of FEMA applications since it delivers a steady and consistent level of light for the full runtime while occupants remain within the designated safe area, avoiding the additional stress and safety concerns caused by diminishing light levels produced by typical *constant current* driver options. The ILB-CP07-2H is available in two mounting configurations: Dual Flex ("A") and Integral Non-flex ("B") mounting profiles.

**Input Voltage**  
(Universal) 120-277 VAC, 50/60Hz

**Input Rating**  
3.7W

**Output Voltage**  
(Class 2) 10-60 VDC

**Output Power**  
7W (Constant)

**Certification**  
UL Classified for Field and Factory Installation  
See complete specifications at  
[www.iotaengineering.com](http://www.iotaengineering.com)

### CONSTANT CURRENT AND COLD-WEATHER UNITS



IOTA's constant current emergency LED drivers provide higher wattage output and external battery mounting with optional cold-weather performance. Two units offer output voltages of 18-26VDC up to 20W (ILB-1826) or 27-30VDC up to 24W (ILB-3020). Battery profile options vary depending on model. Refer to complete specifications for detailed profile data.

#### COLD WEATHER OPTION [-CW]

Cold-Weather battery packs are designed specifically for use in cold-weather applications such as outdoor egress or other freezing environments.

#### HEATING BLANKET

The specialized heating blanket protects the battery from extreme temperatures that can render the battery inoperable. When the temperature drops, the heating blanket is activated and maintains the battery temperature within acceptable parameters.

#### TEMPERATURE CONTROL CIRCUITRY

The temperature control circuitry activates the heating blanket at low temperatures and also prevents the charging circuit from attempting to charge the battery until the battery temperature has reached acceptable levels.

**Input Voltage**  
(Dual) 120/277 VAC, 60Hz

**Input Rating**  
5.5 Watts  
CW (86 Watts w/ Cold Weather heating element on)

**Output Voltage**  
ILB-1826: 18-26VDC  
ILB-3020: 27-30VDC

**Output Power**  
ILB-1826: Up to 20W (max)  
ILB-3020: Up to 24W (max)

**Output Current**  
750 mA (constant)

**Operating Temp**  
Standard: 0° to 50° C  
Cold-Weather: -20° to 50° C

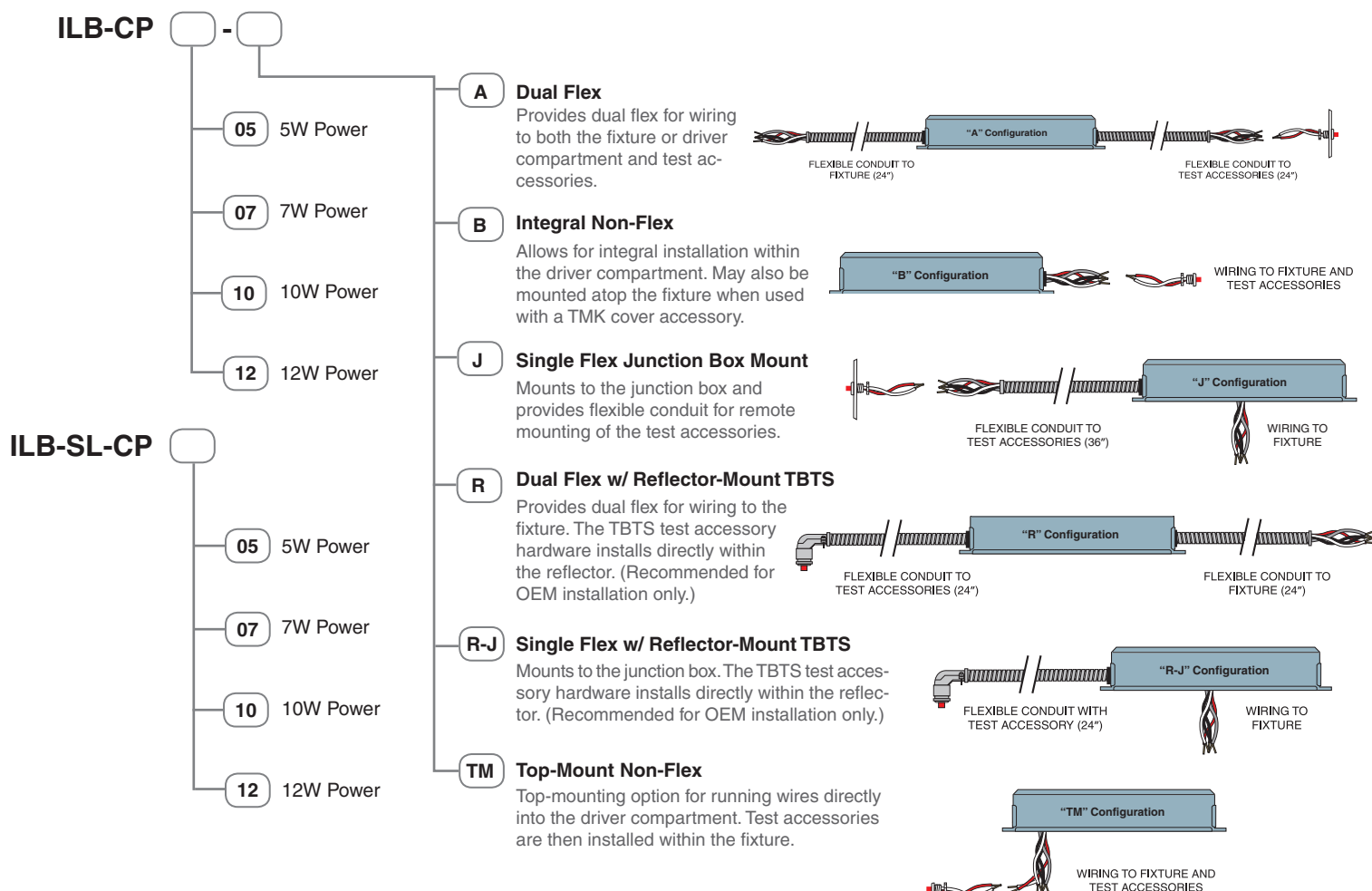
**Weight**  
4.0 lbs.

