FHSCP-UNV-10P-S-SD

Programmable Emergency LED Driver

- Emergency LED Driver
- Input Voltage: 240Vac ± 20%
- Output Voltage Range: 15-55V ⎓
- Output Current: 55-666mA

- Output Wattage: 3W-10W (Factory default 10W)
- Output Type: LED Class 2, Class 2
- Number of Output Channels: 1 Channel

General Specifications

Input Voltage / Frequency	120-277V~, 50/60Hz
Rated Input Voltage	240Vac ±20%, 50/60Hz
Input Current	0.1A Max
Input Power	5W Max
Standby Input Power	<0.85W
Input Power Pass-Through Rating (AC Driver Line)	2A
Max Output Rating (LED+ LED- Terminal)	3A, 55V Max
Output Type	LED Class 2,Class 2
Output Power	3W-10W
Voltage Range	15-55V ⎓
Current Rated	55-666mA
Number of Output Channels	1Channel
Program Port	I²C
Input Surge Protection	Line - Neutral 1kV, Line & Neutral - Ground 2kV and 3KV or 6KV Ring Wave
Protections	Output Open Protection
	Output Overload Protection
	Output Short Circuit Protection
	Output Temperature Protection
Emergency Mode	90 Minutes Min
RFI/EMI	FCC Part15A EN55015
Ambient Operating Temperature Rang	10°C To 55°C (50°F To 131F°) (>7W)
	0°C To 55°C (32°F To 131F°) (≤7W)
Sound Rating	A
Battery Type	Lithium
Battery Voltage	11.1V
Pack Capacity	2400mAh
Battery Rating	25.92Wh
Battery Count	3 Cells
Battery Recharge Time	12 Hours
Battery Discharge Time	Min 1.5 Hours
Test Switch Remote Mounting Distance	20' (6m) Max.
Service Life	50,000 hours
Warranty	5 years
Safety Standard	EN61347-1, EN61347-2-7, EN62384, EN60598-2-22, EN50172
	CEC, MSDS, DGM EEE C62.41.2-2002
	EN61000-3-2, EN61000-3-3, EN61000-4-2, EN61000-4-3, EN61000-4-4
	EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11, EN61000-4-29

