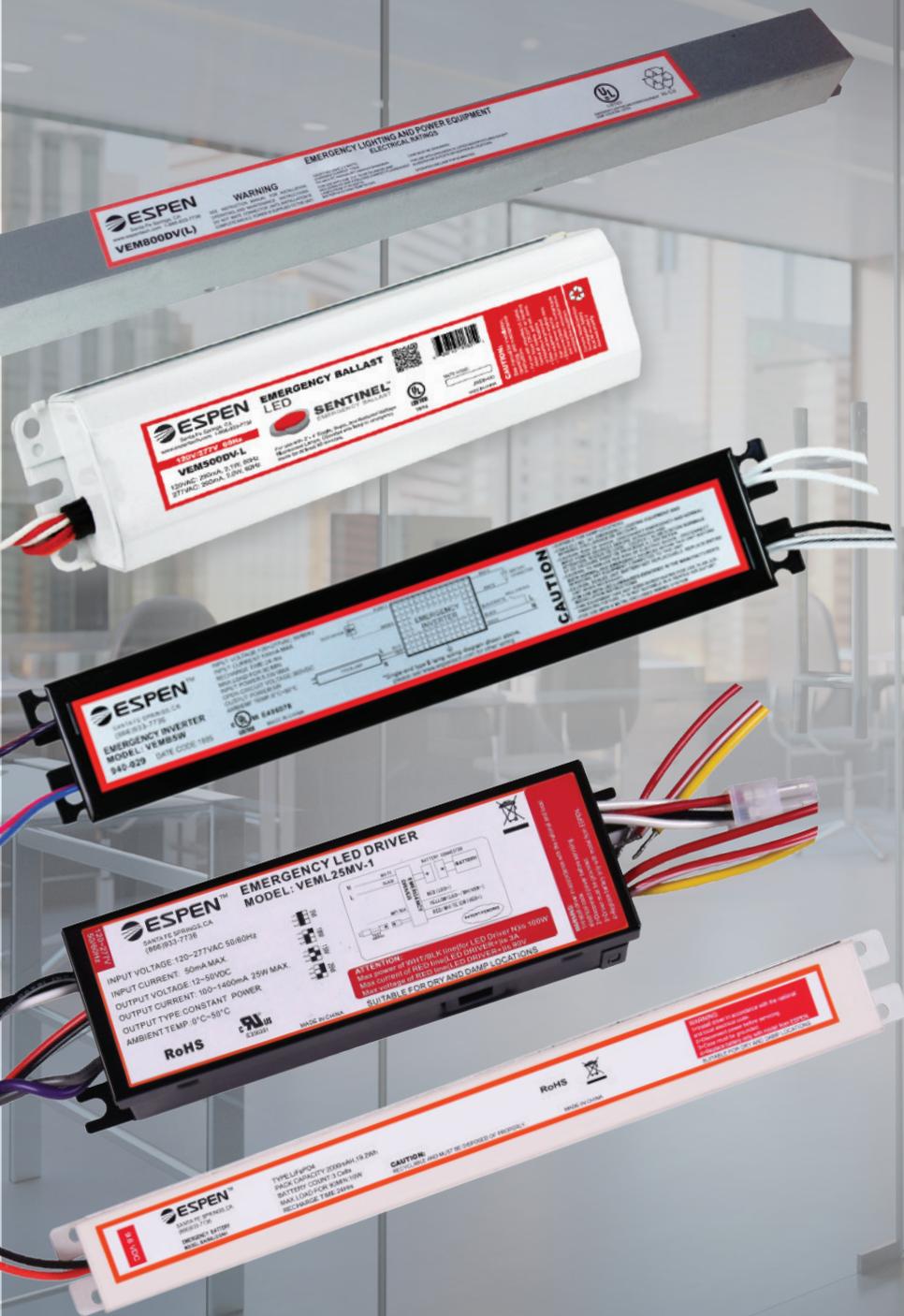


Sentinel®



Emergency Solutions
For Type A, B, C lamps, Retrofit Kits & Fixtures



Sentinel LED Battery Back Up Products



The Power to Create Better Light when you need it the most...

