









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		
Voltage Range	15-55V 		
Current Rated	181-666mA		
Number of Output Channels	1Channel		
Input Surge Protection	3KV/6KV Ring wave, 1KV/2KV Combine surge		
Test Switch	Bi-Color Wet Location Test Switch (FHS-TSTWL-BC)		
Protections	Output Open Protection		
110000000	Output Overload Protection		
	Output Short Circuit Protection		
RFI/EMI	FCC Part15A		
Ambient Operating Temperature Range	0°C To 55°C (32°F To 131F°) (≤10W)		
Tc	62°C (143. 6°F)		
Sound Rating	Α		
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.		
Test Switch Remote Control Distance	16' (5m) Max.		
Service Life	50,000 hours @Tc 62°C (143. 6°F)		
Warranty	@Tc 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		





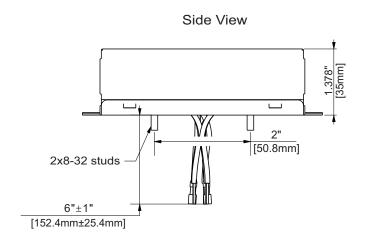






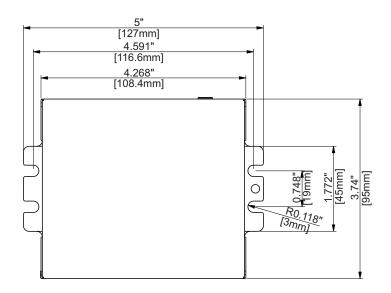


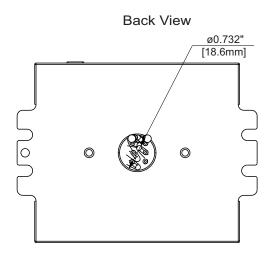
Mechanical Data



Overall Dimensions				
Length	5" [127mm]			
Width	3.74" [95mm]			
Height	1.378" [35mm]			

Front View













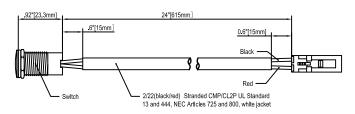


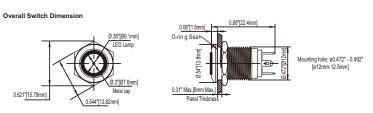


Standard Accessories

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

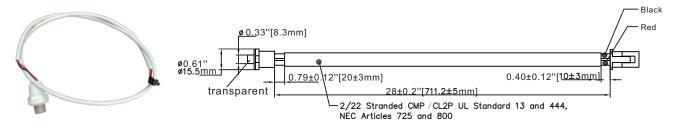






Optional Accessories

Test switch wire: FHS-TST-BC(IP20)















Optional Accessories

Wall Plate: FHSWLPWH

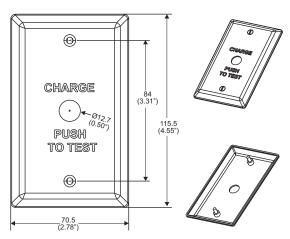


Wall plate and screw color: white with black lettering

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 ½"LG mounting screws





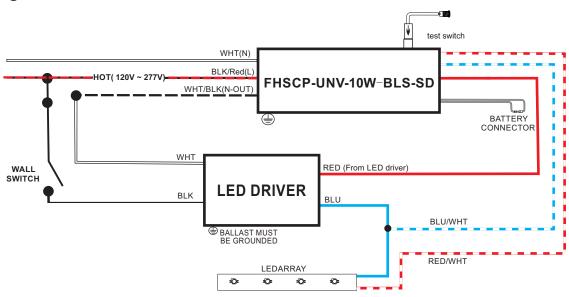


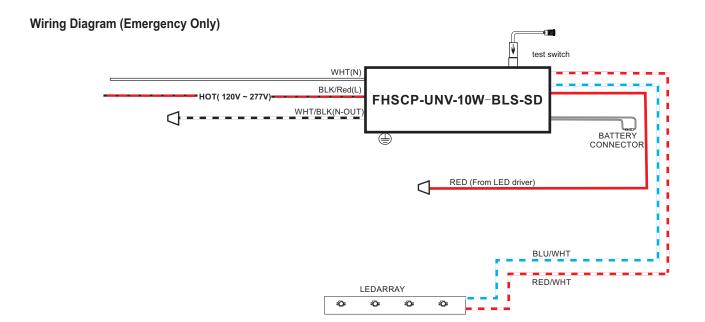






Wiring Diagram

















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		
Flashing 0.5s on/3s off	Self-diagnose process current fault/The battery voltage is abnormal		
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		

TEST SWITCH OPERATIONS

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 and discharge for 90 minutes. 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 5 seconds 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 are designed to drive 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



<u>CP</u>

<u>UNV 10'</u>

<u>/ BLS</u>

<u>SD</u>

LED Driver

Output Type

Input Voltage

.

Characteristic

Special Feature

FHS = Fire Horse EM Driver

CP= Constant Power

UNV= 120V-277V

10= 10W

BLS= Back Side Wire

SD= Self Diagnostic

Product Image: LED Driver

FHSCP-UNV-10W-BLS-SD





Packaging

Master Carton



OUTER DIMENSION						
L		V	V	Н		
18.27"(464r	8.27"(464mm) 14.33"(3		364mm)	7.48"(190mm)		
Net Weight	Gross Weight		Ql	QUANTITY		
11.02lbs 5kg	14.33lbs 6.5kg		10pcs			