











Emergency LED Driver

Universal Voltage: 120-277V~
Output Voltage Range: 15-55V ==
Output Current: 181-666mA

- Output Wattage: 10WOutput Type: LED Class 2
- Number of Output Channels: 1 Channel
- Dry and Damp

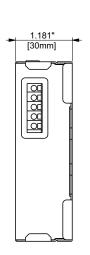
General Specifications			
Input Voltage / Frequency	120-277V~, 50/60Hz		
Input Current	0.1A Max		
Input Power	5W Typical		
Maintain Power	<0.85W		
Input Power Pass-Through Rating (AC Driver Line)	5A		
Max Output Rating (LED+ LED-Terminal)	3A Max		
	55V Max		
Output Power	10W		
Output Voltage Range	15-55V 		
Output Current Rated	181-666mA		
Number of Output Channels	1Channel		
Test Switch	Bi-Color Wet Location Test Switch (FHS-TSTWL-BC)		
Input Surge Protection			
Protections	3KV/6KV Ring Wave, 1KV/2KV Combine surge Output Open Protection		
Flotections	Output Overload Protection		
	Output Short Circuit Protection		
	Output Short Circuit Protection		
RFI/EMI	FCC Part 15A		
Ambient Operating Temperature Rang	0°C To 55°C (32°F To 131F°)		
Tc	62°C (143. 6°F)		
Sound Rating	A		
Battery Type	Lithium-ion		
Battery Voltage	10.95V		
Pack Capacity	2600mAh		
Battery Rating	28.47Wh		
Battery Count	3 Cells		
Battery Recharge Time	24 Hours		
Battery Discharge Time	Min 1.5 Hours		
IP Rating	IP20		
Test Switch Remote Mounting Distance	20' (6m) Max.		
Service Life Warranty	50,000 hours @62°C (143. 6°F) @62°C (143. 6°F) 5 Years From the date of manufacture when properly installed		
Safety Standard	UL 924, UL 1310, CSA C22.2 No.141		
Jaiety Jianuaru	0L 02-3, 0L 10-10, 00A 022-2 110-11-1		

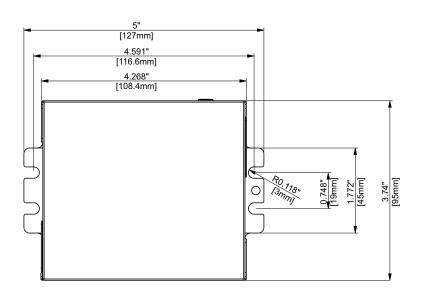


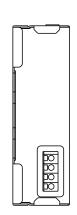


Mechanical Data

Overall Dimensions				
Length	5" [127mm]			
Width	3.74" [95mm]			
Height	1.181" [30mm]			















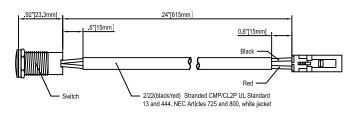


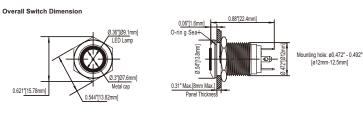


Accessories

Bi-Color Wet Location Test Switch: FHS-TSTWL-BC







Wall Plate: FHSWLPWH

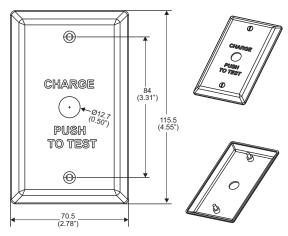


Wall plate and screw color: white with black lettering

Wall Plate: FHSWLPPWH(Pure White Wall Plate)



Wall plate and screw color: Pure white with black lettering



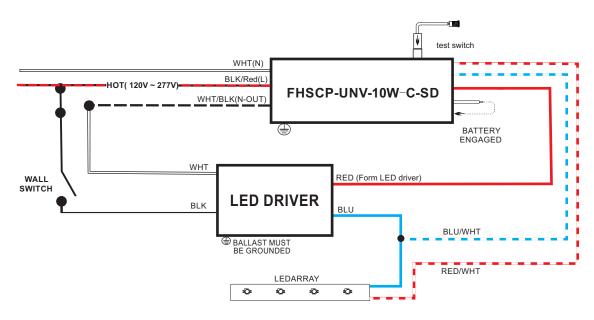
1."Charge push to Test"plate

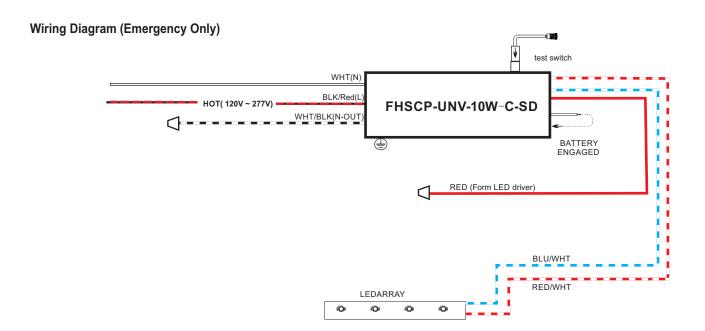
2. (2) 6-32 x 1/2"LG mounting screws





Wiring Diagram









SELF-DIAGNOSTIC INSTRUCTIONS / OPERATION:

If the self-diagnostic feature is enabled:

The emergency LED driver will conduct a self-check for sixty(60) seconds every thirty(30) days; and a ninety(90) minutes self-check every 12 months. After every self-check the LED indicator light will indicate a status signal. Check indicator status chart below to diagnose the status signal.

