



Emergency LED Driver

- Universal Voltage: 120-277V~
- Output Voltage Range: 15-55V $\overline{\text{---}}$
- Output Current: 181-666mA
- Output Wattage: 10W
- Output Type: LED Class 2
- Number of Output Channels: 1 Channel
- Dry and Damp

General Specifications

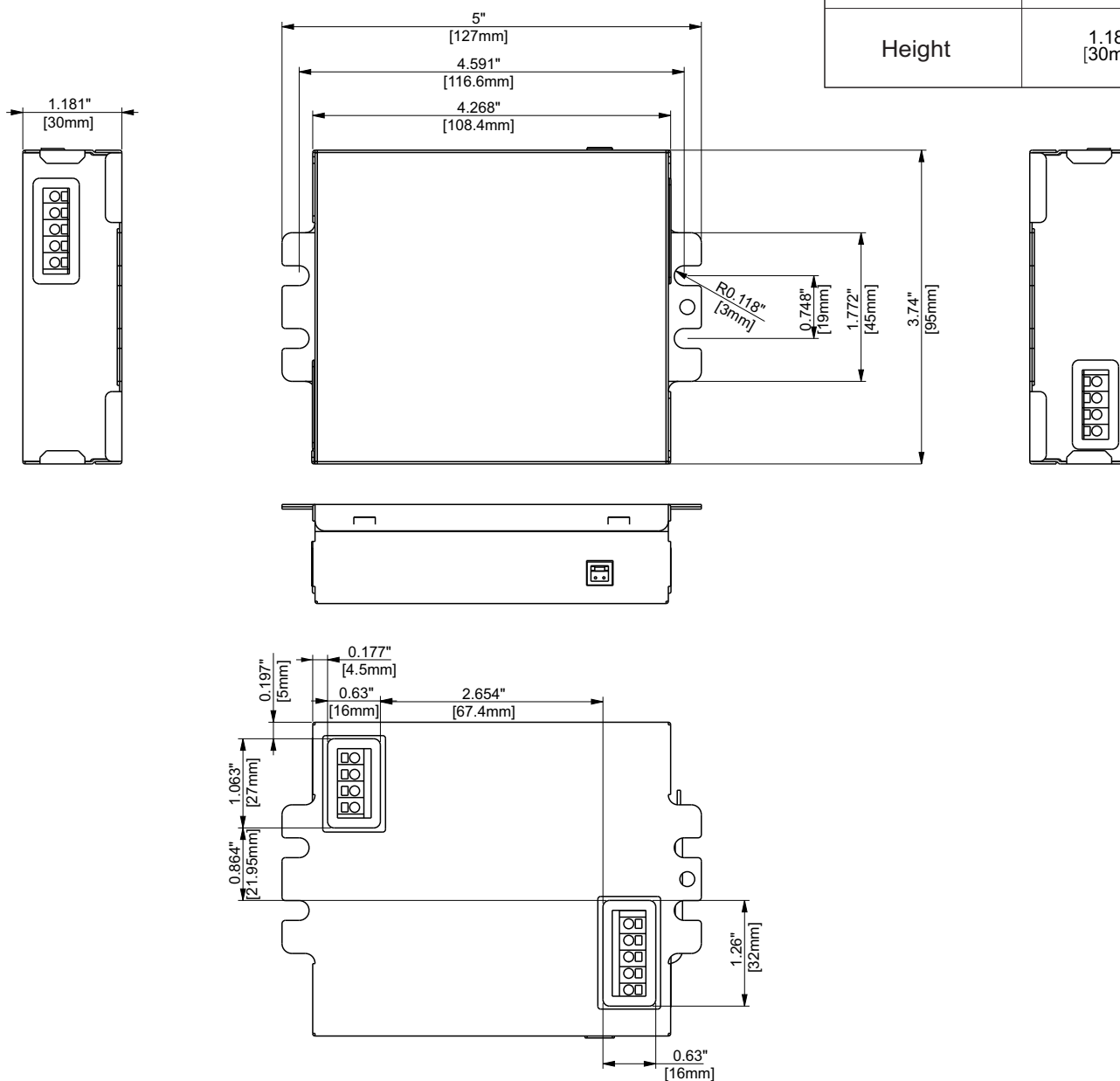
Input Voltage / Frequency	120-277V~, 50/60Hz
Input Current	0.1A Max
Input Power	5W Typical
Maintain Power	<0.85W
Input Power Pass-Through Rating (AC Driver Line)	5A
Max Output Rating (LED+ LED-Terminal)	3A Max
	55V Max
Output Power	10W
Output Voltage Range	15-55V $\overline{\text{---}}$
Output Current Rated	181-666mA
Number of Output Channels	1Channel
Test Switch	Bi-Color Wet Location Test Switch (FHS-TSTWL-BC)
Input Surge Protection	3KV/6KV Ring Wave, 1KV/2KV Combine surge
Protections	Output Open Protection Output Overload Protection Output Short Circuit Protection
RFI/EMI	FCC Part 15A
Ambient Operating Temperature Rang	0°C To 55°C (32°F To 131°F)
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	50,000 hours @62°C (143. 6°F)
Warranty	@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

