Project	SDE13B	Catalog #		Type	SDE13B
Prepared by		Notes		Date	2026.02.07

Features

- New Compact Case
- Constant power output 8W, suit for 8W to 200W lamp
- Field or Factory Installation (Indoor and Damp)
- 8W with Built-in Lithium-ion battery.
- For use on a wide range of LED fittings to convert them from standard to emergency fitting.
- Battery protections:over charge protection,over discharge protection, short circuit protection
- Self testing monthly/yearly
- Accessory test switch and charge indicator with Plenum Rated Cable
- Meet NEC, IBC, and NFPA 101 Life Safety Code
- UL Listed for US and Canada, Listed to UL924 and tested to CSA 22.2 No. 141
- UL Listed for dry locations.
- IP20 protection.
- RoHS Compliant

CONSTANT POWER EMERGENCY OUTPUT

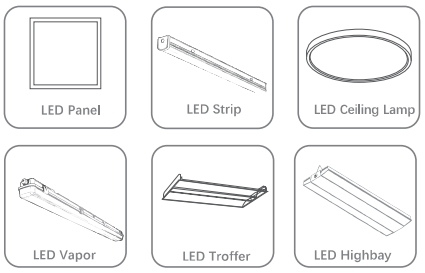
Self Test

Benefits

- Reduce SKU, the output voltage range is wide 20–300Vdc, making it compatible with the forward voltage of most lighting boards.
- Test switch with plenum rated cable
- Manually deactivate emergency operation for shipping or storing product via test switch

Applications

Widely used for indoor LED lighting products



c UL us LISTED E542150

FC

BC

RoHS COMPLIANT

0°C to 50°C operating temperature

Short-circuit protection

Overload protection

Over temperature protection

Specification

Model No.:	SDE013B-080A90L-A	SDE013B-160A90L-A
Rated supply voltage	120-277Vac	120-277Vac
Output Voltage	20-300Vdc	20-300Vdc
Output Power	8W	16W
Battery Pack	7.2V 3.0Ah Li-ion	14.4V 3.0Ah Li-ion
Test Mode	Manual test and Self test	Manual test and Self test
Rated duration	>90min	>90min
Lifetime	up to 50,000H	up to 50,000H

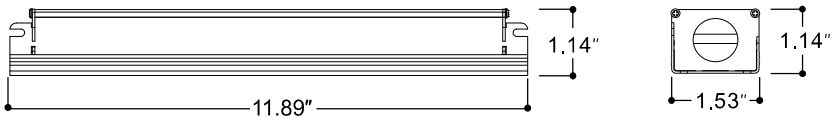
5625 Arville St. Suite A Las Vegas NV, 89129 | Tel 702-364-9998 | csupport@magtechind.com | www.magtechind.com

Parameter

Input voltage	120-277Vac, 50/60Hz
Input Current	100mA Max
Input power	6W Max
Power factor	8W: 0.8@120Vac, 0.3@277Vac, 16W: 0.9@120Vac, 0.5@277Vac
Output Voltage	Adaptive 20-300VDC
Output Power	8W, 16W, constant power
Battery Type	High-Temperature, Maintenance-Free Lithium Ion Battery; 8W: 7.2V/3000mAH 16W: 14.4V/3000mAH
Recharge current	0-240mA
Recharge time	⩾24 Hours
Emergency Time	⩾90 minutes
Luminaire Power	8W-200W: LED luminaries
Abnormal Protection	Over-load, Over-voltage, over-current, over-tem premature, short-circuit, and open-circuit protection and current limitation
Ambient Temp	0°C - 50°C (32°F-122F°)
Case: Tc (max)	58°C
Lifespan	50000 hours
Dimension	8W: 11.89"x1.52"x1.12", 16W: 14.57"x1.52"x1.12"
Weight	8W: 1.59 lbs. (0.72 kg), 16W: 1.79 lbs. (0.81 kg)
Warranty	5 Years

