



T1M1UNV140P-50L

IP20 

Programmable Constant Current

- Input Voltage: 120V - 277VAC 50/60Hz
- Output Current Range: 470mA - 1400mA
- Output Voltage Range: 10V - 56VDC $\equiv$
- Output Power: 50W Max.
- 0-10V Dimming
- Dimming Range: 100% -1%, 0% (Dim-to-Off)

General Specifications

Input Voltage / Frequency	120V - 277VAC 50/60Hz $\pm$ 10%
Input Current	0.53A @120V, 0.29A @240V and 0.25A @277V
Input Power	57W
Power Factor	> 0.9 under 120~277Vac input with 80~100% load condition (for all output currents)
THD	< 20% under 120~277Vac input with 80~100% load condition (for all output currents)
Efficiency	87%
Inrush Current	10A @120V
Leakage Current	Maximum 0.5mA at 277Vac, 60Hz input
Open Circuit Voltage	60V
Driver Type	Constant Current
Programming Type	Wired, TPSB-100A Programmer
Output Voltage Range	10VDC - 56VDC $\equiv$
Output Current Range	470mA - 1400mA (programmable in 10mA increments)
Output Power	50W Max.
Aux Output	12V/200mA Max.
Load Regulation	$\pm$ 2%
Line Regulation	$\pm$ 1%
Current Tolerance	$\pm$ 5% at full load condition
Turn-on Delay Time	< 0.75s at full load condition
Overshoot	< 10% at full load condition
No Load Power Consumption	< 1.5W
Ripple & Noise (pk-pk)	< 3%
Withstand Voltage	I/P - O/P, 2,800Vdc, 2mA
Dimming Type	0-10V Dimming
Dimming Range	100% -1%, 0% (Dim-to-Off)
Operating Ambient Temperature Range	-40 ~ 50°C
Storage Temperature	-40 ~ 85°C
Maximum Driver Case Temperature (Tc)	90°C
Humidity	5% to 95%
Driver Output Type / Number of Output Channels	LED Class 2 / 1 Channel
Overall Size	11.02" L x 1.20" W x 1.00" H (280 x 30.4 x 25.4mm), Mounting 10.63" (270mm)
Weight	0.61lbs (0.3kg) / Unit
Case Construction	Metal
Input / Output Connector Type	I/P: 18 AWG x 2C (30cm) ; O/P: 22AWG x 2C (30cm) ; connector
Safety / Compliance	UL8750, Class P, Type HL Suitable for Dry and Damp locations
IP Rating	IP20
EMC	FCC, 47CFR Part 15; ANSi C63.4:2009 Class B (Consumer Limit)
Protections	Over Voltage Protection Over Current Protection Short Circuit Protection Over Temperature Protection
Service Life	85,000 hours lifetime @ Tc 60°C
Warranty	5 years @ Tc 60°C from the date of manufacture



