FHSCP-UNV-16W-L-SD-HV

Emergency LED Driver For Non-Class 2 Applications

- Emergency LED Driver
- Universal Voltage: 120-277VAC, 50/60Hz
- Output Voltage Range: 50-300VDC
- Output Current: 53.3-320mA

- Output Wattage: 16W
- Output Type: Non-Class 2
- Number of Output Channels: 1 Channel
- Dry and Damp

General Specifications

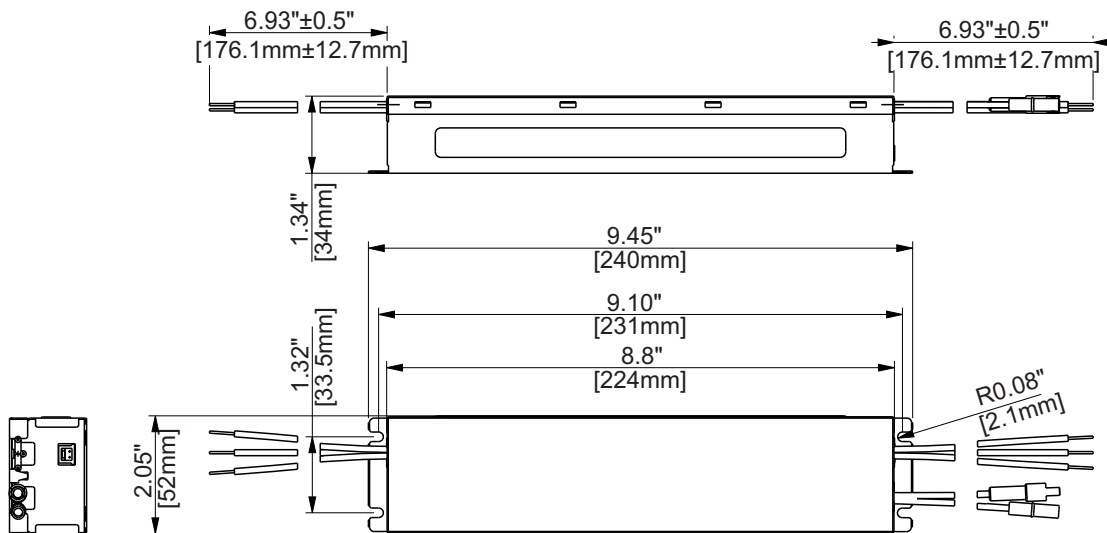|	
Input Voltage / Frequency	120-277VAC , 50/60Hz
Input Current	0.1A Max
Input Power	7W Max
Standby Power	<0.85W
Input Power Pass-Through Rating (AC Driver Line)	3A
Max Output Rating (LED+ LED- Terminal)	3A, 300V Max
Driver Type	Constant Power
Output Current Rated	320mA Max.
Output Voltage Range	50 - 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	Non-Class 2
Battery Type	Lithium-ion
Battery Voltage	11. 1V
Battery Capacity Available	5000mAh
Battery Rating	55.5Wh
Battery Recharge Time	24 Hours Max
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, CSA C22.2 No.141-10
Service Life	50,000 Hours
Warranty	5 Years From the date of manufacture when properly installed

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Mechanical Data

Overall Dimensions	
Length	9.45" (240mm)
Width	2.05" (52mm)
Height	1.34" (34mm)
Wire Length	
AC Input (Black/Red) (White) (Black/White)	6.93" (176.1mm)
Output (Red/White) (Blue/White) (Red)	6.93" (176. 1mm)

6.93"±0.5" [176.1mm±12.7mm]

6.93"±0.5" [176.1mm±12.7mm]

1.34" [34mm]

9.45" [240mm]

9.10" [231mm]

8.8" [224mm]

1.32" [33.5mm]

R0.08" [2.1mm]

2.05" [52mm]

Tolerance=0.02"