Sentinel Emergency Solutions

- The Espen Sentinel family of emergency Ballast, Inverters and Driver kits, provide a comprehensive set of back-up solutions for Types A, B, and C LED products to function should the AC power fail.
- Espen Sentinel LED battery backup products switch to emergency mode in case of power failure and keep LED retrofit products illuminated at a reduced lumen output for a minimum of 90 minutes.
- The Sentinel emergency ballasts are for Type A lamps.
- The Sentinel emergency inverters are for Type B lamps.
- The Sentinel emergency driver kit is for Type C lamps, retrofit kits, and fixtures.
- The Sentinel Emergency standalone back up kits can be used if you do not want to change/modify wiring of your lamp and ballast/driver setup, or if you do not want to use your regular lighting as emergency lighting. The Sentinel standalone kits include the Sentinel Type C emergency driver with battery, and the LED module that would light up during power interruption.
- Sentinel LED emergency backup solutions are suitable for use in new fixtures as well as retrofit applications.
- All models include LED charging indicator light, single pole test switch, and installation hardware.

► Emergency Solutions for Type A, B, C lamps, Retrofit Kits and Fixtures

Emergency Ballasts

Suitable for LED Type A or A+B lamps with fluorescent ballasts
Directly power the lamps



Emergency Inverters

Suitable for LED Type B or A+B lamps, retrofit kits and LED fixtures, esp. integrated fixtures
Power up the whole fixture



Sentinel®

Emergency Solutions

Standalone Emergency Back-Up Kits

Suitable for any applications
Standalone operation



Emergency Drivers

Suitable for LED Type C lamps, LED Modules, or LED fixtures
Directly power the LED lamps or modules



Standalone Emergency Backup Kits

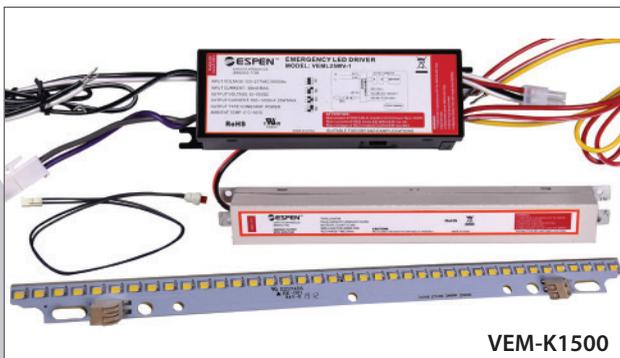
▶ Constant Wattage LED

FEATURES AND BENEFITS

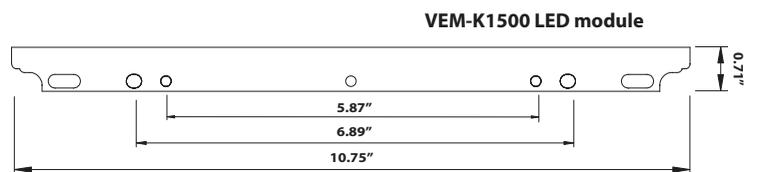
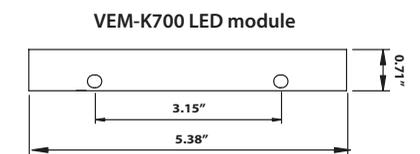
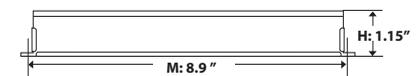
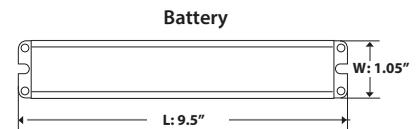
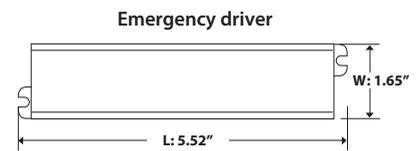
- Constant Wattage & Light Output
- LED emergency back up kit includes constant wattage emergency driver, battery, high efficacy LED module & LED charging indicator light
- VEM K1500 provides 1500lm while the VEM K700 provides 700lm when power fails
- Does not affect Existing Lighting Fixture / Luminaire
- UL Listed
- Standalone Works independently from the regular light fixture