HOTSPOT FULHAM

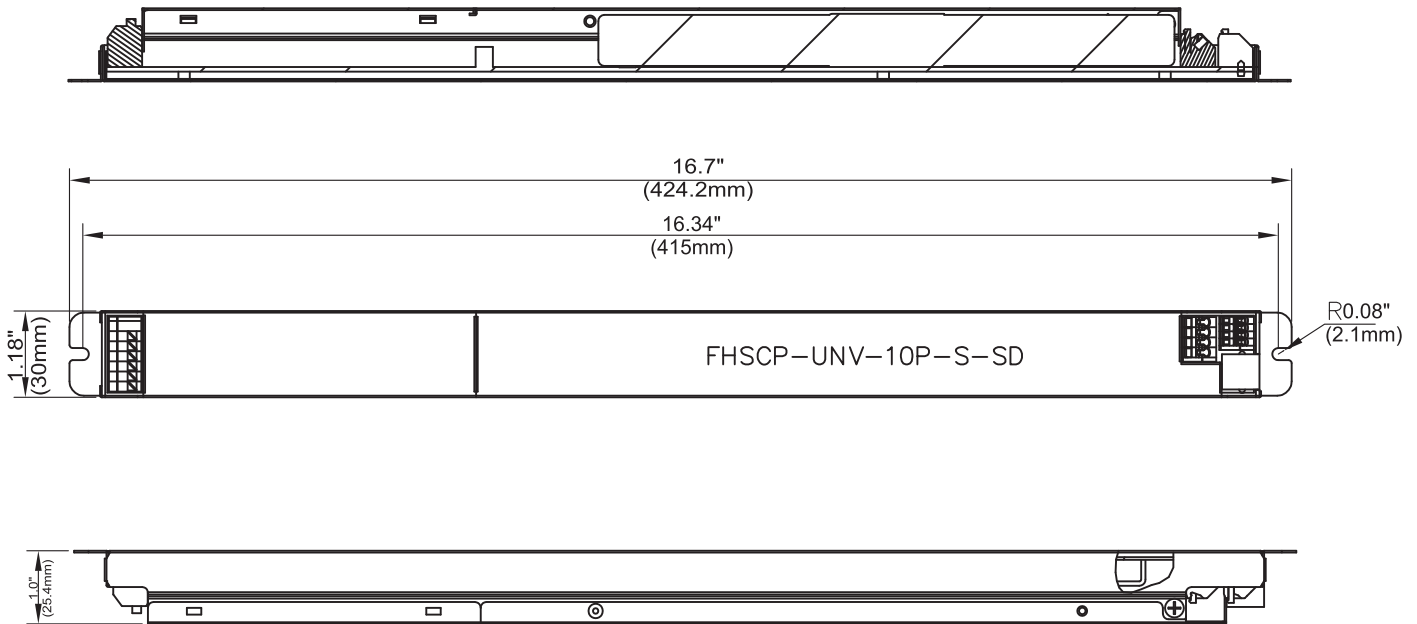# FHSCP-UNV-10P-S-SD

Mechanical Data

Overall Dimensions	
Length	16.7" (424.2mm)
Width	1.18" (30mm)
Height	1.0" (25.4mm)

16.7"
(424.2mm)

16.34"
(415mm)

1.18"
(30mm)

FHSCP−UNV−10P−S−SD

R0.08"
(2.1mm)

1.0"
(25.4mm)

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Accessories

Test Switch (Included)

BLACK
RED

ø0.33" (ø8.3mm)
ø0.61" (ø15.5mm)
0.79" (20mm)
24.21" (615mm)
0.39" (10mm)
0.35" (9mm)

2/22 Stranded CMP / CL2P UL Standard 13 and 444,
NEC Articles 725 and 800，黑/红双芯线，白色护套
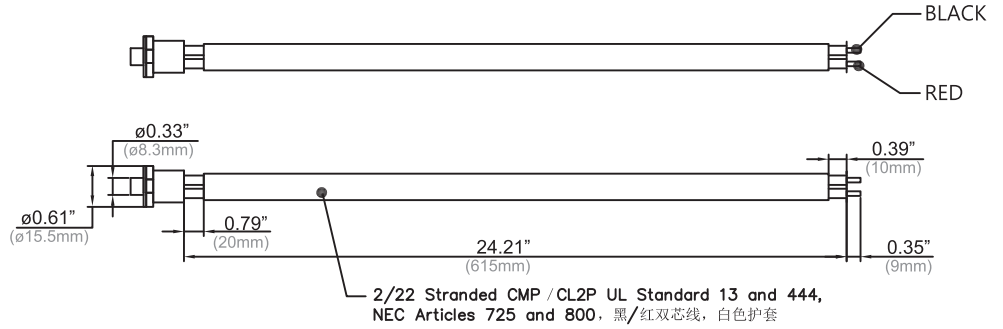
Wet Location Test Switch: FHS-TSTWL-BC (Optional)

24.21" (615mm)
0.59" (15mm)
0.78" (20mm)
PP,White
Red
Black
Black
Red
0.35" (9mm)

Stainless steel push button switch (normally open):
2/22 Stranded CMP / CL2P UL Standard 13 and 444,
NEC Articles 725 and 800，Black/Red cord, White jacket
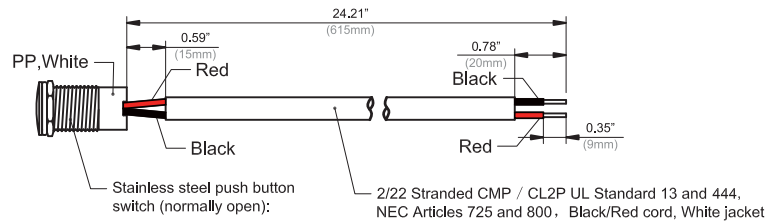
Overall Switch Dimension