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Accessories

Test switch wire

φ 0.33''[8.3mm]

φ 0.61''[15.5mm]

0. 79±0.12''[20±3mm]

Black

Red

0. 4±0.12''[10±3mm]

24.2±0.2''[615±5mm]

2/22 Stranded CMP/CL2P UL Standard 13 and 444,
NEC Articles 725 and 800
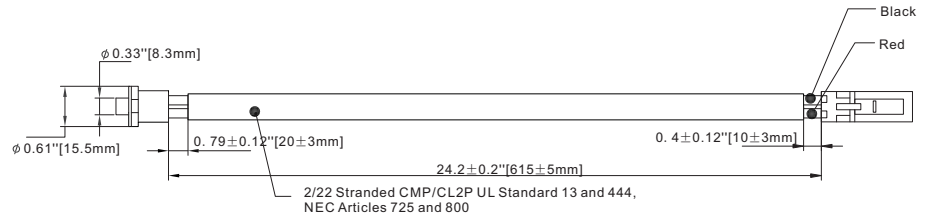
Optional Accessories

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

.92''[23.3mm]

.6''[15mm]

24''[615mm]

0.6''[15mm]

Black

Red

Switch

2/22(black/red) Stranded CMP/CL2P UL Standard
13 and 444, NEC Articles 725 and 800, white jacket
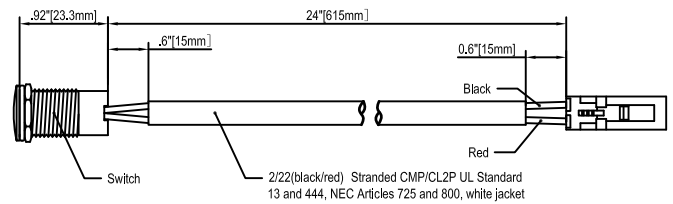
Overall Switch Dimension

Ø.36''[Ø9.1mm] LED Lamp

Ø.3''[Ø7.6mm] Metal cap

0.621''[15.78mm]

0.544''[13.82mm]

0.06''[1.6mm]

0.88''[22.4mm]

O-ring Seal

Ø.54''[13.8mm]

Ø.472''[Ø12mm]

0.31'' Max.[8mm Max.]
Panel Thickness

Mounting hole: ø0.472'' - 0.492''
[ø12mm-12.5mm]

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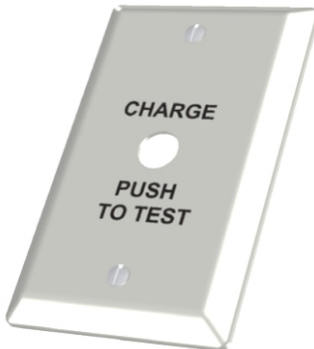Page 3 of 8
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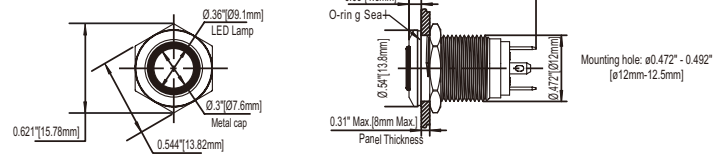
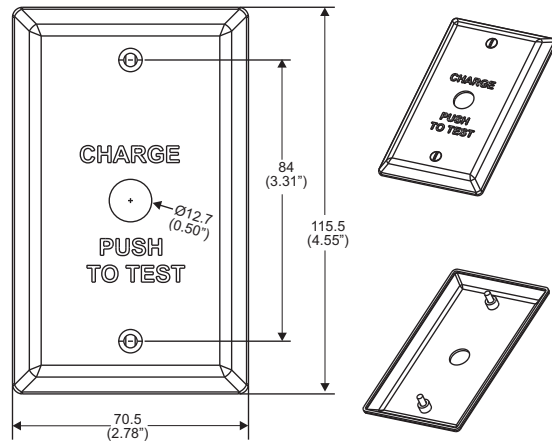## Optional Accessories

