



7 - 10 - 21 watts

# Self- Diagnostic Emergency LED Driver

## General Product Information:

- Automatic Self-Test technology
- Monthly and Annual testing
- Microprocessor design for CEC compliance
- Auto adjusting Class 2 output
- Maintenance free Nickel Metal Hydride battery
- USGBS/Green Building Council Certified
- CEC Title 20
- Constant Current for variable illumination

## Input Specifications:

- Input Voltage: 120 - 277
- Freq. Range: 50 - 60 Hz
- Input Power: Max. 85mA; 3.9W

## Output Specifications:

- Output Voltage: 16 - 48VDC
- Output Current: 875mA to 145mA, Programable
- Max. Wattage: 7 to 21 Watts



## Environmental Specifications:

- Ambient Operating Temp. 0 to 50 C
- Safety Approval: UL/cUL Listed
- EMI Compliance: FCC Part 15, Class A

| Model No.     | Emergency Power | Output Range Vdc | Factory Default Output mA | Max. Output W | SW1 | SW2 | SW3 | SW4 |
|---------------|-----------------|------------------|---------------------------|---------------|-----|-----|-----|-----|
| iES-H007L-HMx | 7.0W            | 16.0             | 440                       | 7             | On  | Off | Off | Off |
|               |                 | 24.0             | 290                       | 7             | Off | On  | Off | Off |
|               |                 | 36.0             | 195                       | 7             | Off | Off | On  | Off |
| iES-H007L-LMx |                 | 48.0             | 145                       | 7             | Off | Off | Off | On  |

| Model No.     | Emergency Power | Output Range Vdc | Factory Default Output mA | Max. Output W | SW1 | SW2 | SW3 | SW4 |
|---------------|-----------------|------------------|---------------------------|---------------|-----|-----|-----|-----|
| iES-H010L-HMx | 10.5W           | 16.0             | 625                       | 10.5          | On  | Off | Off | Off |
|               |                 | 24.0             | 425                       | 10.5          | Off | On  | Off | Off |
|               |                 | 36.0             | 280                       | 10.5          | Off | Off | On  | Off |
| iES-H010L-LMx |                 | 48.0             | 210                       | 10.5          | Off | Off | Off | On  |

| Model No.     | Emergency Power | Output Range Vdc | Factory Default Output mA | Max. Output W | SW1 | SW2 | SW3 | SW4 |
|---------------|-----------------|------------------|---------------------------|---------------|-----|-----|-----|-----|
| iES-H021L-HMx | 21.0W           | 24.0             | 875                       | 21            | On  | Off | Off | Off |
|               |                 | 36.0             | 580                       | 21            | Off | On  | Off | Off |
|               |                 | 42.0             | 500                       | 21            | Off | Off | On  | Off |
|               |                 | 48.0             | 435                       | 21            | Off | Off | Off | On  |

## Code Compliance

- UI924 Listed for U.S. and Canada
- CS860
- Title 24 Compliant
- Title 20 Certified
- UL Listed for Damp Locations
- Warranty Five-years.



California Energy Commission



UL Listed  
IP 67 Rated



NiMH  
Nickel Metal Hydride



NFPA Approved  
Life Safety Code Experts



American Green Council  
Certified

# Self- Diagnostic Emergency LED Driver

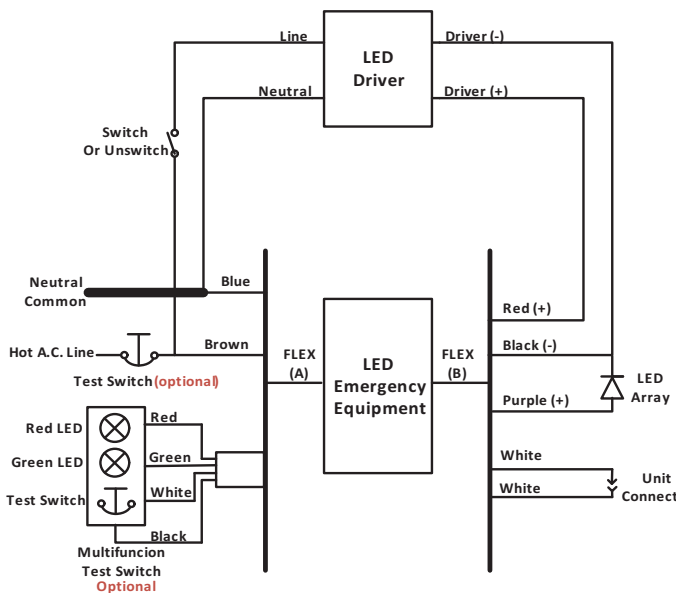
## Auto Testing - Self Diagnostic Operation

This unit automatically performs a 90-second discharge test every month, and a full 90-minute discharge test once a year. During routine testing, the self-testing emergency driver simulates an AC power failure causing the unit to automatically switch to emergency mode. The unit will monitor the operation of the lighting fixture, internal battery voltage, discharging current, and emergency duration. If the emergency system functions properly, then the unit will return to normal mode. Should the unit detect any problems, the indicator light will flash continually until the condition has been corrected and the unit passes the next test (see LED indicator guide).

- If the condition has not been corrected by the next scheduled test, the unit will once again detect the failure and signal the failure indicator.
- To cancel a test, press and hold the Multifunction Button ONCE for less than 1 seconds.
- To perform manual self-test push and hold Multifunction button for minimum of 3 seconds. Once button is released emergency driver will perform the 90 second diagnostic test. After Self-testing is completed, the indicator light will flash per testing results (see LED indicator guide).
- You can configure the Auto Testing in to Wireless Network version by flip the deep switch and adding antenna at any time. The unit will join the network to perform remote testing and reporting functions.

**NOTE:** For short-term testing of the emergency function, the battery must be charged for at least one hour. The emergency driver must be charged for at least 24 hours before conducting a long-term test.

## Field Installation Wiring Diagram



## LED Indicator Guide

| STATUS INDICATORS             |                               | PROBLEM           | CORRECTIVE ACTION                                                                                                                                  |
|-------------------------------|-------------------------------|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Green Light                   | Red Light                     |                   |                                                                                                                                                    |
| ON steady                     | OFF                           | NONE              | None, Unit is fully charged and working correctly.                                                                                                 |
| Flashing Slow (2s interval)   | OFF                           | NONE              | None, Unit is in Charging mode.                                                                                                                    |
| OFF                           | ON steady                     | NONE              | None, AC is lost and Unit is in Emergency Discharging mode.                                                                                        |
| OFF                           | Flashing Slow (2s interval)   | NONE              | None, Unit is in Self-testing mode                                                                                                                 |
| Flashing Fast (0.5s interval) | OFF                           | NONE              | Press test button to clear message. Unit is passed Self-testing.                                                                                   |
| OFF                           | Flashing Fast (0.5s interval) | Self-testing Fail | 1. Check the wiring;<br>2. Allow unit to charge for 24 hours. Perform manual test. If failure mode continues, emergency driver should be replaced; |
| OFF                           | OFF                           | Battery Failure   | 1. Check the battery Connector<br>2. If battery connection is good, battery or emergency driver should be replaced                                 |