FHSCP-UNV-10W-C-SD



Mechanical Data

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

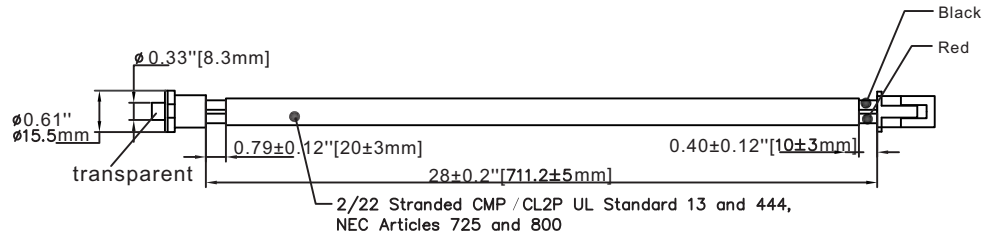


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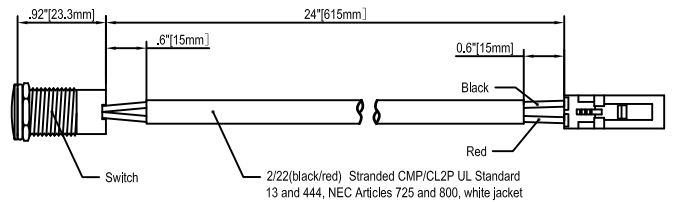
Accessories

Test switch wire: FHS-TST-BC

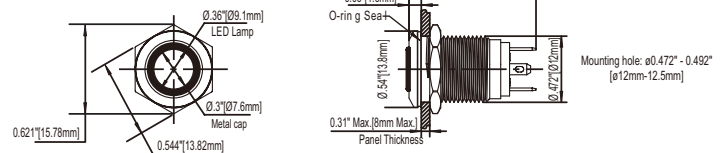


Optional Accessories

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



Overall Switch Dimension





Optional Accessories

Wall Plate: FHSWLPWH

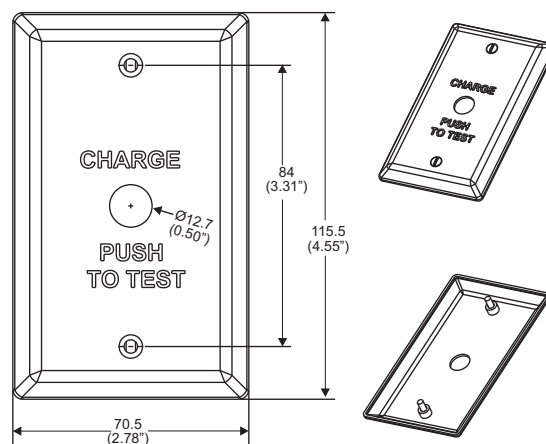


Wall plate and screw color:
white with black lettering

Wall Plate: FHSWLPPWH(Pure White Wall Plate)