Model No.	Lumens (90min)	Wattage	Module Information
VEM-K700	700lm	5W	VLM0605L/850 5W, 5000K, CRI80
VEM-K1500	1500lm	10W	VLM1207L/850 10W, 5000K, CRI80

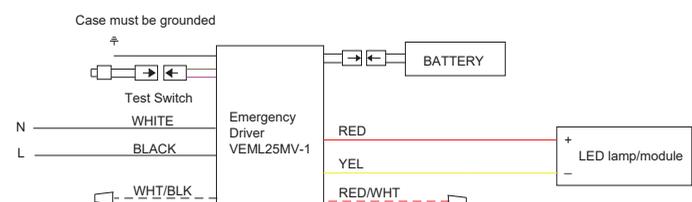
Model #	Dip Switch Setting	Emergency Mode Output Power	Emergency Mode Output Voltage	Emergency Mode Output Current	Battery Charging Current
VEM-K700		5W	12-50V	416-100mA	60mA
VEM-K1500		10W	12-50V	830-200mA	100mA



DIMENSIONS



WIRING DIAGRAM



Emergency Ballasts

▶ For T5 and T8 Lamps

FEATURES AND BENEFITS

- Emergency ballasts for Type A Emergency Applications
- Dual Input Voltage (120/277V)
- May work with Fluorescents and Type A T5 or T8 LED lamps using ballasts*
- Compatible with Espen Retroflex Lamps, Ballasts, and Type A drivers
- May work with Uniflex lamps if wired & used as Type A

Compatible With:



- High Temperature Ni Cad Battery
- Durable, Heavy Duty Steel Housing
- 4 options with different sizes and lumen output
- Maintenance Free, Long Life
- 5 Year Warranty



Model No	Total Lumens (maximum) Emergency Mode	Input Voltage (V)	Operating Time in Emergency Mode	Case
VEM500DV-L	500	120-277V	> 90 minutes	Regular
VEM700DV-L	700	120-277V	> 90 minutes	Regular
VEM800DV-L	800	120-277V	> 90 minutes	Slim
VEM1300DV-L	1300	120-277V	> 90 minutes	Slim

1 Lamp Emergency

VEM500DV-L



Regular Case

500 Lumens

VEM800DV-L



Slim Case

800 Lumens

1 to 2 Lamp Emergency

VEM700DV-L



Regular Case

700 Lumens

VEM1300DV-L



Slim Case

1,300 Lumens

Lumen output is the total combination for all lamps wired as emergency lamp/s.

*Note: Espen recommends testing compatibility and performance in the actual jobsite prior to purchasing and before the actual installation lamp, ballasts/drivers, and emergency ballasts combinations performs differently depending on the circuit designs, components used, and other factors that can affect compatibility and performance.

Specifications are subject to change without notice.

Emergency Inverters

▶ For Type B Lamps

FEATURES AND BENEFITS

- Emergency Inverter for most Espen Type B lamps
- Dual Input Voltage (120/277V)
- 90 Minute Illumination Time
- 32 °F to 122 °F Ambient Operating Temperature
- 3 options with different sizes and wattage output
- Durable Steel Housing Contains LED Driver & Battery
- Suitable for Damp Locations
- LED Test Switch Included
- Does Not Affect Normal Operation
- 5 Year Warranty

VEMB5W



- Espen Flex Type B T5 and T8 for 2ft, 3ft, 4ft. Also operated PL and PLL lamps.
- Provides 5 W of power for a minimum of 90 minutes
- Lithium Ion Rechargeable Battery
- UL 924 & FCC Compliant
- Output OCV 200 VDC

