SUNNY
LIGHT FOR LIFE

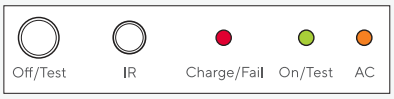
Self-Contained Emergency Lighting - MESG Series

Model : MESG209CD3

Technical Specifications

Mode of Operation	Non-Maintained
Operating Temperature	10 to 50°C
Input Voltage	220-240 VAC / 50Hz
LED Lamp Power	9W / Bulb
Color Temperature	Warm White (3000K ± 250K) Daylight (6000K ± 250K)
Luminous Intensity	833.5 lm, Warm White 726 lm, Daylight
Rated Beam Angle	45° ± 5°
Battery Type / Capacity	Lithium Iron Phosphate (LiFePO4) 3.2V-6000mAh
Protection Features	- AC, DC Fuse - Battery Low Voltage Cut-Off - Surge Protection
Testing Systems	- Auto Check - Auto Test - Manual Test or Remote Test
Charging Method	3 Steps Charger System
Charging Period	10-15 Hrs
Backup Time	3.0 Hrs
Housing	Electro-galvanized steel sheet 1mm. thick with epoxy powder coating
Dimensions (L x W x H)	165 x 64 x 180 mm
Weight	1.37 Kg
Degree of Protection	IP20
Mounting	Wall Surface
Accessory	Infrared Remote Test (RT-S3)
Standards / Compliance	- TIS.902 Part2(22)-2560 - TIS.1955-2551 - ISO9001 - CE

Indicators



- Switch **Off/Test** ▸ Press to turn off the lamp and the system of the unit (while the power is off or the unit is not plugged in) / Press to test the device's availability (during normal circumstance and the unit is plugged in)
- **IR** ▸ Infrared signal receiver
- LED **Charge/Fail** ▸ Indicates that the unit's battery is charging or is a problem with the battery
- LED **On/Test** ▸ Indicates that the unit is receiving a power / Indicates that the unit is set to perform automatic self-tests / Indicates if the unit is performing a self-test
- LED **AC** ▸ Indicates that the unit is receiving a power supply

Product Overview

The emergency light comes with an Auto Check system that continuously monitors the performance of the device and automatically alerts any abnormalities in key components such as the battery, bulbs, fuses, lighting circuits, and battery charging system. It provides notifications when the device is not ready for use, ensuring confidence in its operation. In the event of a sudden power outage caused by electrical disturbances, it utilizes a lightweight Lithium Iron Phosphate (LiFePO4) battery that offers long service life, high energy output, and minimal environmental impact. The battery charging system incorporates a new innovation called the 3 Steps Charger System (patent number 15955), surpassing other charging systems, to ensure complete protection during the battery charging process. The housing is made of 1mm thick Electro-Galvanized steel sheet, coated with two-tone modern and aesthetically pleasing colors. It has a compact and sleek design, and coated with Epoxy powder and Stove Enamel system to provide excellent protection against metal corrosion.

Features

Bulb

- Highly efficient and super bright 9 Watts LEDs provides maximum brightness while saving on power consumption. It also offers long operational life of more than 50,000 hours

Battery

- Use Lithium Iron Phosphate (LiFePO4) 3.2V-6000mAh, backup power for 3 hours. It has the advantages of light weight, long service life and high power. It also causes less pollution

Functions

- Auto Check for key components abnormalities such as the battery, bulbs, fuses, lighting circuits, and battery charging system (patent number 21778)
- Auto Test schedule: 1 month every 60 seconds, 1 year every 120 minutes (according to standard TIS.021004-22), activate and deactivate functions with a remote control
- The operation can be tested manually (Manual Test)
- A 5-second, 30-minute or 60-minute self-test can be performed on the unit using the remote

Circuit Systems

- Controlled by an 8-bit microcontroller circuit
- A Timer Delay circuit to keep the unit operating for a few more seconds once normal power has returned

Protection Features

- AC and DC fuse to prevent current overload
- Surge Protection
- IP20 dust and water resistant

Features to Extend Battery Life

- An innovative 3 Steps Charger System
- A Low Voltage Cut-Off to prevent the battery from draining completely
- Continuous monitoring and checking system for the battery charging status
- Battery voltage change rate monitoring system with respect to time (dv/dt)

Warning Systems

- Alert for device not ready for use
- Alert for AC input not connected to the device and notification for rectifier circuit malfunction
- An LED will blink 3 times every 15 seconds to indicate that the system performs an automatic battery test (Auto Test) and detects that the backup lighting emergency duration is less than 120 minutes (Battery Fail)
- An LED will blink 4 times every 15 seconds to indicate that there is a problem charging the battery (Charging Fail)
- An LED will blink 5 times every 15 seconds to indicate that an abnormality in the lighting system (Lighting Fail)

Dimensions (mm)