



# **Emergency LED Driver**

Emergency LED Driver

Universal Voltage: 120-305VAC, 50/60Hz

• Output Voltage Range: 120-300V---

Output Current: 53-134mA

Output Wattage: 16W

Output Type: No-Class 2

Number of Output Channels: 1 Channel

Dry and Damp

General	<b>Specifications</b>
Input V	oltage / Frequency

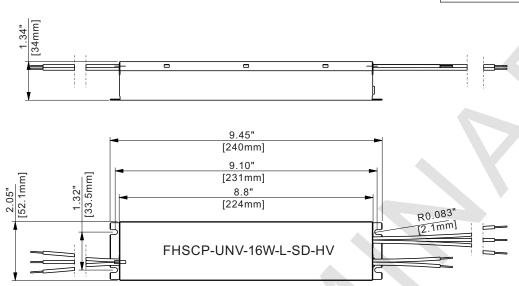
Input Voltage / Frequency	120-305VAC , 50/60Hz
Input Current	0.12A
Input Power	6.5W Max
Standby Power	<0.85W
Input Power Pass-Through Rating (AC Driver Line)	5A
Max Output Rating (LED+ LED- Terminal)	2A, 300V Max
Driver Type	Constant Power
Output Current Rated	134mA Max.
Output Voltage Range	100 - 300VDC
Output Power	Typical 16W
Number of Output Channels	1 Channel
Input Surge Protection	3KV/6KV Ring wave
RFI/ EMI	FCC Part 15A
Output Type	No-Class 2
Battery Type	Ternary Lithium Battery
Battery Voltage	10.95V
Battery Capacity Available	5000mAh
Battery Rating	54.75Wh
Battery Recharge Time	24 Hours Max TBD
Battery Discharge Time	1.5 Hours Min.
Rated Ambient (ta)	0°C to 55°C (32°F to 131°F)
Protections	Over / Under Voltage Protection
	Overload Protection
	Output Open Circuit Protection
Sound Rating	A
Humidity	5% - 95%
Safety Standards	UL 924, UL 1310, CSA C22.2 No.141-10
Service Life	50,000 Hours
Warranty	5 Years From the date of manufacture when properly installed





# **Mechanical Data**

Overall Dimensions				
Length	9.45" (240mm)			
Width	2.05" (52.1mm)			
Height	1.34" (34mm)			





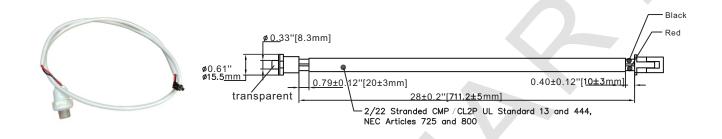
Tolerance=0.02"





### **Accessories**

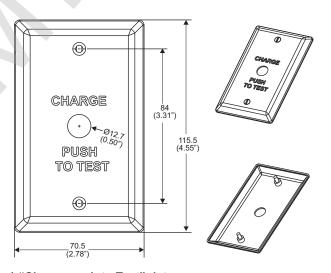
Test switch wire



### Wall Plate: FHSWLPWH



Wall plate and screw color: white with black lettering

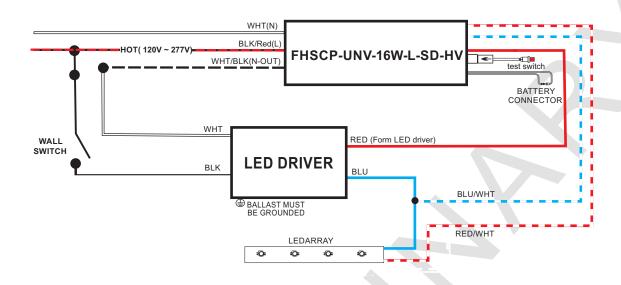


1."Charge push to Test"plate 2. (2) 6-32 x ½"LG mounting screws

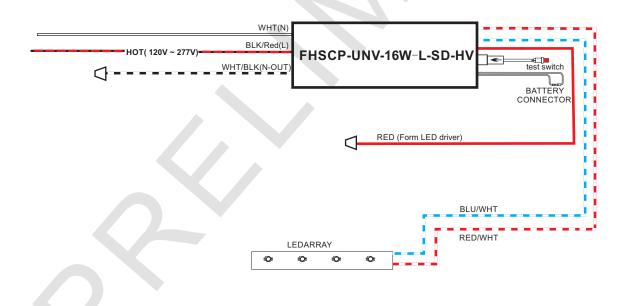




# **Wiring Diagram**



## Wiring Diagram (Emergency Only)







#### **SELF-DIAGNOSTIC INSTRUCTIONS / OPERATION:**

#### If the self-diagnostic feature is enabled:

The emergency LED driver will conduct a self-check for thirty(30)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			
<ul><li>Solid Green</li></ul>	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				
Fast Flashing Red, 0.1s on / 0.1s off	Abnormal driver performance, replace driver			
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			
Slow Flashing Red, 0.5s on / 0.5s off	Charge circuit failure replace driver			

### **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 or battery fully charged, quickly press the test button three(3) times within two (2) seconds to force the controller to enter Self-Diagnostic cycle. To quit the Self-Diagnostic cycle after engaged, press and hold the test button for ten (10) seconds.

#### **Enable/Disable Self-Diagnostic Status:**

Fast click 2 times within 2s to query the Self-Diagnostic Enabled/Disabled status. The indicator would blink for current status for 3 cycles. 2.5s ON/0.5s OFF stands for Enabled. 0.5s ON/2.5sOFF stands for Disabled.

#### Load Test:

When the test button is flashing red 4s on/4s off, press and hold the test switch for 10s, the unit will enter Self -Diagnostic mode.

#### **Turn Off EM Output:**

Press and hold the test switch for 3 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.

#### **Overload Protection**

• If the maximum output power is exceeded, the LED driver switches offautomatically, after elimination of the overload the normal operation is restored automatically.

#### **LED Load**

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

### Mounting and cooling

Above an output power of 10W, the driver need to be mounted on a heat conductive surface of at least 100cm<sup>2</sup>.
 Always test if the surface is sufficient enough before installing the LED driver.

#### **Short Circuit Protection**

• In case of a short circuit the LED driver switches to protection mode. After 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 specific open circuit output voltage.

#### **Hot Swapping**

This driver does not support the hot swapping og the LED's.

# **Remote Mounting**

• up to 50ft with 18AWG wire. Contact Fulham for higher remote distance.

#### Warranty

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





**Part Number Matrix** 

<u>FHS</u>

<u>CP</u>

<u>UNV</u>

<u> 16</u>

<u>L</u>

<u>SD</u>

HV

**Special Features** 

<u>LED Driver</u>

FHS = FireHorse HotSpot Driver

<u>Driver Type</u>

CP = Constant Power

Input Voltage
UNV = 120V-305V

Max Output
Power

16W = 16 Watts

Case Type
L = Long Case

Special Features

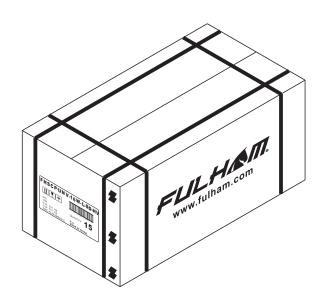
SD = Self Diagnostic

HV = Class One Output

Product Image: FHSCP-UNV-16W-L-SD-HV

# **Packaging**

Master Carton



OUTER DIMENSION						
L		V	٧	Н		
Net Weight		ross eight	Ql	JANTITY		