VEMB10W



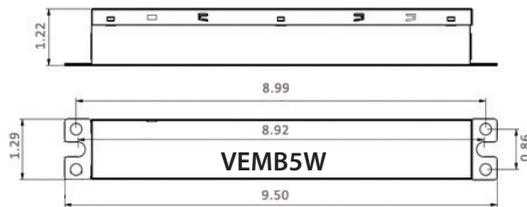
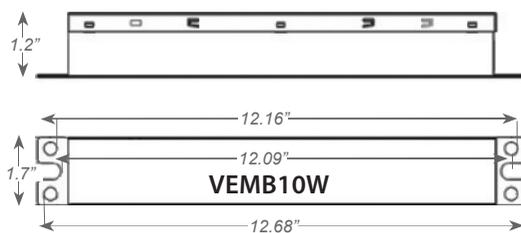
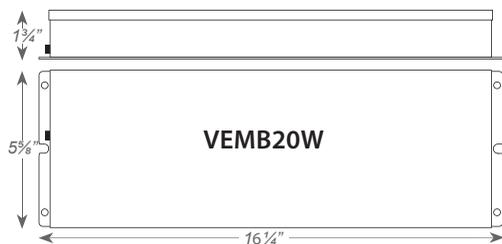
- Espen Flex Type B T 5 T 8 2 ft 3 ft, and 4 ft and Uniflex (when used as Type B) lamps.
- Provides 10 W of power for a minimum of 90 minutes
- Lithium Ion Rechargeable Battery
- UL 924 & FCC Compliant
- Output OCV 200 VDC

VEMB20W



- Espen Type B PL, PLL, Uniflex (when used as Type B), and T 8 and T 5 HE lamps not exceeding 20W
- Illuminates Most LEDs at Full Brightness, up to 20W for a minimum of 90 minutes
- Nickel Cadmium Rechargeable Battery
- UL 924 NFPA 101 Life Safety Code, NEC OSHA Compliant
- Output OCV 320 VDC

DIMENSIONS



Emergency Inverter

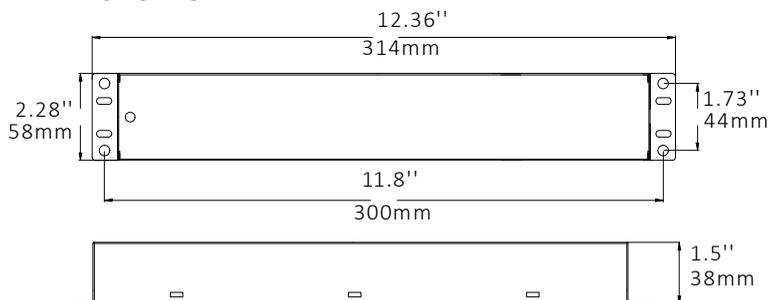
FEATURES AND BENEFITS

- Universal 120-347V AC, 50/60Hz Input
- Open Circuit Voltage 170VDC
- Charge/Power "ON" LED Indicator Light and Push-to-Test Switch for Code Compliance Testing
- Long Life, Maintenance Free, Lithium-Ion Battery
- Output Short and Overcurrent Protection: Electronic Limiting, with Normal Operation Resuming
- 90 Minute Minimum Emergency Operating Time Over Full Temperature Range
- Durable Steel Housing contains LED Driver and Battery
- 24 Hour Maximum Battery Recharge Time
- Major application includes commercial downlight and 0-10V fixtures
- 5 Year Warranty
- Meets UL924



Model No.	Description
VEMB15W-10V (C)	Operates Espen Commercial Downlight or 0-10V Dimming Fixture