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Charts

Figure 1

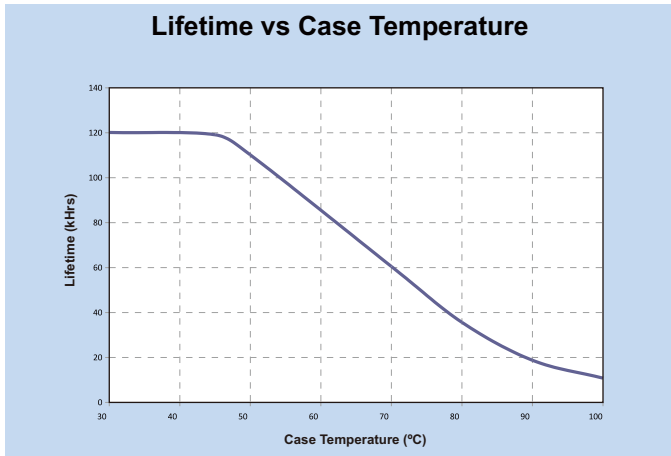


Figure 2

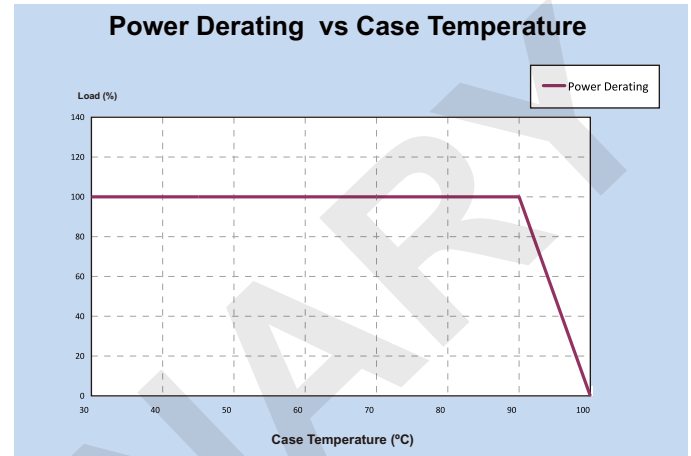


Figure 3

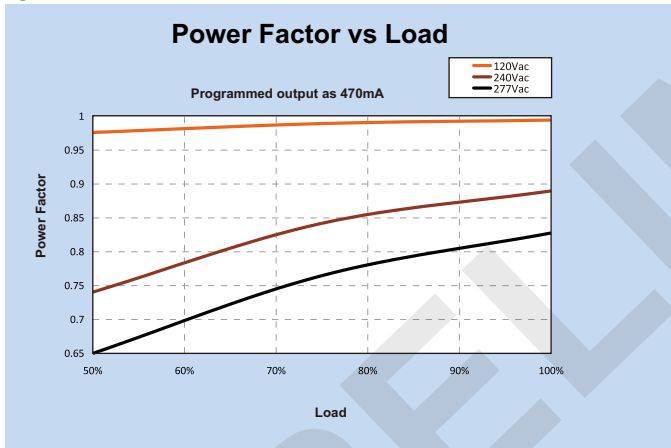


Figure 4

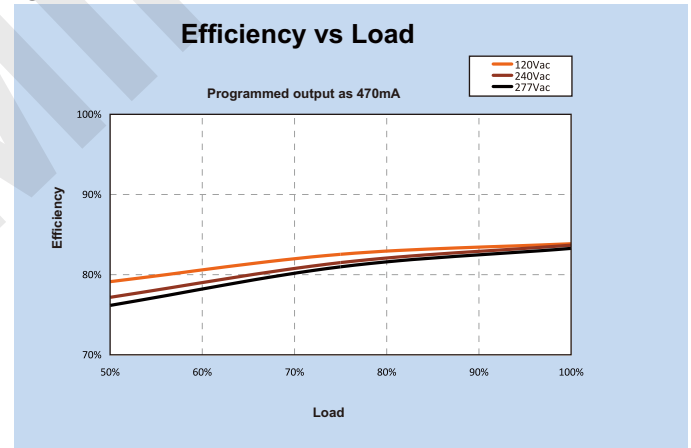


Figure 5

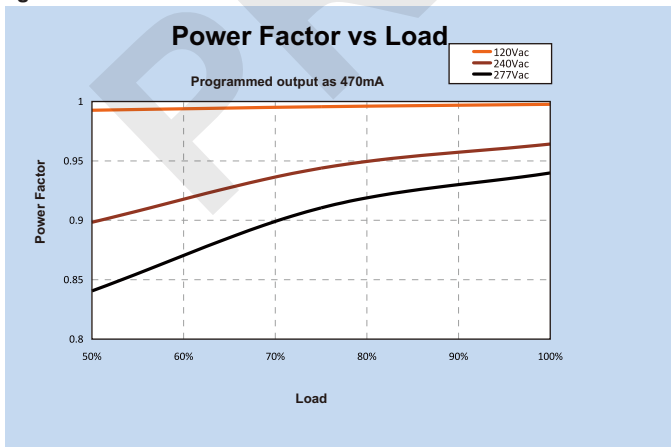
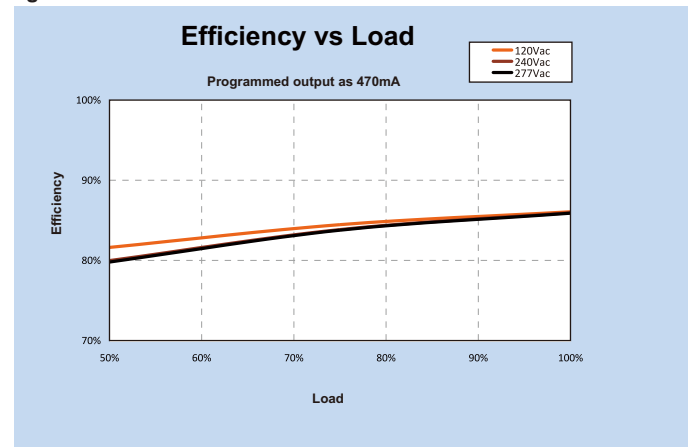


