HOTSPOT FULHAM

FHSCP-UNV-10W-BLS-SD

Emergency LED Driver

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

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

General Specifications

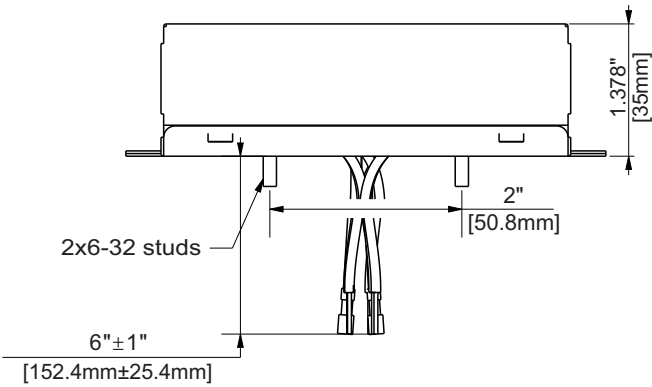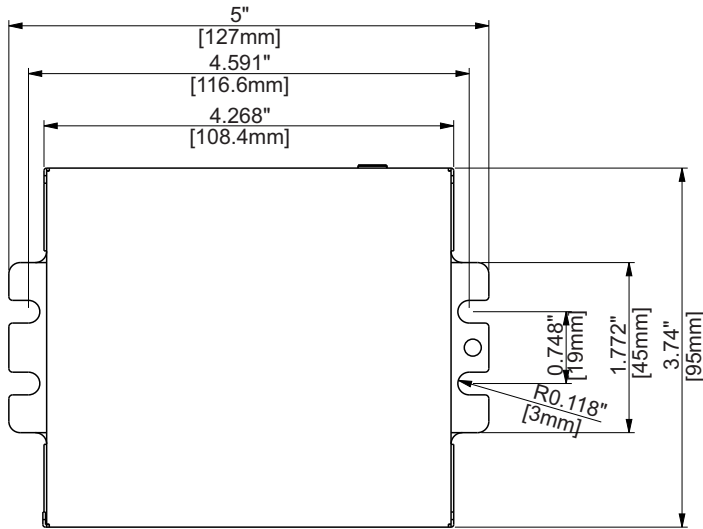|	
Input Voltage / Frequency	120-277V~, 50/60Hz
Input Current	0.1A Max
Input Power	5W Typical
Maintain Power	<0.85W
Input Power Pass-Through Rating (AC Driver Line)	5A
Max Output Rating (LED+ LED-Terminal)	3A Max
	55V Max
Output Power	10W
Voltage Range	15-55V ⎓
Current Rated	181-666mA
Number of Output 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
	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	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 @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

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Mechanical Data

Side View

2x6-32 studs

2"
[50.8mm]

1.378"
[35mm]

6"±1"
[152.4mm±25.4mm]

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

Front View

5"
[127mm]

4.591"
[116.6mm]

4.268"
[108.4mm]

0.748"
[19mm]

1.772"
[45mm]

3.74"
[95mm]

R0.118"
[3mm]

Back View

ø0.732"
[18.6mm]

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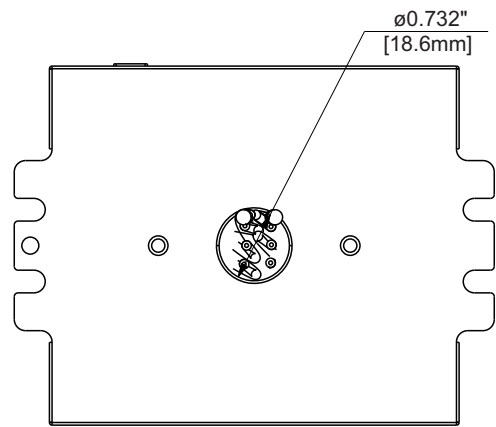
Accessories

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

.92"[23.3mm]

24"[615mm]

.6"[15mm]

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
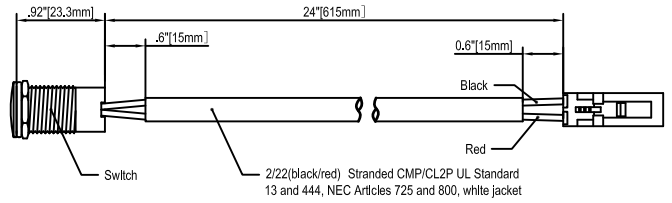
Overall Switch Dimension

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-rin g Sea

Ø.54"[13.8mm]

Ø.472"[Ø12mm]

0.31" Max.[8mm Max.]