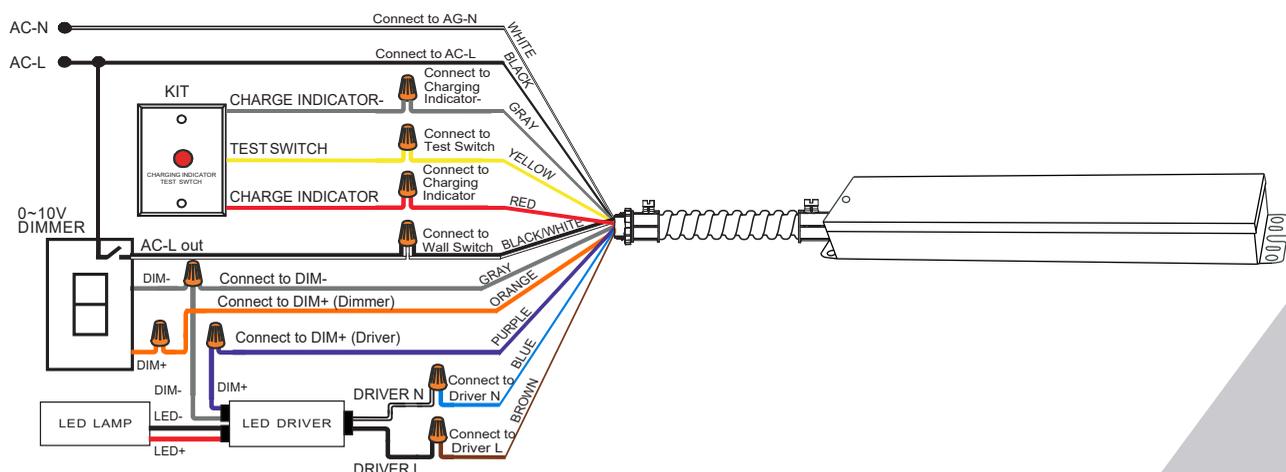
DIMENSIONS



Compatible With:



WIRING DIAGRAM



Emergency LED Driver

▶ Type C LED Lamps, LED Modules and Fixtures

FEATURES AND BENEFITS

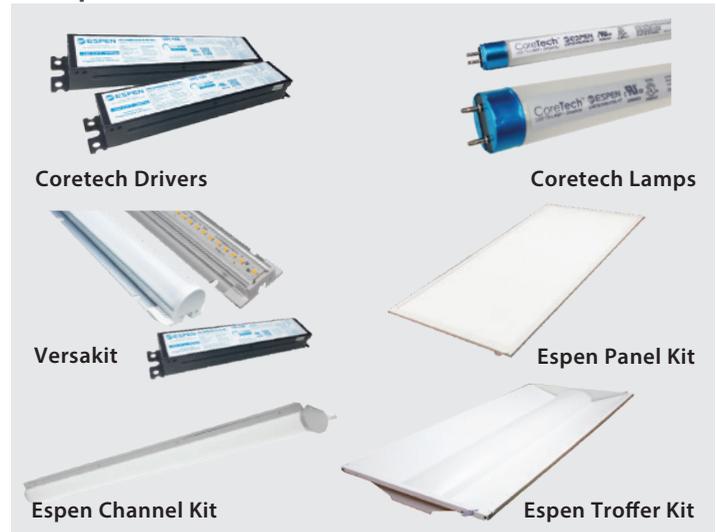
- Constant Light Output
- Auto LED load sensing
- Universal Input (120-277V)
- Complete Thermal Solution
- Heavy duty battery
- Programmable for Lumen Output
- UL Recognized
- 5 Year Warranty



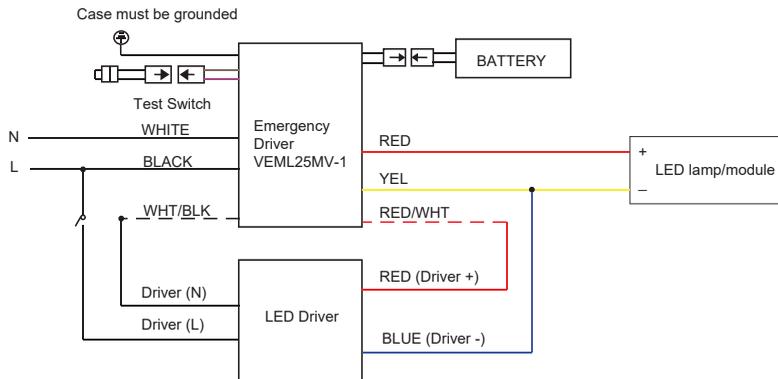
Wattage Adjustment (dip switch):

Dip Switch Setting	Emergency Mode Output Power	Emergency Mode Output Voltage	Emergency Mode Output Current	Battery Charging Current
	5W	12-50V	416-100mA	60mA
	10W	12-50V	830-200mA	100mA
	15W	12-50V	1250-300mA	160mA
	20W (VEML20MV-1) 25W (VEML25MV-1)	12-50V	1400-400mA 2084-500mA	210mA

Compatible With:



WIRING DIAGRAM



Model No.	Description
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EML25-PLATE	Emergency driver back plate Pre-wired and mounted emergency driver and battery unit in one plate
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**Sold Separately*





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