Ø.36"[Ø9.1mm] LED Lamp
Ø.3"[Ø7.6mm] Metal cap
0.621"[15.78mm]
0.544"[13.82mm]

0.06"[1.6mm]
O-ring Seal
0.88"[22.4mm]
Ø.54"[13.8mm]
Ø.472"[Ø12mm]
0.31" Max.[8mm Max.] Panel Thickness
Mounting hole: ø0.472" - 0.492" [ø12mm-12.5mm]
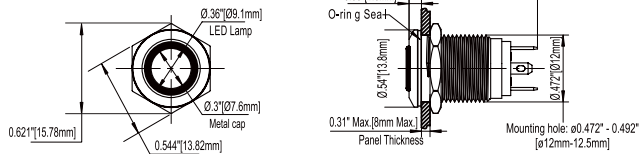
Wall Plate: FHSWLPWH

Wall plate and screw color: white with black lettering

CHARGE
Ø12.7 (0.50")
+
PUSH TO TEST
84 (3.31")
115.5 (4.55")
70.5 (2.78")
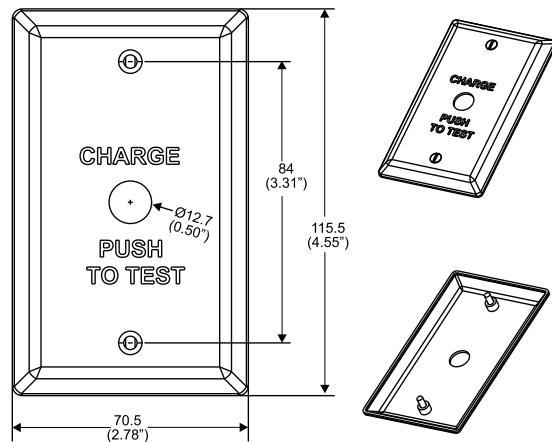
1. "Charge push to Test" plate
2. (2) 6-32 x ½" LG mounting screws