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

CHARGE PUSH TO TEST

Ø12.7 (0.50")
84 (3.31")
115.5 (4.55")
70.5 (2.78")

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

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Lithium   RoHS COMPLIANT   BC   c UL us LISTED E477042

Wiring Diagram

WHT(N)
BLK/Red(L)
HOT(120V ~ 277V)
WHT/BLK(N-OUT)
FHSCP-UNV-16W-L-SD-HV
test switch
BATTERY CONNECTOR
WALL SWITCH
WHT
BLK
LED DRIVER
MUST BE GROUNDED
RED (From LED driver)
BLU
BLU/WHT
RED/WHT
LEDARRAY
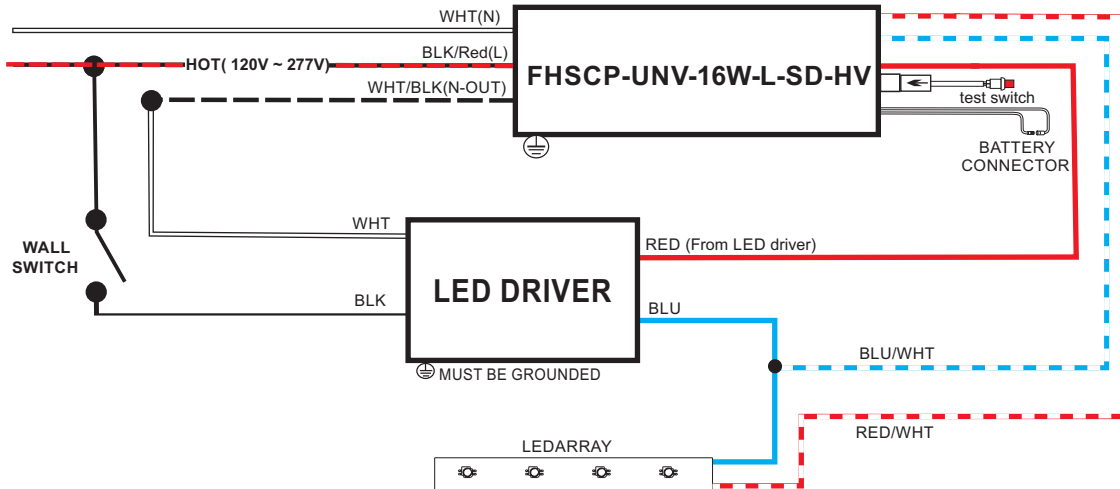
Wiring Diagram (Emergency Only)

WHT(N)
BLK/Red(L)
HOT(120V ~ 277V)
WHT/BLK(N-OUT)
FHSCP-UNV-16W−L-SD-HV
test switch
BATTERY CONNECTOR
RED (From LED driver)
BLU/WHT
RED/WHT
LEDARRAY

Specifications subject to change without notice.
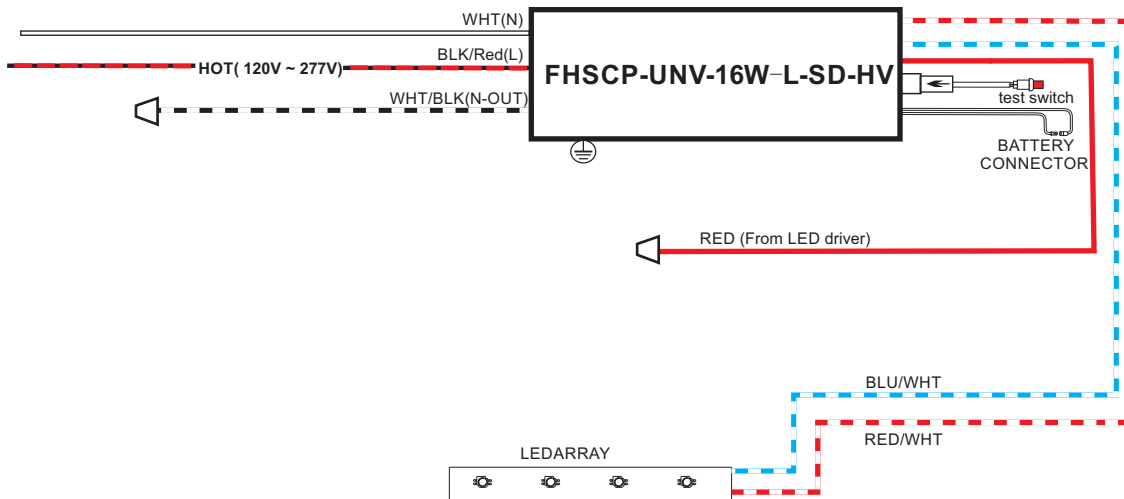
FHSCP-UNV-16W-L-SD-HV

