

## OPTOTRONIC Outdoor Programmable LED Power Supplies

79371 / OT50W/UNV/1250C/2DIMLT2/P6



The OPTOTRONIC programmable dimmable family consists of highly efficient, constant current LED power supplies for outdoor applications. One click programming through the OPTOTRONIC programmer allows OEMs to configure the output current with 1mA resolution. Also fully customizable by the OEM are the proprietary OSRAM AstroDIM and LEDset features. AstroDIM is autonomous dimming for night-time power reduction based on an internal timer that can be set for an entire year. The LEDset feature automatically sets the output current based on the module that is connected. These power supplies are available in dimming to 10% with built-in 0-10V dimming, enables direct integration and operation with standard dimmers, sensors, as well as energy and light-management systems.



### Product family features

- Programmable with 1mA resolution to perfectly match LED load and maximize performance
- Dimming down to 10% on 0-10V dimmers
- Integrated OEM programmable features include - AstroDIM - LEDset - Constant lumen maintenance - LED thermal protection
- Programming doesn't require powering up or connecting the power supply to AC line voltage
- High levels of line transient protection for outdoor applications (6kV)
- UL Damp and Wet Rated
- IP66 Rated
- Available in both: - Universal Input Voltage 120-277 V<sub>AC</sub> 50/60 Hz 347-480 V<sub>AC</sub> 50/60 Hz

### Areas of application

- Architectural building mounted
- Bollards
- Cobra heads
- Decorative landscape lighting
- Industrial high bay
- Mini wall packs
- Shoe box

Technical data

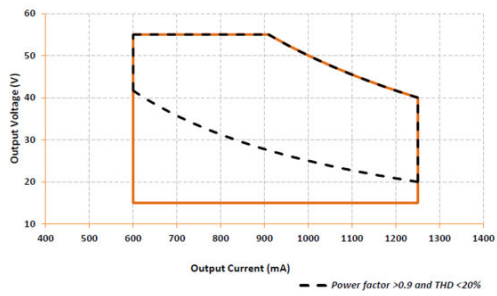
General product information

Product Name	OT50WUNV1250C2DIMLT2P6 20/CS 1/SKU
Ordering Abbreviation	OT50W/UNV/1250C/2DIMLT2/P6
Brand Name	OSRAM
General Description	50W Programable High Current Outdoor LED Power Supply UNV 2DIM
Programmable Features	Output current, Dimming level, LED thermal protection, AstroDIM, LEDSet Gen2, Constant Lumen output, End of life indicator
Programming Tool	51645
Type	Constant Current, Class2
Product Number	79371