Panel Thickness

Mounting hole: ø0.472" - 0.492"
[ø12mm-12.5mm]
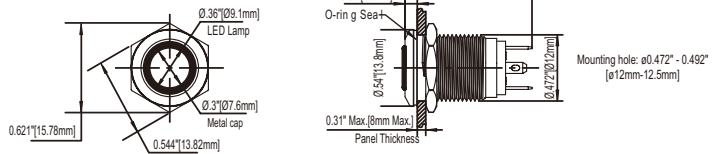
Wall Plate: FHSWLPWH

Wall plate and screw color:
white with black lettering

Wall Plate: FHSWLPPWH(Pure White Wall Plate)

CHARGE

PUSH
TO TEST

Ø12.7
(0.50")

84
(3.31")

115.5
(4.55")

70.5
(2.78")
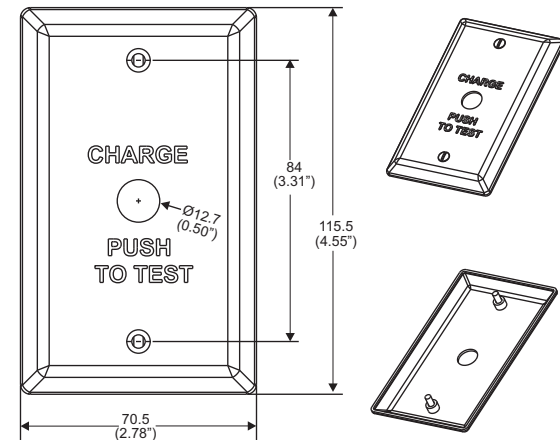
1.“Charge push to Test”plate
2. (2) 6-32 x ½"LG mounting screws
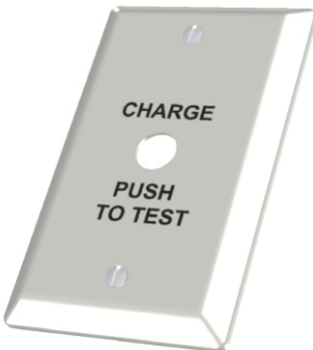
Wall plate and screw color:
Pure white with black lettering

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RoHS COMPLIANT   BC   c UL us LISTED E477042

Lithium

Wiring Diagram

WHT(N)
BLK/Red(L)
HOT(120V ~ 277V)
WHT/BLK(N-OUT)

test switch

FHSCP-UNV-10W–BLS-SD

BATTERY CONNECTOR

WALL SWITCH

WHT

LED DRIVER

RED (Form LED driver)

BLU

BLK

BLU/WHT

⏚ BALLAST MUST BE GROUNDED

RED/WHT

LEDARRAY

Wiring Diagram (Emergency Only)

WHT(N)
BLK/Red(L)
HOT(120V ~ 277V)
WHT/BLK(N-OUT)

test switch

FHSCP-UNV-10W–BLS-SD

BATTERY CONNECTOR

RED (Form LED driver)