FHSCP-UNV-10P-S-SD

Wiring Diagram
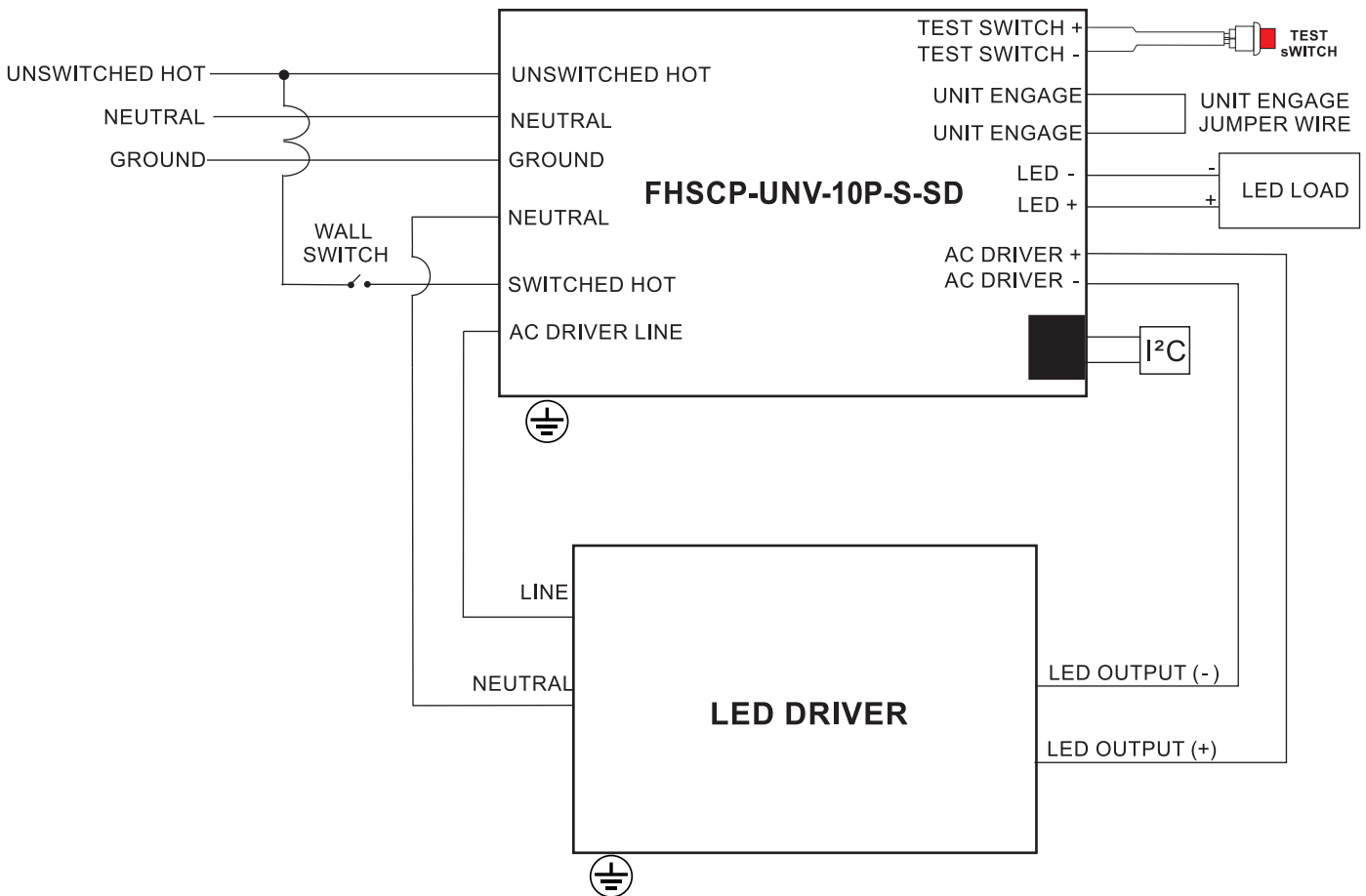
NC
UN-SWITCHED HOT
NEUTRAL
GROUND
NEUTRAL
SWITCHED HOT
AC DRIVER LINE

(0.75~1)mm²
18AWG 9 mm
Cu only

AC DRIVER-	TEST SWITCH+
AC DRIVER+	TEST SWITCH-
LED-	UNIT ENGAGE
LED+	UNIT ENGAGE

(0.75~1)mm²
18AWG 9 mm
Cu only

(0.35~0.5)mm²
22AWG 9 mm

RJ11

TOP VIEW

UNSWITCHED HOT
NEUTRAL
GROUND

WALL SWITCH

UNSWITCHED HOT
NEUTRAL
GROUND
NEUTRAL
SWITCHED HOT
AC DRIVER LINE

FHSCP-UNV-10P-S-SD

TEST SWITCH +
TEST SWITCH -
UNIT ENGAGE
UNIT ENGAGE
LED -
LED +
AC DRIVER +
AC DRIVER -

TEST sWITCH

UNIT ENGAGE JUMPER WIRE

LED LOAD

I²C

LED DRIVER

LINE
NEUTRAL
LED OUTPUT (-)
LED OUTPUT (+)