Dimensions

SDE13B 8W



SDE13B 16W

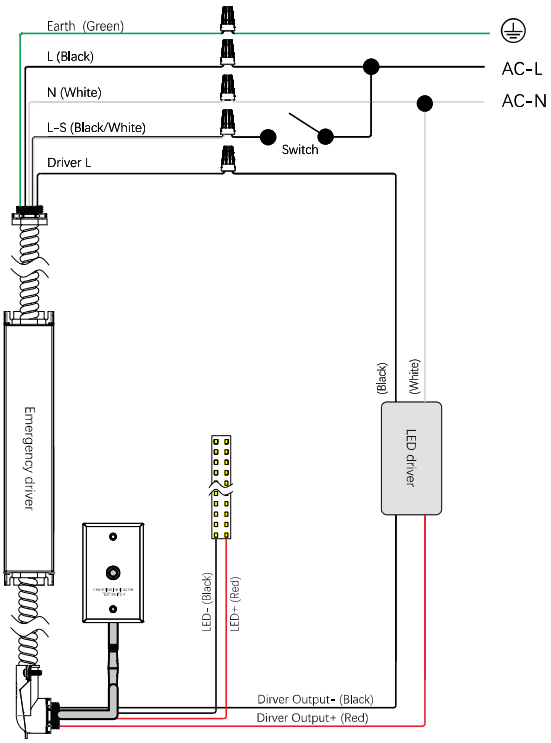
5625 Arville St. Suite A Las Vegas NV, 89129 | Tel 702-364-9998 | csupport@magtechind.com | www.magtechind.com

Wiring Diagram

Connected with LED

For Input 20-300Vdc LED Module

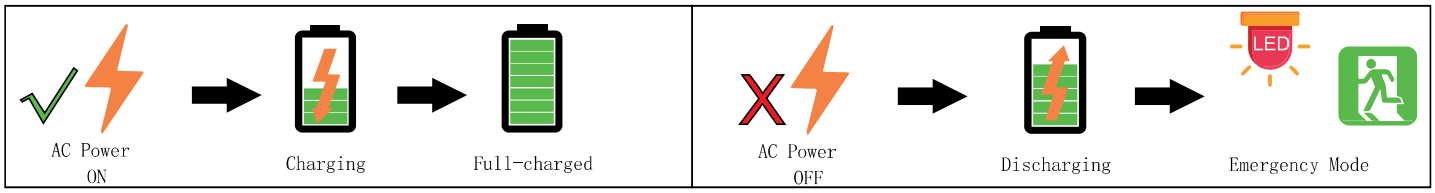
- Constant power output for LED load, Suitable for 0-10V LED Driver, Non-Dimming LED Driver, Triac LED Driver, PWM LED Driver, Constant Voltage 24V LED Driver.



AC Operation: AC power is present. The AC driver operates the LED load as designed. The emergency driver is charging in a standby mode. The charging indicator light is flashing green, showing that the battery is charging.

Emergency Operation: When the AC power goes out, the emergency driver detects the AC power outage and automatically switch to the working emergency mode. The red LED Light on indicates that it is discharging.The red LED light off indicates that the discharge is complete. The LED luminaire is illuminated for a minimum of 90 minutes. When the AC power is restored, the emergency driver switches the system back to the Normal Mode and resumes battery charging.

Malfunction Operation: When the emergency LED Driver fault, the flashing red LED on.



Indicator Light Introduction

Mode	LED Indicators Status	Error	EM Driver Status / Mode	Corrective Action
Normal Mode	Flashing Green	None	Battery is charging/ Self-Diagnostic test underway	/
	Solid Green	None	Battery fully charged / System OK	/
Emergency Mode	Solid Red	None	In Emergency mode	/
Fault Mode	Flashing Red	Overload protection		1. Check load power and connect 2. Check input and dimming line 3. Powered on again 4. Contact after-sales

Manual Testing Switch

Test Mode	Description	Action	Status
Quick Test	Quick discharge test.	Press the test button twice in 1 second during normal lighting.	The light will switch to its emergency lighting and the indicator light flash green for 60 seconds till enter normal lighting.
Exit Test	Exit emergency mode test under the main supply is on.	Long press test button for 3 second under emergency mode test.	The light will recover to normal lighting.
Monthly Test	60-Second Test.	Press the test button twice in 1 second	LED indicator light will falsh green and quick discharge for 60 seconds.
Annual Test	90-Minutes Test.	Press test button three time in 2second	LED indicator light will falsh green and quick discharge for 90 mintues.
Sleep Mode	Enter Sleep Mode for Shipping consignment.	Long press test button for 3 second during emergency mode.	To Cut off the emergency output and enter shipping consignment.

* Sleep Mode deactivates the unit and internally disconnects the battery to prepare the unitfor storage prior to installation. The Automatic Power Activate feature will reactivate the unit upon installation and first power-up.

Self-Test

Automatically tests emergency lighting for 60 seconds once a month and 90 minutes once a year.
This unit contains a control/monitor circuit that if enabled automatically performs a 60-second discharge test once a month and a full 90-minute discharge test once a year. During routine testing, the selftesting emergency driver simulates an AC power failure causing the unit to automatically switch to emergency mode. The unit will monitor the operation of the LED load, battery voltage, 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 Red.

5625 Arville St. Suite A Las Vegas NV, 89129 | Tel 702-364-9998 | csupport@magtechind.com | www.magtechind.com