BLU/WHT

RED/WHT

LEDARRAY

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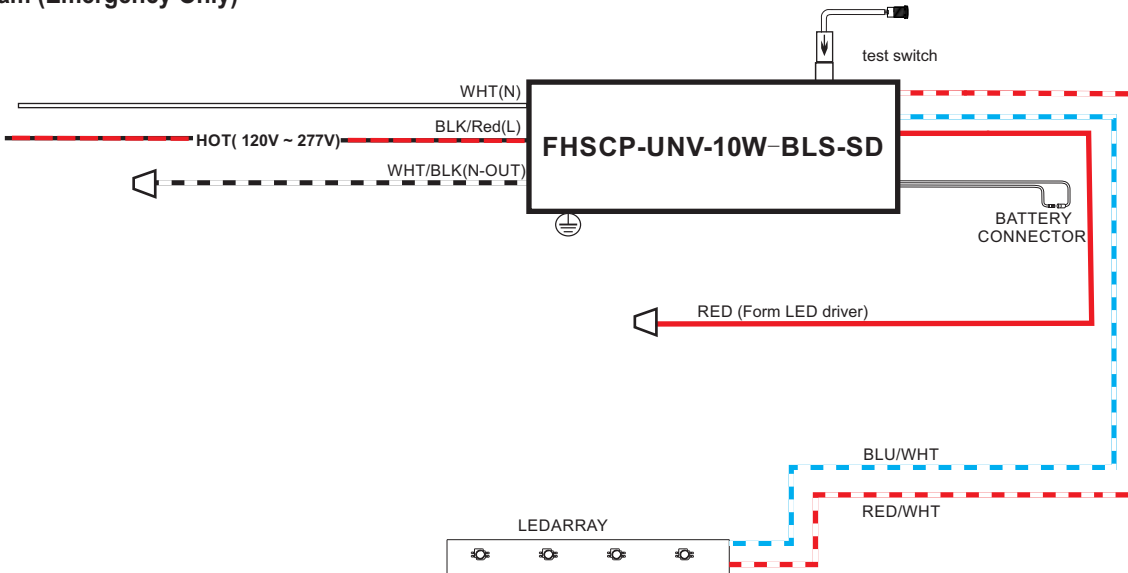
SELF-DIAGNOSTIC INSTRUCTIONS / OPERATION:

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.

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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

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FHSCP-UNV-10W-BLS-SD

RoHS COMPLIANT BC c(UL)us LISTED E477042

Lithium

Part Number Matrix

FHS	CP	UNV	10	BLS	SD
LED Driver	Output Type	Input Voltage	Power	Characteristic	Special Features
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
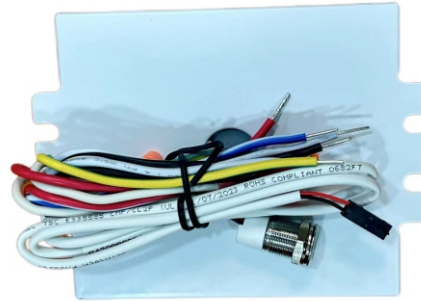
Packaging

Master Carton
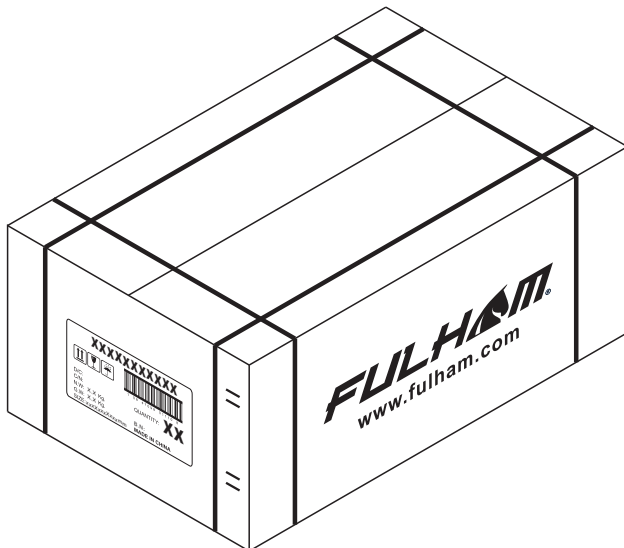
OUTER DIMENSION		
L	W	H
18.27"(464mm)	14.33"(364mm)	7.48"(190mm)
Net Weight	Gross Weight	QUANTITY
11.02lbs 5kg	14.33lbs 6.5kg	10pcs

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