



EMQ SERIES



FEATURES

- UL Listed for US and CANADA
- Listed to UL924 and tested to CSA C22.2 NO.141 Field or factory installation
- Low energy consumption CEC Title20 compliance
- High output voltage
- Constant output power
- Self-testing
- Battery: Over Charge Protection
Over Discharge Protection
- Malfunction indicate function
- For wiring to the led driver's DC output

SPECIFICATIONS

- Input Voltage: 100~347Vac, 50/60Hz
- Input Current: 100mA max.
- Recharge Power: 7W max.
- Output Voltage: 25V~58Vdc/50V~300Vdc
- Emergency Power: 4W/8W/15W
- Recharge Time: 24Hrs
- Discharge Time: 1.5H
- Warranty: 5 Years
- Battery: LiFePO4
- Ambient Temp: 32~140°F (0~60°C)
- Weight: 1.54 lbs (0.7kg) max.
- Surge Protection: Live-Neutral 3KV

SPECIFICATION CHART

Models		Emergency Power	Battery Type	Output Voltage
EMQ-04058DO-HY	EMQ-04300DO-HY	4 Watts (Constant)	LiFePO4	25V~58Vdc or 50V~300Vdc
EMQ-08058DO-HY	EMQ-08300DO-HY	8 Watts (Constant)		
EMQ-15058DO-HY	EMQ-15300DO-HY	15 Watts (Constant)		

SELF-TESTING

The integrated Self- Diagnostic circuitry will automatically conduct 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 (30)seconds self-discharge test of the emergency led driver every 30 days. And automatically restore to normal charging after (30)seconds dis-charged.
- **Annually**- During AC mode, the system conducts a (90)minutes self-discharge test of the emergency led driver every 365 days. And automatically restore to normal charging after fully dis-charged.





INSTALLATION MANUAL

READ AND FOLLOW ALL SAFETY INSTRUCTION

1. **CAUTION-** This emergency driver provides more than one power supply output source. To reduce the risk of electrical shock, disconnect both normal and emergency source by turning off the A.C. branch circuit and by disconnecting the battery on/off connector.
2. **CAUTION-** Servicing of this equipment should be performed by qualified personnel only.
3. **CAUTION-** Do not attempt to service the battery. A sealed, no-maintenance battery is used that is not field replaceable. Replace the entire unit when necessary.
4. **CAUTION-** The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition, void warranty, and result in non-compliance with UL specifications.
5. **CAUTION-** Connect the emergency driver battery pack to the unit before applying A.C. Power.
6. **CAUTION-** The emergency driver requires an un-switched AC power source of **100-347VAC**, 50/60Hz . **Verify the correspondent electrical rating at the LED fixture before servicing.** Both of the electrical rating will supply power under an output voltage of 25-58VDC or 50-300VDC in emergency mode for at least 90 minutes.
7. **CAUTION-** Battery pack should be charged for 24 hours every 6 months during storage.
8. **CAUTION-** Press test switch again to turn off emergency before shipping.
9. Battery in this unit may not be fully charged. After electricity is connected to the unit for at least 24 hours, then normal operation of this unit should take effect.
10. For use in 0°C minimum, 60°C maximum ambient temperatures. Suitable for use in damp locations and plenum spaces.
11. Flexible metal conduit is optional, depend on installation environment.
12. The emergency driver should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
13. For led fixture power higher than or equal to rating of the emergency driver emergency battery pack.
14. Do not use this equipment for anything other than its intended use. Equipment only use for LED Lighting emergency backup.
15. Do not mount near gas or electric heaters. Do not let power supply cords touch hot surfaces.
16. Do not make or leave any other open holes in the wiring enclosure or electrical component enclosure during installation.
17. This fixture is for use with grounded, UL Listed, damp location rated, indoor fixture. Not for use in heated air outlets or hazardous locations.
18. Do not use outdoor.