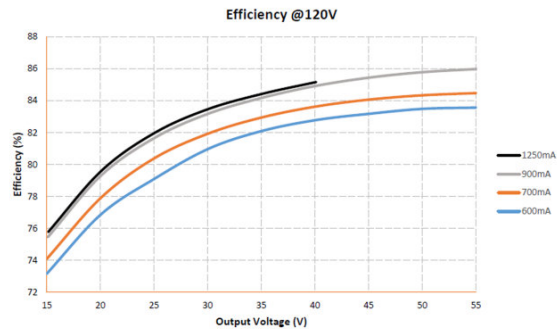
Electrical data

Nominal Total Max Wattage	50 W
Nominal Voltage	120-277 V

OPERATING RANGE

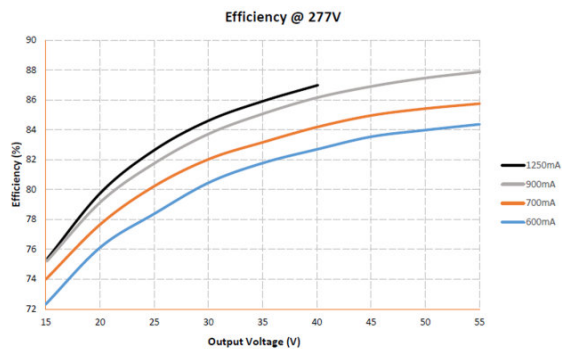


EFFICIENCY VS OUTPUT VOLTAGE

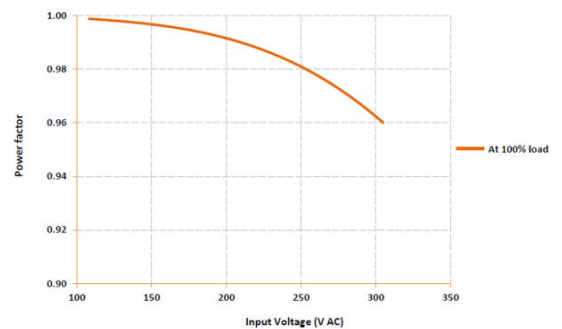


79371 - OT50W - Operating Range

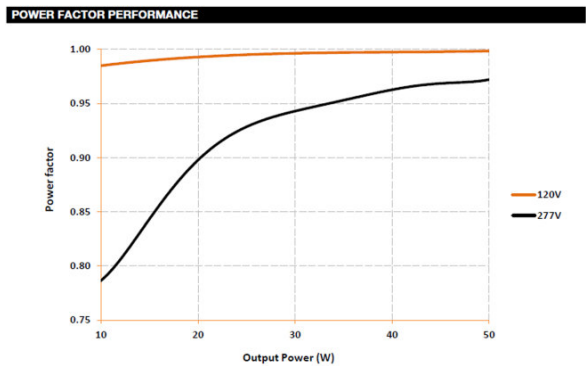
79371 - OT50W Efficiency vs Output Voltage



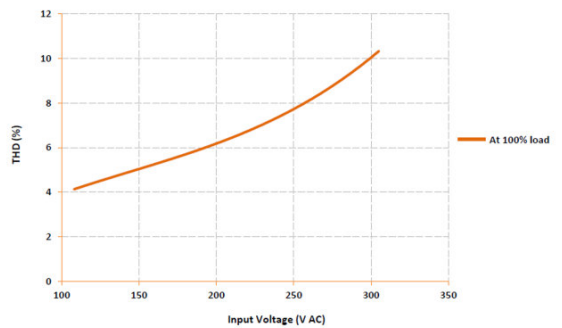
79371 - OT50W - Efficiency vs Output Voltage - 277V



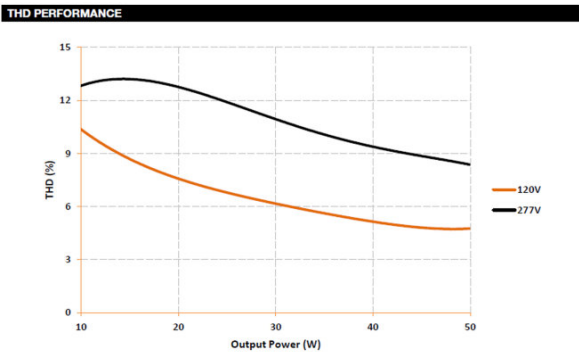
79371 - OT50W - Power Factor Performance Input Power



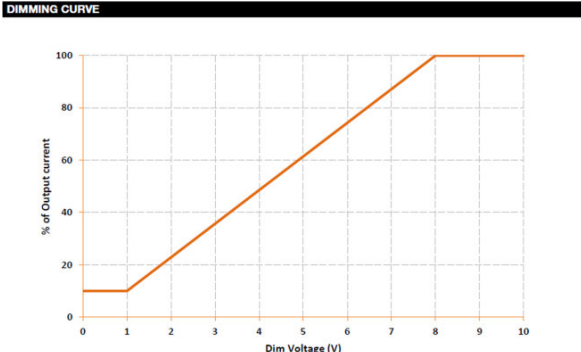
79371 - OT50W - Power Factor Performance Output Voltage



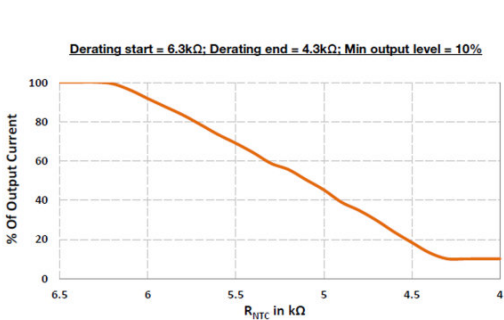
79371 - OT50W THD Performance Input Power