Figure 6



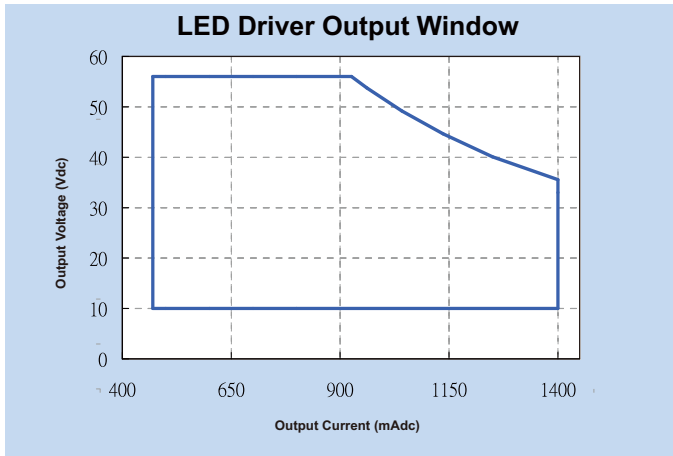


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Charts

Figure 7

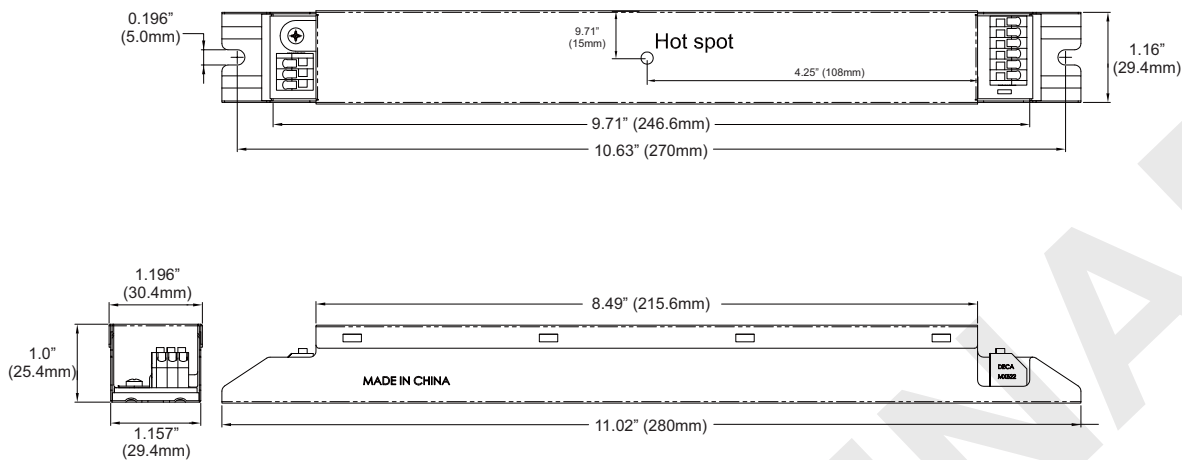




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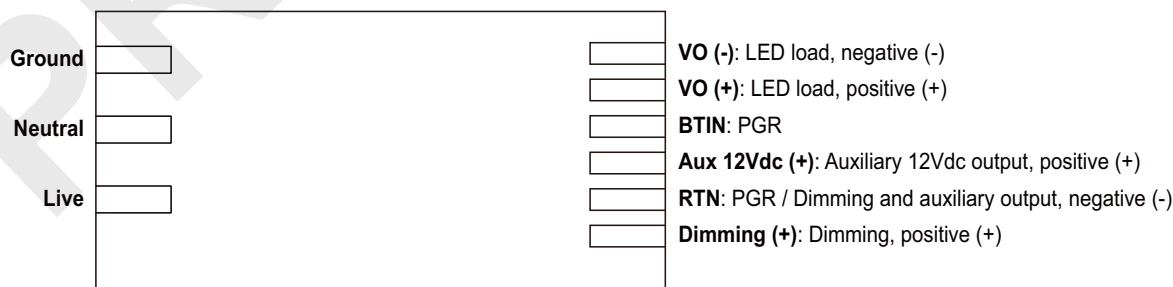
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Mechanical Drawings



Overall Dimensions	
Length	11.02" [280mm]
Width	1.20" [30.4mm]
Height	1.0" [25.4mm]
Mounting	10.63" [270mm]
Wire Length	
Input/Output	Terminal Block
0-10V Dimming	Terminal Block

Wire Diagram



NOTES :

- 1) This driver must be installed by a licensed electrician
- 2) This driver must be grounded



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Guidelines

Grounding

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

Over temperature protection

- The Fulham ThoroLED drivers is protected against thermal overload. If the temperature limit is exceeded, the output current is reduced.