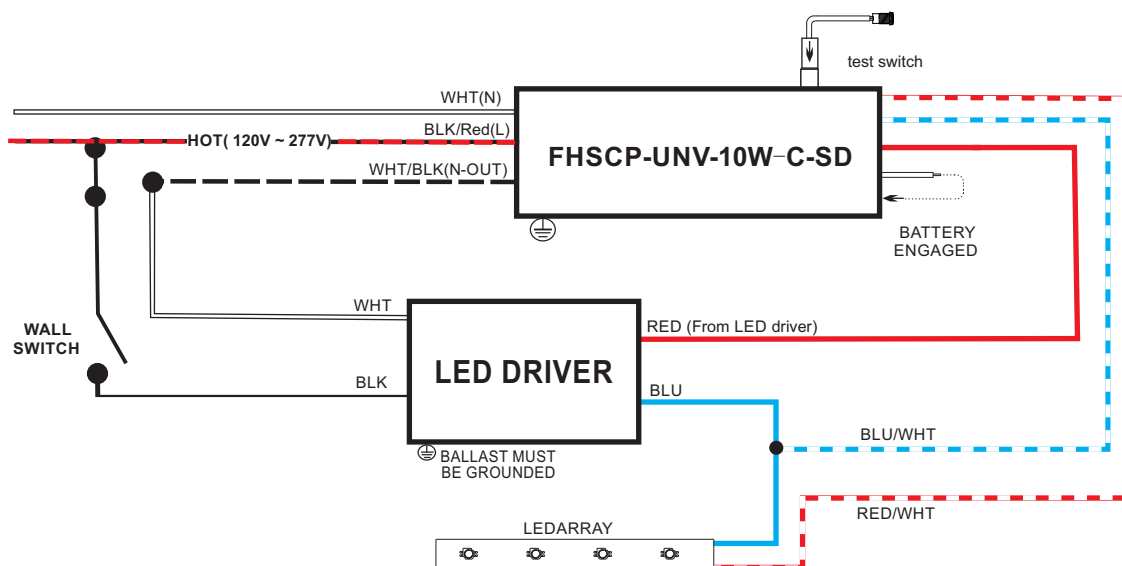
Wall plate and screw color:
Pure white with black lettering



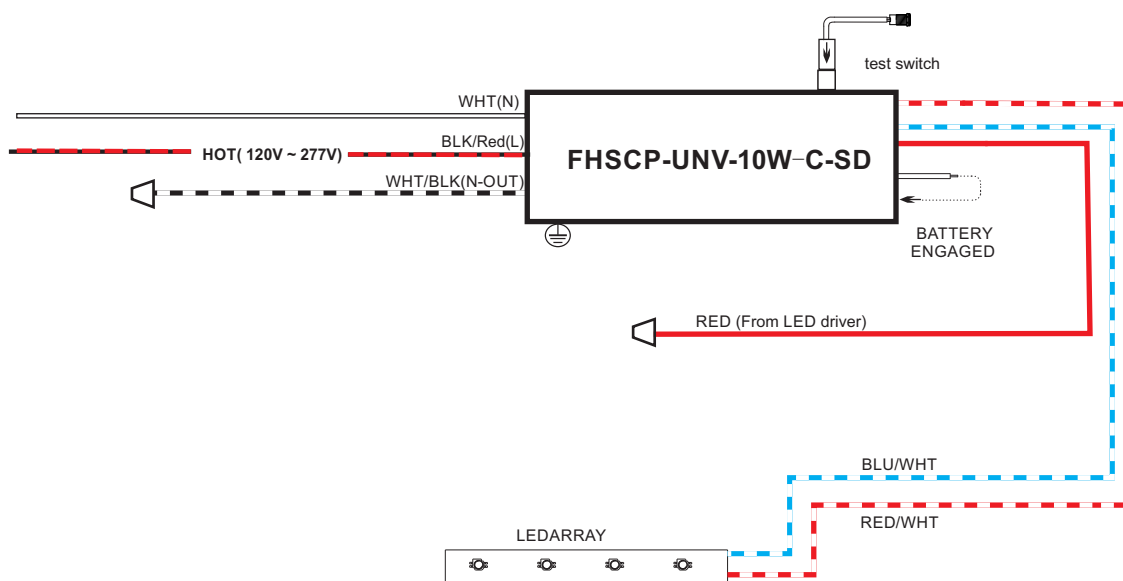
1. "Charge push to Test" plate
2. (2) 6-32 x 1/2" LG mounting screws