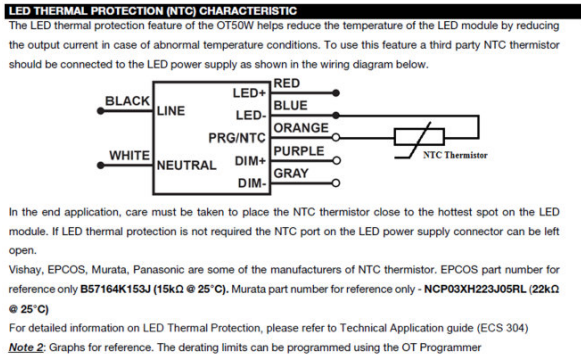
79371 - OT50W THD vs Performance Output Voltage



79371 - OT50W - Dimming Curve

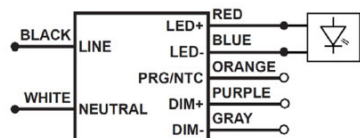


79371 - OT50W LED Thermal Protection Output Current



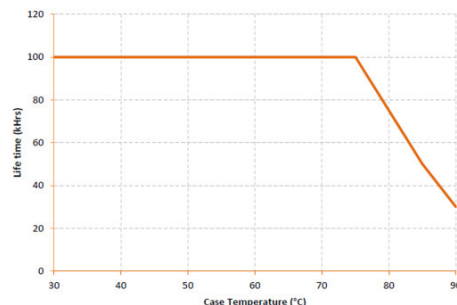
79371 - OT50W LED Thermal Protection Wiring Diagram

## WIRING DIAGRAM



**Note 1:** Maximum suggested remote mounting distance is 32 feet. For additional information on further distances and EMI compliance reference application note LED126.

## LIFETIME VS TCASE



79371 - OT50W - Wiring Diagram

79371 - OT50W - Lifetime Case Temperature

## Electrical specifications - Dimming

Dimming Control	0 – 10V (Isolated), AstroDIM <sup>1)</sup>
Dimming Range	10-100%
Dimming Type	Analog

<sup>1)</sup> Class 2 or non-Class 2 wiring allowed. CAUTION: More than one power supply present.

## Electrical specifications - Input

Efficiency @ Full load 120V	≥85%
Efficiency @ Full load 277V	≥87%
Frequency Range (Hz)	50 – 60 Hz (+/- 10%)
Input Current (A) 120V	0.5
Input Current (A) 277V	0.22
Input Voltage (VAC)	120V-277V (+/- 10%)
Inrush Current (Apk, T@50% of Apk) 120V	29A,179μs
Inrush Current (Apk, T@50% of Apk) 277V	69A,191μs
Power Factor @ Full load 120V	>0.99
THD @ Full load 120V	<10%
THD @ Full load 277V	<06%

## Electrical specifications - Output

LED Power-Up Time	< 1sec
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## Product datasheet

Line Regulation	< 5%
Load Regulation	< 5%
Max. Output Power (W)	50W
Output Current (mA)	600-1250mA (1mA step)
Output Ripple Current	<25% @ 1250mA
Output Short-Circuit Protection	Yes, non - latching
Output Voltage (VDC)	15-55VDC (Class2)
Over Load Protection	Yes, power fold back @ 54W, non - latching
Over Temperature Protection	Yes, Foldback at 100°C, Auto Recovery
Over Voltage Protection	Yes, non - latching

### Environmental specifications

Case Temperature (Tc)	85°C <sup>1)</sup>
EMI Compliance	FCC Part 15 Class A
IP Rating	IP66
Max. Relative Humidity (%)	95% non-condensing
Max. Storage Temp.	70°C
Sound Rating	Class A
Transient Protection	ANSI C62.41 Cat.B
UL Environmental Rating	Dry & Damp, Type HL
UL File number	E320395

<sup>1)</sup> Warranty applicable only at 85°C

### Packaging Information

Item number	EAN/UPC	Packaging	Quantity	Outside dimensions l x w x h	Gross weight
79371	4052899158474	Unpacked (SKU)	1	6.6 in x 1.7 in x 1.2 in	0.8 lb
79371	4052899156692	Shipping box (Case)	20	11.3 in x 7.3 in x 6.3 in	17.6 lb

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

### Disclaimer

For information on specific product warranties, visit [www.osram.us/warranty](http://www.osram.us/warranty). Specifications are subject to change without notice.

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