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 PACK not found.(Including Self-test/self-diagnostic)
● Flashing Red, 1s on / 1s off	Battery PACK fault.（Including Self-test/self-diagnostic)
● Flashing Green, 1s on / 1s off	Self-Diagnostic test underway
● Slow Flashing Green, 0.1s on / 3s off	Normal working in EM mode.（Including Self-test/self-diagnostic)
● Flashing Red, 4s on / 4s off	No load or output over voltage protection. (Including Self-test/self-diagnostic)
● Slow Red	Over current protection.（Including Self-test/self-diagnostic)
● Flashing Red, 0.5s on / 3s off	Self-diagnose process current fault or Battery voltage <87.5%.
● Flashing Green, 2s on / 0.5s off	Self-Diagonstic Enabled
● Flashing Green, 0.5s on / 2s off	Self-Diagonstic Disabled

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 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 more than three (3) seconds in the monthly check mode.

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. 2s ON/0.5s OFF stands for Enabled. 0.5s ON/2sOFF stands for Disabled.

Turn Off EM Output:
Press and hold the test switch for more than 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.

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Lithium   RoHS COMPLIANT   BC   c UL us LISTED E477042

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 16W, the driver need to be mounted on a heat conductive surface of at least 100cm². 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

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Part Number Matrix

FHS	CP	UNV	16	L	SD	HV
LED Driver	Driver Type	Input Voltage	Max Output Power	Case Type	Special Features	Special Features
FHS = FireHorse HotSpot Driver	CP = Constant Power	UNV = 120V-277V	16W = 16 Watts	L = Long Case	SD = Self Diagnostic	HV = Class One Output

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

Packaging

Master Carton
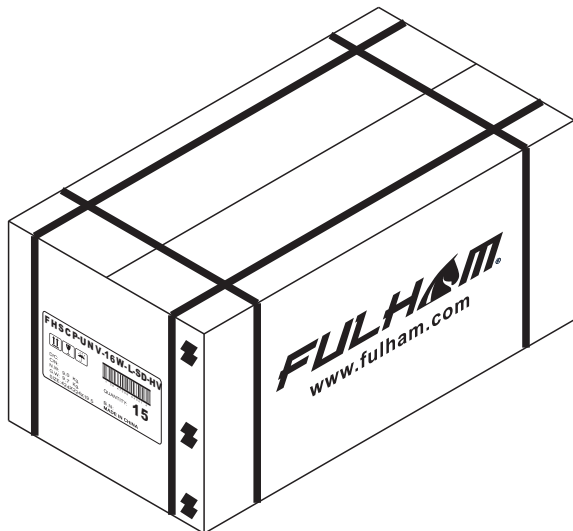
OUTER DIMENSION		
L	W	H
14.13"(359mm)	13.98"(354mm)	7.60" (193mm)
Net Weight	Gross Weight	QUANTITY
20.28lbs. (9.2kg.)	23.15lbs. (10.5kg)	16pcs.

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