**Certification**  
UL Component Recognized

**Housing Dimensions**  
9.5" x 1.0" x 2.0"  
(mounting center 9.0")

See complete specifications at  
[www.iotaengineering.com](http://www.iotaengineering.com)

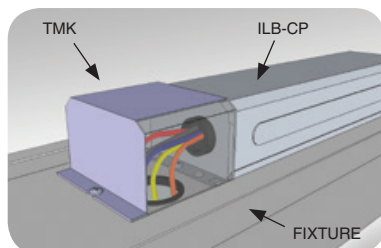
IOTA ILB-CP Emergency Drivers are available in a variety of wattage and mounting configurations to accommodate various performance requirements and fixture types. When specifying the ILB-CP unit for your project, add the desired wattage and mounting suffix to the ILB-CP model number. (Mounting configurations not required for Slim Profile ILB-SL-CP units).



## ACCESSORIES

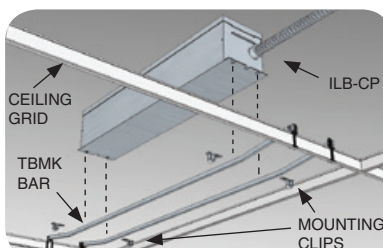
Use IOTA mounting accessories for accommodating different installation scenarios and for complying with local and federal regulations. Complete mounting accessory product details can be found at [www.iotaengineering.com/accessory.htm](http://www.iotaengineering.com/accessory.htm).

### TMK Top Mount Cover



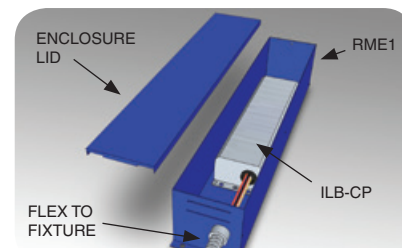
When top-mounting "B" configuration ILB-CP units, the TMK is used to cover the exposed wiring that goes from the battery pack into the fixture. For slim profile "SL" units, use the TMK-ISL for plenum rating in top mount applications.

### TBMK T-Grid Mounting Kit



Use the TBMK mounting kit to remote mount flexed units within a grid ceiling. The ILB-CP is secured to the bars of the TBMK via mounting clips. The bars then mount to the T-bars of the ceiling grid. The flexible conduit of the ILB-CP connects to the fixture.

### RME1 Remote Mounting Enclosure



The RME1 enclosures accepts "B" configuration ILB-CP units for remote mounting. The ILB-CP is secured within the enclosure and wiring is routed through the 2 ft. of flexible conduit for connecting to the fixture. Can be used in conjunction with the TBMK for grid ceiling mounting.



# IOTA Engineering is dedicated to providing products that meet the standards our customers demand as well as the superior service they deserve.

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All IOTA products receive 100% quality inspection before shipment to ensure proper and satisfactory operation. IOTA warrants all emergency drivers in the continental United States and Canada from defects in materials or workmanship under normal use for five years from date of retail purchase and will repair or replace any IOTA product found to be defective in materials or workmanship free of charge.



For additional information on IOTA's LED emergency drivers and other emergency lighting solutions, visit us at **[www.iotaengineering.com](http://www.iotaengineering.com)**. Our website features the latest up-to-date information for comparing models, specifying products, or assisting with installation. Our on-line Technical Library puts you one click away from dozens of IOTA Specification Sheets and Installation Manuals, in addition to helpful specification tools such as the **ILB-CP Performance Calculator**. Also, check out our IOTA Media Room to stay current on the latest news in product offerings and design enhancements for your emergency lighting options. Need some additional assistance? You can easily contact your Customer Service Team via e-mail by visiting our IOTA Contacts page. Bookmark IOTA at **[www.iotaengineering.com](http://www.iotaengineering.com)**!

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