LUMEN OUTPUT DURING EMERGENCY OPERATION

The luminaire rated data and maximum mounting height can be found as follows:

1. Determine the fixture efficacy under normal AC operation, based on fixture manufacturer published data in lumens per watt(LM/W).
2. Reference DLC QPL (www.designlights.org) and Energy Star QPL (www.energystar.gov) for rated data on fixture efficacy. If fixture is not found on DLC or Energy Star Qualified Product List, contact fixture manufacturer.
3. Multiply *fixture LM/W by rated output power of emergency pack* Example 'model EMQ-08300DO-HY' is $8 W \times 100 LM/W = 800 Lumens$



CAUTION: before installation, make certain the A.C. power is off.

STEP1: INSTALLING THE EMERGENCY LED DRIVER

- > Turn off the AC power before installing.
- > Test switch and indicator light shall be installed where can be seen depending on the application.
- > Determine appropriate location for emergency driver in the fixture or using existing mounting holes in the fixture. The installation instruction of LED luminaire may provide guidance on mounting location.

STEP2: WIRING THE EMERGENCY DRIVER

- > The emergency driver and A.C. driver must be on the same branch circuit.
- > Select the appropriate wiring diagram to connect the emergency driver to the AC driver. For other diagrams, consult the manufacturer.
- > Using wire nuts to cover unused wires and make sure all connections are in accordance with the NEC and any local regulations.

STEP3: TESTING

- > After wiring is complete, check if the indicator light lights or not , which will indicate the battery's charging situation.
- > **The battery in this unit may not be fully charged.** A short-term discharge test may be conducted after the emergency driver has been charging for 1 hour. Charge for 24 hours before conducting a long-term discharge test.

SAVE THESE INSTRUCTIONS



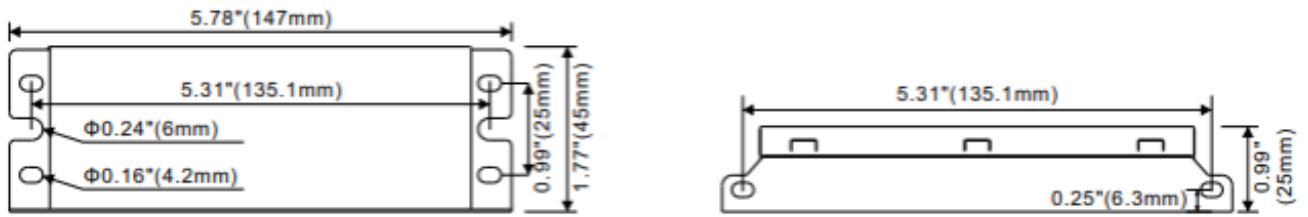
THIS PRODUCT CONTAINS A RECHARGEABLE LITHIUM BATTERY. THE BATTERY MUST BE RECYCLED OR DISPOSED OF PROPERLY TO PREVENT FIRE.





DIMENSIONS

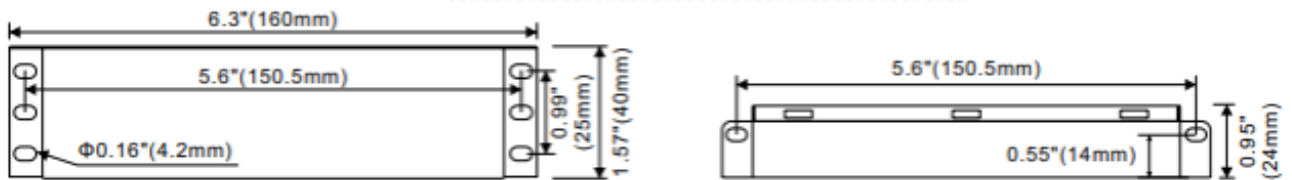
DRIVER: L 5.78"(147mm)-W 1.77"(45mm)-H 0.99"(25mm)