FHSCP-UNV-10P-S-SD

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 above 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
🔴 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 10 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.
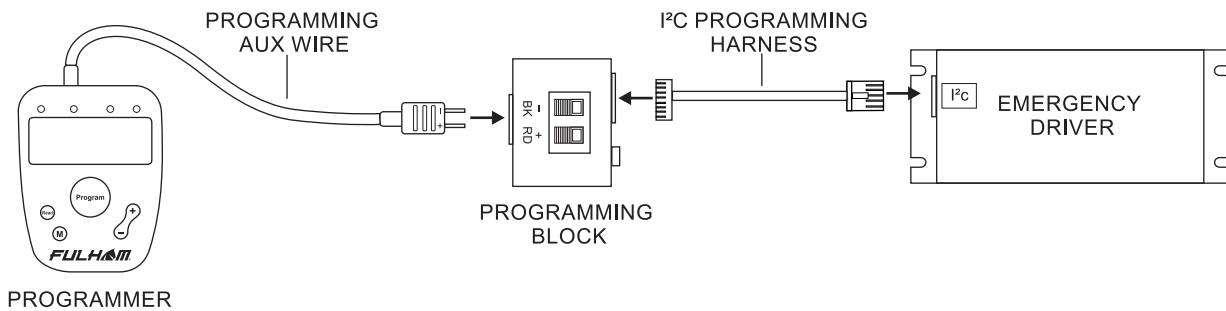
FHSCP-UNV-10P-S-SD

Programming:

The FHSCP-UNV-10P-S-SD is programmed through the I²c port on the emergency driver with the TPSB-100 programmer.
Unless otherwise programmed the output will self-program to the maximum rating of the battery.
Customer must use the I²c programming harness and programming block that comes with the TPSB-100.

Programming Wire Diagram

Programming Features

- Output EM Power - 3W to 10W
* Enable / Disable Self-Diagnosic

SmartSet Software

TPSB-100 SmartSet
Controller

* For more detailed programming instructions please see our Programming Instructions and Design Guide found
  on our website:

- https://www.fulham.com/PDFs/SpecSheets/Fulham-Design-Guide-Programmable-Drivers.pdf

FHSCP-UNV-10P-S-SD

Guidelines

Grounding
- Driver must be grounded by means of the Driver case.

Over temperature protection
- The Fulham Hotspot Plus LED drivers are protected against thermal overload. If the temperature limit is exceeded, the output current is reduced.

LED load
- Fulham Hotspot Plus 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 20W, 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 15ft 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-10P-S-SD

RoHS COMPLIANT CE

Part Number Matrix

FHS	CP	UNV	10	P	S	SD
LED Driver	Output Type	Input Voltage	Power	Characteristic	Case Type	Special Features
FHS = Fire Horse EM Driver	CP= Constant Current	UNV= 120V-277V	10= 10W	P= Programmable	S= Stick	SD= Self Diagnostic

Product Image: LED Driver

FHSCP-UNV-10P-S-SD

Packaging

Master Carton
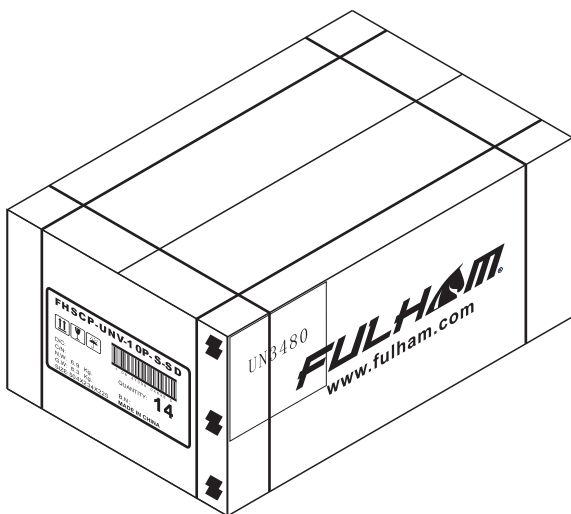
OUTER DIMENSION		
L	W	H
19.84" (504mm)	9.21"(234mm)	8.86" (225mm)
Net Weight	Gross Weight	QUANTITY
15.21lbs. (6.9kg.)	18.30lbs. (8.3kg)	14pcs.