Wiring Diagram



Wiring Diagram (Emergency Only)

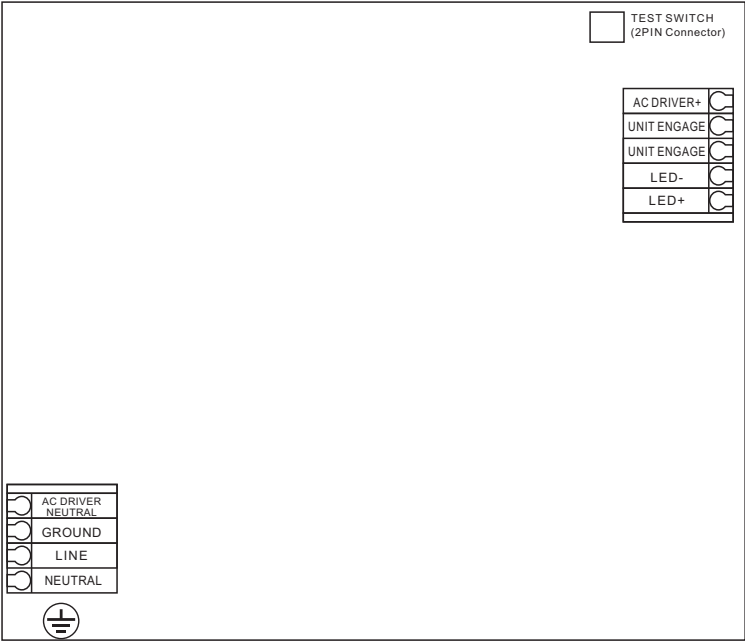




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Wiring Diagram





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 remote 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>



FHSCP-UNV-10W-C-SD



Part Number Matrix

<u>FHS</u>	<u>CP</u>	<u>UNV</u>	<u>10W</u>	<u>C</u>	<u>SD</u>
LED Driver	Output Type	Input Voltage	Power	Characteristic	Special Features
FHS = Fire Horse EM Driver	CP= Constant Power	UNV= 120V-277V	10W= 10W	C= Compact	SD= Self Diagnostic

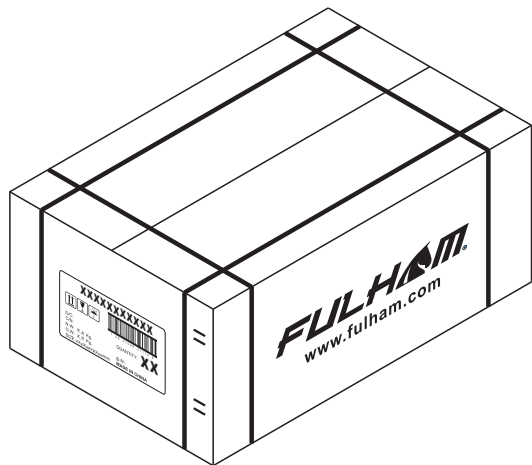
Product Image: LED Driver

FHSCP-UNV-10W-C-SD



Packaging

Master Carton



OUTER DIMENSION		
L	W	H
15.71" (399mm)	13.35" (339mm)	11.73" (298mm)
Net Weight	Gross Weight	QUANTITY
19.40lbs. (8.8kg.)	22.93lbs. (10.4kg)	20pcs.