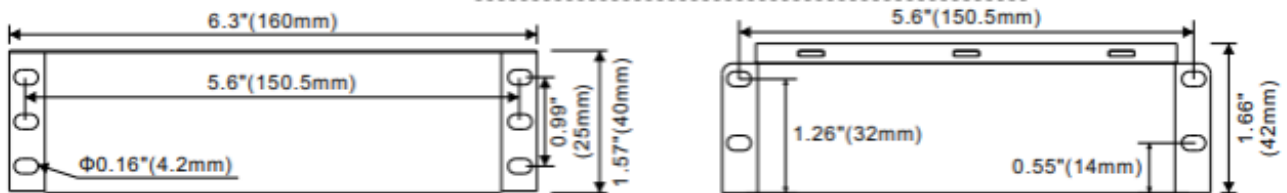
BATTERY: 4W 6.4V/1600mAh(2S1P) L 3.7"(94mm)-W 1.57"(40mm)-H 0.95"(24mm)



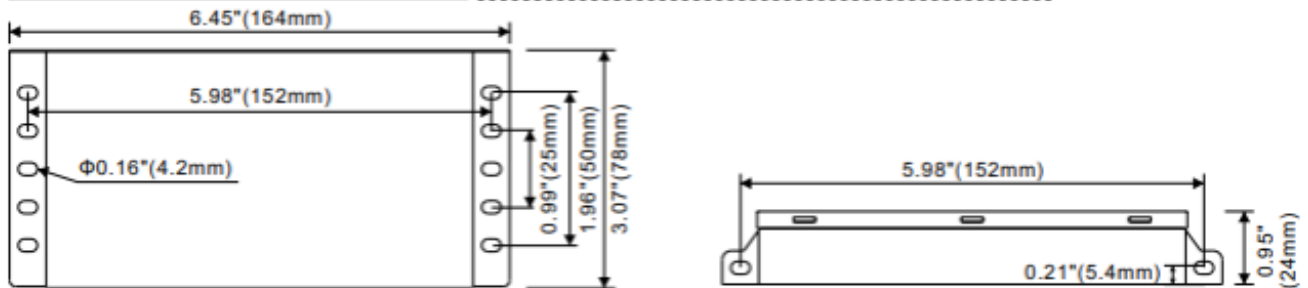
BATTERY: 8W 6.4V/3200mAh(2S2P) L 6.3"(160mm)-W 1.57"(40mm)-H 0.95"(24mm)



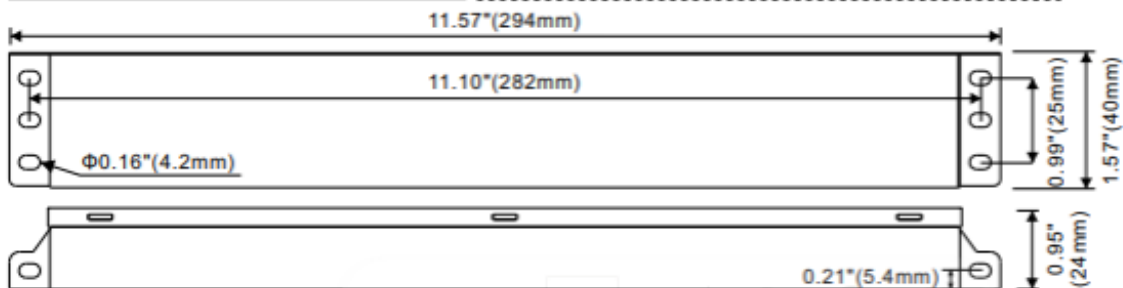
BATTERY: 15W 12.8V/3200mAh(4S2P) A: L 6.3"(160mm)-W 1.57"(40mm)-H 1.66"(42mm)



BATTERY: 15W 12.8V/3200mAh(4S2P) B: L 6.45"(164mm)-W 3.07"(78mm)-H 0.95"(24mm)



