

EM-EMS

Split Emergency Driver



Applications: Canopy, indoor and Outdoor linear, Wallpack

PERFORMANCE SUMMARY

The EM-EMS series emergency LED driver is for field and factory installation. It's small size and split battery allows integral installation in most Sunled 0-10V dimmable fixtures for both normal and emergency operation.

This unit contains a battery charger and inverter that operates a load of 8W or 18W with constant power at a rated output voltage of 170VDC. The patented constant power circuitry of the module maintains uninterrupted illumination levels during power failure

Features

- Constant power output in emergency mode
- Split two piece design with smaller dimensions for integral enclosures
- Self-sensing output voltage circuitry maximises product compatibility
- High temperature recyclable lithium battery technology enables significantly decreased enclosure size and longer operational life
- Quick connect junction box on driver side reduces installation time

Self Diagnostic

The integrated self-diagnostic circuitry will automatically conduct 1 monthly 30 second and annual 90 minute tests to verify proper emergency capability per life safety code requirements NFPA 101 Life Safety Code outlines the following schedule:

Monthly

During AC mode, the system conducts a 30s self discharge test of the emergency LED driver every 30 days and automatically restores to normal charging after full discharge

Annually

During AC mode, the system conducts a 90 minute self discharge test of the emergency led driver every 365 days and automatically restores to normal charging after 30 seconds discharge

Operation

Normal Supply

During normal AC supply conditions the LED driver load will operate as usual and emergency driver remains in charging mode

Emergency Mode

When AC power fails the driver automatically switches to emergency mode, keeping the LED load illuminated at a reduced lumen output for a minimum of 90 minutes. During this time, the indicator will flash slowly (light on for 2 seconds, off for 2 seconds). When AC power is restored, it will return to charging mode and the indicator light remains on

Specification

Input Voltage: 120-347VAC 50/60Hz
 Input Power: 7W Max
 Output Voltage: 170VDC
 Input Current: 100mA
 Output Power: 8,18W Power Factor: 0.85
 EMI Radiated/Conducted: FCC Class A Charge and EM Modes
 Surge Protection: Line-Neutral 3kV
 Emergency Operation: 90 minutes
 Charge Time: 24hr Recharge
 Ambient Temperature: Lithium 5°C to +50°C (41°F to 122°F)
 Approval: cUL Listed for Factory and Field Installation



ORDERING CODE

EM-EMS cat. 18 WW

EM-EMS Emergency Series

EM-EMS Integrated Emergency Driver

18 Output

8 8W/170VDC
Up to 100W Driver
18 18W/170VDC
Up to 200W Driver

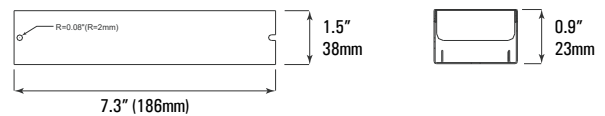
WW Test Switch

WW Wired
WL 2.4GHz Remote

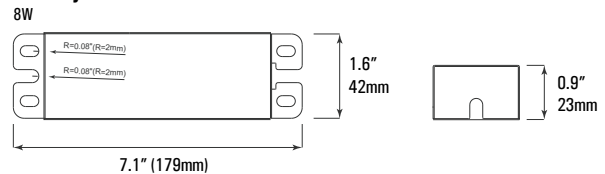
DIMENSIONS

Weight: (May vary with accessories)
1.3lbs (0.6kg)