If the self-diagnostic feature is disabled:

User must conduct a manual test every thirty (30) days to ensure the emergency LED light source illuminates as intended. A full discharge test shall be conducted once a year; the LED light source shall illuminate for a minimum of ninety (90) minutes.

*Self-Diagnostic feature is factory enabled

TEST SWITCH INDICATOR STATUS:

LED Indicators Status	EM Driver Status / Mode		
Solid Green	System OK / AC OK (Self-Diagnostic Enabled or Disabled)		
Slow Flashing Red, 4s on / 1s off	Battery NOT detected, check battery switch or connection		
Flashing Red, 1s on / 1s off	Battery Failure, replace battery		
Flashing Green, 1s on / 1s off	Self-Diagnostic test underway		
Slow Flashing Green, 0.1s on/3s off	Normal working in EM mode		
Solid Red	No load or output over voltage protection triggered, Check LED connection		
Solid Red	Over Current Protection		
Flashing Green, 2s on/0.5s off	Enables Self-diagnosis		
Flashing Green, 0.5s on/2s off	Cancel Self-diagnosis		
Flashing Red, 0.5s on/3s off	Abnormal Power-on Under Self-diagnosis/Battery Voltage abnormal		

EM Test:

Press and hold the test button (>1s) to enter EM mode in normal AC powered.

Manual Self-Diagnostic:

After charging twelve (12) hours at least, quickly press the test button three(3) times to force the controller to enter Self-Diagnostic cycle. To quit the Self-Diagnostic cycle after engaged, press and hold the test button for three (3) seconds.

Query Self-Diagnostic Status:

Fast click 2 times within 2s to query the Self-Diagnostic status. The indicator would blink for current status for 3 cycles. 2s ON/0.5s OFF stands for Enabled. 0.5s ON/2s OFF stands for Disabled.

How to Enable and Disable Self-Diagnostic Status:

Press and hold the test button for one second, then release, and press and hold the test button for 2 seconds.

Cancel reporting error:

In standby, press and hold the button for about 5s to cancel the error indication.

Emergency Battery Disconnect:

Press and hold the test switch for 5seconds during EM output condition to turn off EM output. This is useful for production environment to turn off the EM output once a luminaire has completed functionality testing.





Guidelines

Grounding

• Driver must be grounded by means of the Driver case.

LED load

• Fulham's Hotspot Constant Power Emergency LED drivers passive LEDs, -COB's and -LED assemblies Proper function is not guaranteed when (LED) loads with active components are used.

Mounting / Cooling

• Above an output power of 10W, the driver needs to be mounted on a heat conductive surface of at least 200cm². Always test if the surface is sufficient enough before installing the driver.

Short-circuit protection

• In case of a short circuit the LED driver switches to protection mode. After the removal of the short-circuit the LED driver will recover automatically.

No-load Operation

• In no-load operation the output voltage will not exceed the specified open circuit output voltage.

Hot Swapping

This driver does not support hot swapping of the LEDs

Remote Mounting

• Up to 20ft with 18AWG. Contact Fulham for higher remoute distance.

Battery Maintenance

In order to maintain proper operation and warranty coverage, the battery must be recharged once per year prior to installation.

Warranty

Reference Fulham's limited Warranty: https://cdn.fulham.com/PDFs/Limited-Warranty.pdf











Part Number Matrix



LED Driver

Output Type

Input Voltage

Special Features

FHS = Fire Horse EM Driver

CP= Constant Power

UNV= 120V-277V

10= 10W

C= Compact

SD= Self Diagnostic

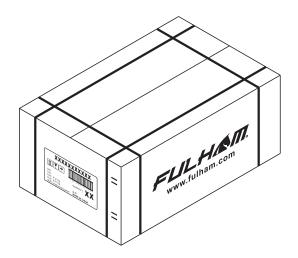
Product Image: LED Driver

FHSCP-UNV-10W-C-SD



Packaging

Master Carton



OUTER DIMENSION						
L	L V		V	Н		
15.71" (399mm) 13.35"((339mm)	11.73" (298mm)			
Net Weight	Gross Weight		Ql	UANTITY		
19.40lbs. (8.8kg.)	22.93lbs. (10.4kg)		20pcs.			