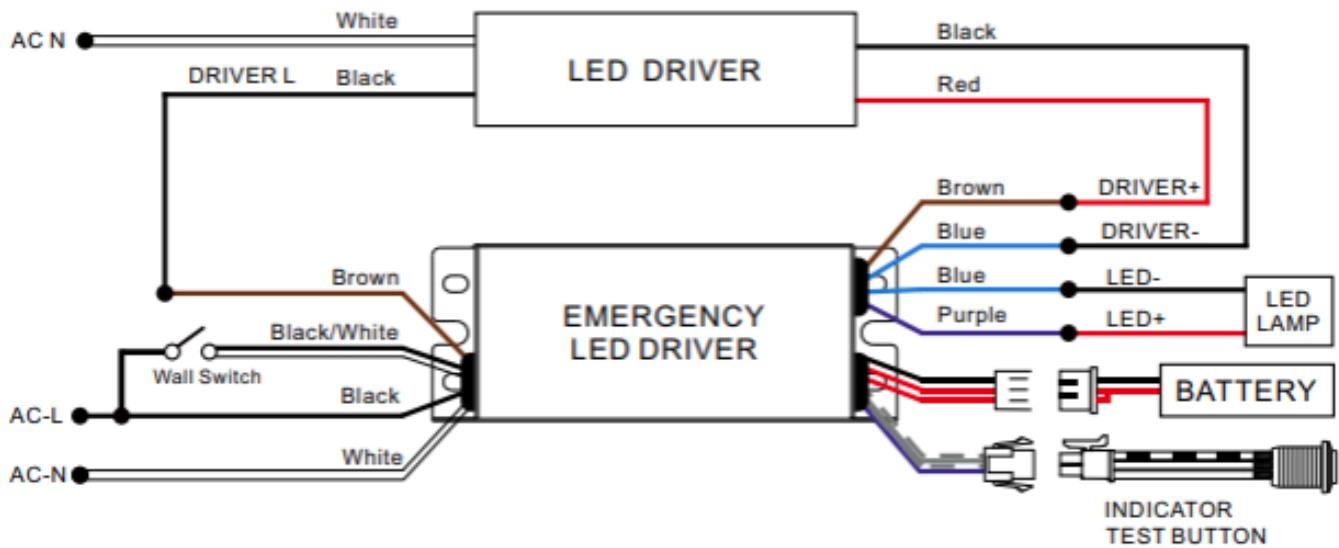
BATTERY: 15W 12.8V/3200mAh(4S2P) C: L 11.57"(294mm)-W 1.57"(40mm)-H 0.95"(24mm)



WIRING DIAGRAM

25V~58Vdc: FOR LED LUMINAIRE < 150W AND < 3A LED DRIVER CURRENT.

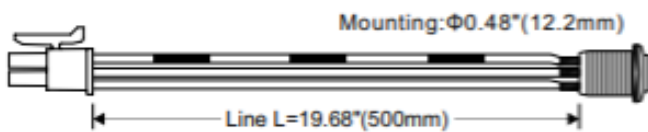
50V~300Vdc: FOR LED LUMINAIRE < 200W AND < 2A LED DRIVER CURRENT.



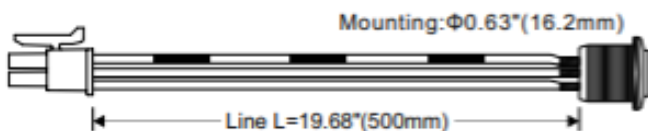
ACCESSORIES

Indicator light & Test Button

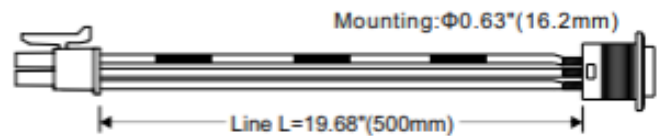
A: Metal integrated



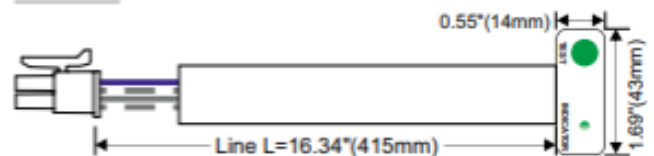
B: Metal integrated



C: Plastic integrated




D: FPC



OPERATION (INDICATOR STATUS)