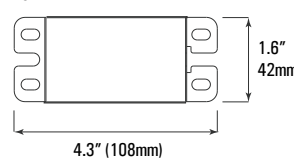
Driver



Battery



18W



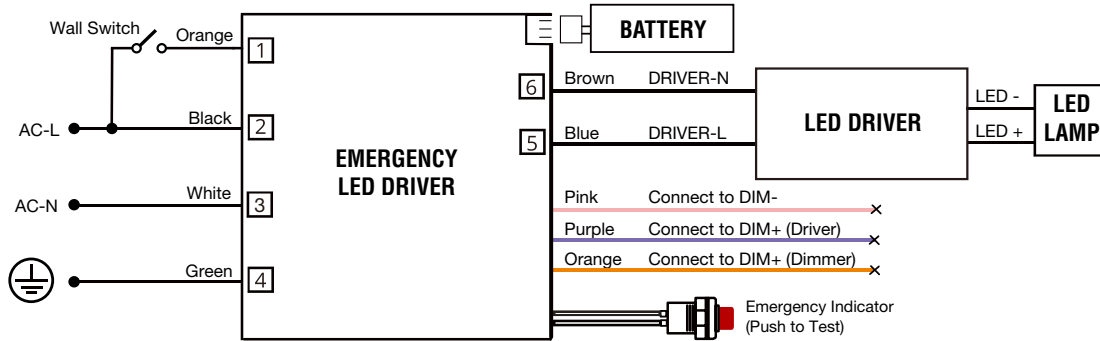
EM-EMS

Split Emergency Driver

WIRING DIAGRAM

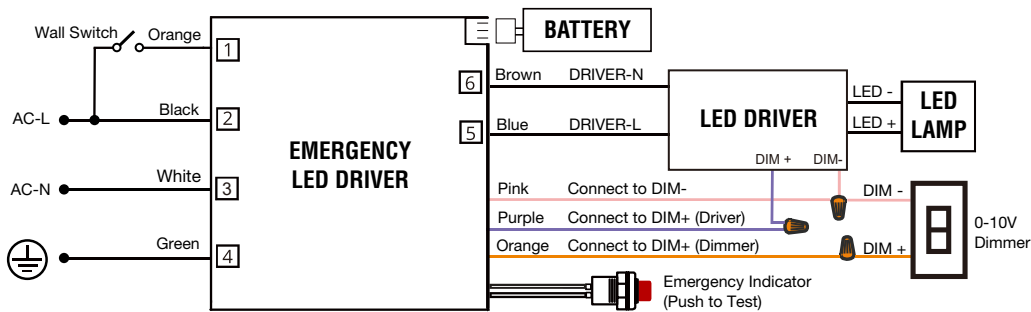
LED Fixture < Emergency Driver

Model No	Input Voltage	Input Power	Input Current	Output Voltage	Output Power	Application
EM-EMS-8W	100-347VAC	7W Max	< 100mA	170VDC	8W	< 8W Fixture With No Dimming
EM-EMS-18W	100-347VAC	7W Max	< 100mA	170VDC	18W	< 18W Fixture With No Dimming



LED Fixture > Emergency Driver

Model No	Input Voltage	Input Power	Input Current	Output Voltage	Output Power	Application
EM-EMS-8W	100-347VAC	7W Max	< 100mA	170VDC	8W	< 100W Fixture With No Dimming
EM-EMS-18W	100-347VAC	7W Max	< 100mA	170VDC	18W	< 200W Fixture With No Dimming



CAUTION

The LED fixture must be connected to 0-10V driver when the fixture power is more than the emergency backup unit power. Refer diagram above to avoid early failure not covered under warranty

INDICATOR OPERATION

Mode	Test Switch	Wireless Remote	Indicator Status	Solution
AC Mode 1	Not Pressed	Not Pressed	On Not Flashing	Driver Charging
AC Mode 2	Pressed Once	Pressed Button A Once	2s On 2s Off	30s Short Term Test
AC Mode 3	Pressed 2x In 2s Sequence	Pressed Button B Once	2s On 2s Off	Long Term Test To Discharge
Emergency Mode 1	Not Pressed	Not Pressed	2s On 2s Off	Emergency Mode To Discharge
Emergency Mode 2	Pressed Once	Pressed Button A Once	Off	Driver Is Off
Problem	When indicator flashes 0.2s on and 0.2s off or turns off the emergency backup is damaged and should be replaced			