LED load

- Fulham ThoroLED 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.

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 26ft with 18AWG. Contact Fulham for higher remote distance.

Service life/Lifetime

- Failure Rate Info based upon MTBF modeling: 90% survivals at end of life @ $\leq T_c$ lifetime rating.

Warranty

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



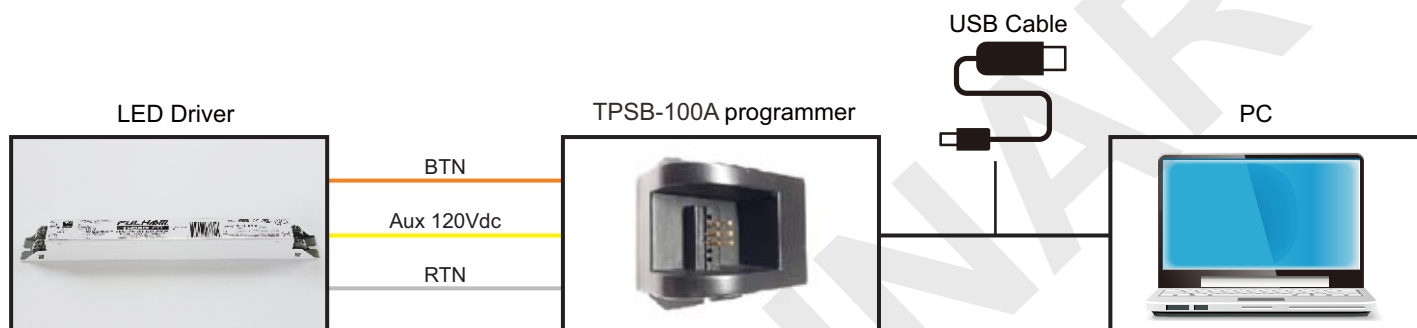
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Programing Tool

- 1) To program this LED driver use the Fulham TPSB-100A programmer.
 - 2) Please consult the user manual for instructions on using the TPSB-100A programmer.
- Note: The LED driver can only be programmed in 10mA increments.

Programming Connection Diagram





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Part Number Matrix

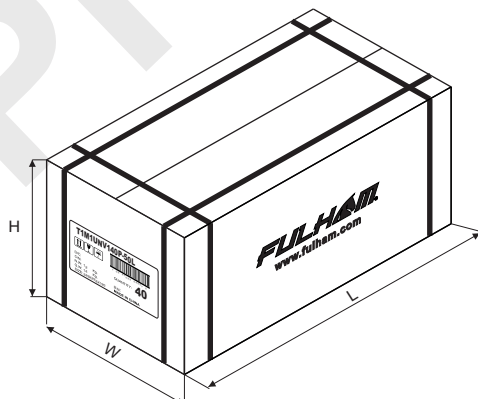
<u>T</u>	<u>1</u>	<u>M</u>	<u>1</u>	<u>UNV</u>	<u>140</u>	<u>P</u>	<u>50</u>	<u>L</u>
<u>LED Driver</u>	<u># of Control Channels</u>	<u>Dimming Control Type</u>	<u># of Control Channels</u>	<u>Input Voltage</u>	<u>Output Current</u>	<u>Characteristic</u>	<u>Max. Output Power</u>	<u>Case Type</u>
T = ThoroLED	1 = 1 Channel	M = 0-10V	1 = 1 Channel	UNV = 120V~277V	140 = 1400mA Max.	P = Programmable	50 = 50W	L = Long

Product Image



Packaging

Master Carton



OUTER DIMENSION		
L	W	H
12.59"(320mm)	11.41"(290mm)	5.11"(130mm)
Net Weight	Gross Weight	QUANTITY
26.45 lbs. (12 kg)	30.86 lbs. (14 kg)	40pcs.