Mode	Test Button Operation	Indicator Status	Comment & Solutions
AC MODE (1)	NO press	Permanent green	Emergency LED driver is charging
AC MODE (2)	press once	Fast flashing green (0.1s on, 0.1s off)	Emergency LED driver is conducting a 30s short-term emergency test. After 30 seconds, it will automatically restore to normal charging mode
AC MODE (3)	press twice (2s) in sequence	Slow flashing green (1s on, 1s off)	Emergency LED driver is conducting a long-term emergency test until battery is fully discharged
EMERGENCY MODE	NO Press	Slow flashing green (2s on, 2s off)	Emergency LED driver is conducting a long-term emergency test until battery is no power
AC MODE (4)	/	Slow flashing red (0.1s on, 0.1s off)	Battery over charge fault
AC MODE (5)	/	Slow flashing red (1s on, 1s off)	No battery

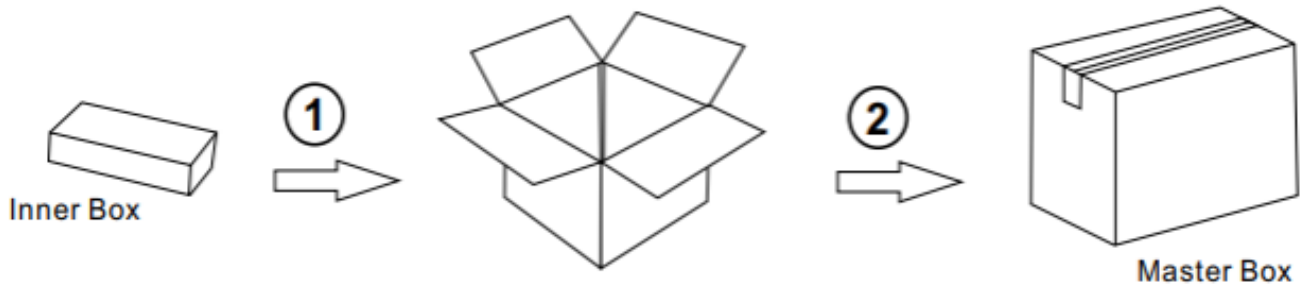
WARNING
Risk of Electric Shock 

Note: Please press once test button to make certain the battery is turned off, before installation, maintenance, storage or shipping.





PACKAGING



PACKAGE INFORMATION

Power	Length	Width	Height	G.W(kg)	N.W(kg)	QTY(pcs)
8W	16.62*(422mm)	8.78*(223mm)	7.29*(185mm)			20
15W	17.52*(445mm)	11.62*(295mm)	7.29*(185mm)			20





PRODUCT WARNINGS

- ⚡ Please turn off power before install or change assembly parts.
- ⚡ The input voltage and lamps should be matched, after connecting the power line.
- ⚡ Please make sure the wiring section is insulated.
- ⚡ Professionals must install and disassemble the lamps.
- ⚡ Surge is the number 1 cause of LED light failure. Outdoor lights must have surge at fixture, pole, and breaker.
- ⚡ Surge is the number 1 cause of LED light failure. Indoor lights must have surge at fixture and breaker.

PRODUCT TROUBLESHOOTING

Issue	Check points
Light Flickers	Check all wiring for disconnections, shorts and burnt wiring and connections. Confirm steady input voltage to the light fixture, fluctuating input voltage will harm the LED driver and can lead to premature failure. Lights with photocells can have photocell tag from ambient light or light reflecting at the sensor. Simply cover the photocell completely and see if flickering continues while the photocell is covered. Call Tech Support for help if none of the above solves the issue.
Light does not work at all.	Check all wiring for disconnections, shorts and burnt wiring and connections. Confirm steady input voltage to the light fixture, fluctuating input voltage will harm the LED driver and can lead to premature failure. If input voltage is not in the voltage range of the fixture, you will need to find the source of your input voltage issue. Call Tech Support for help if none of the above solves the issue.

For more technical information, install questions, troubleshooting help or warranty claims, we have a dedicated US Tech and Customer Support Team to help solve any issues you have and can be reached by email or phone. If you need help with any of our products, we are here for you so that you are never in the dark!

BETTER LIGHTS. BETTER SUPPORT.





CERTIFIED



LISTED



LEGENDARY RUGGEDGRADE QUALITY



**US based
phone and online
customer support**



**5 YEARS
WARRANTY**