

OPTOTRONIC Outdoor Programmable LED Power Supplies

79369 / OT100W/UNV/1250C/2DIM/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_{AC} 50/60 Hz 347-480 V_{AC} 50/60 Hz

Areas of application

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

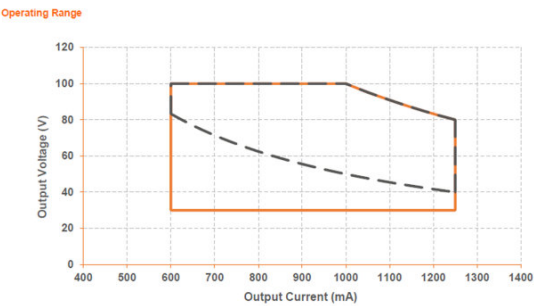
Technical data

General product information

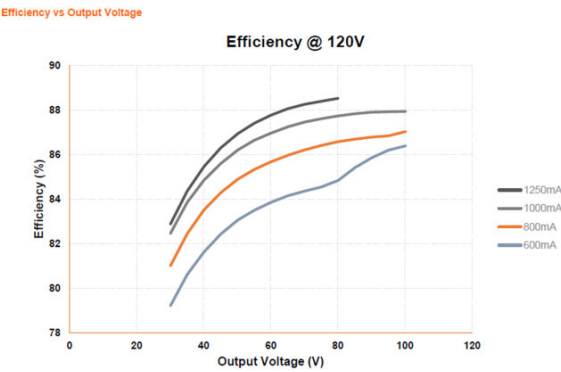
Product Name	OT100WUNV1250C2DIMP6 20/CS 1/SKU
Ordering Abbreviation	OT100W/UNV/1250C/2DIM/P6
Brand Name	OSRAM
General Description	100W Programable High Current Outdoor LED Power Supply UNV 2DIM
Programmable Features	Output current, Dimming level, LED thermal protection, AstroDIM, LEDSet Gen2, Constant Lumen output, End of life indicator
Programming Tool	51645
Type	Constant Current
Product Number	79369

Electrical data

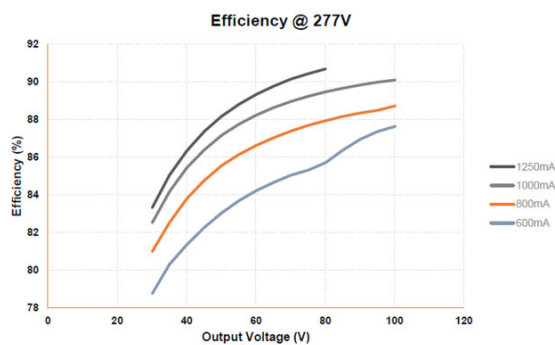
Nominal Total Max Wattage	100 W
Nominal Voltage	120-277 V



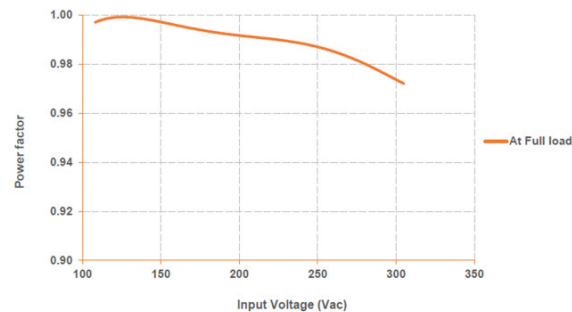
79369 - OT100W - Operating Range



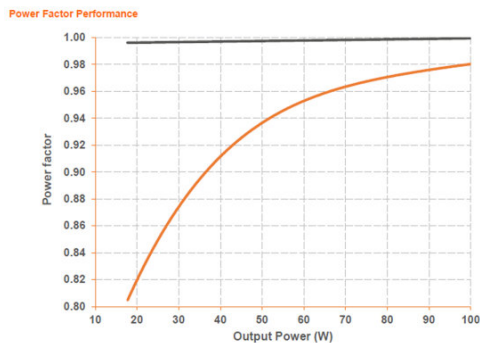
79369 - OT100W Efficiency vs Output Voltage



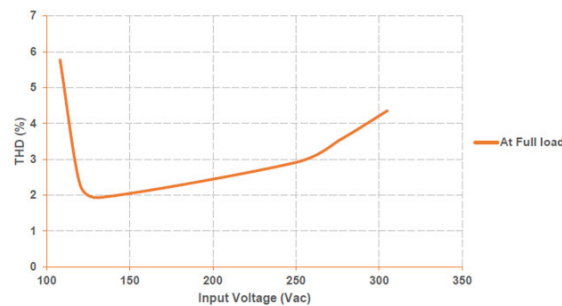
79369 - OT100W - Efficiency vs Output Voltage - 277V



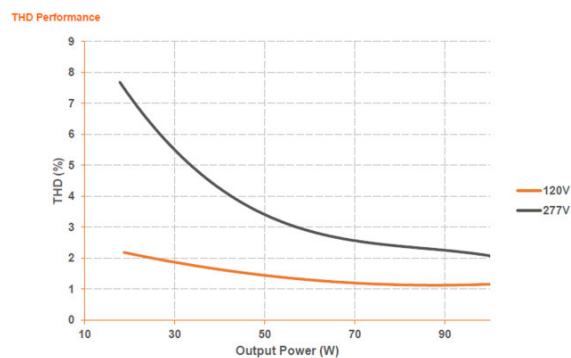
79369 - OT100W - Power Factor Performance Input Power



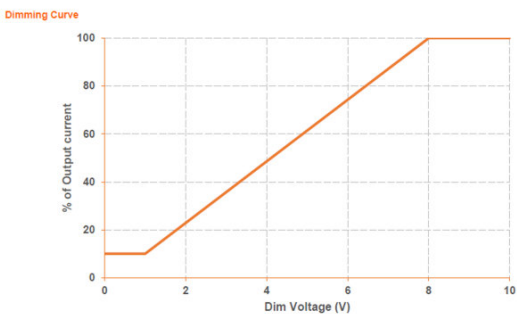
79369 - OT100W - Power Factor Performance Output Voltage



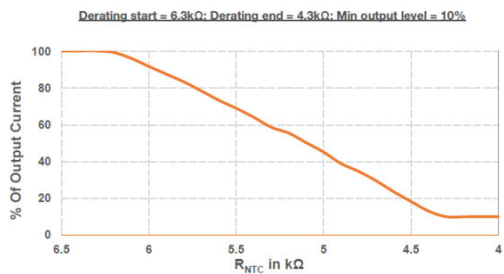
79369 - OT100W THD Performance Input Power



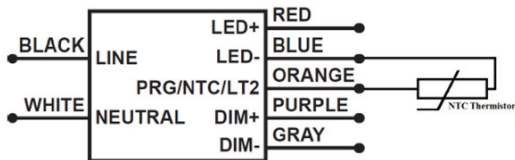
79369 - OT100W THD vs Performance Output Voltage



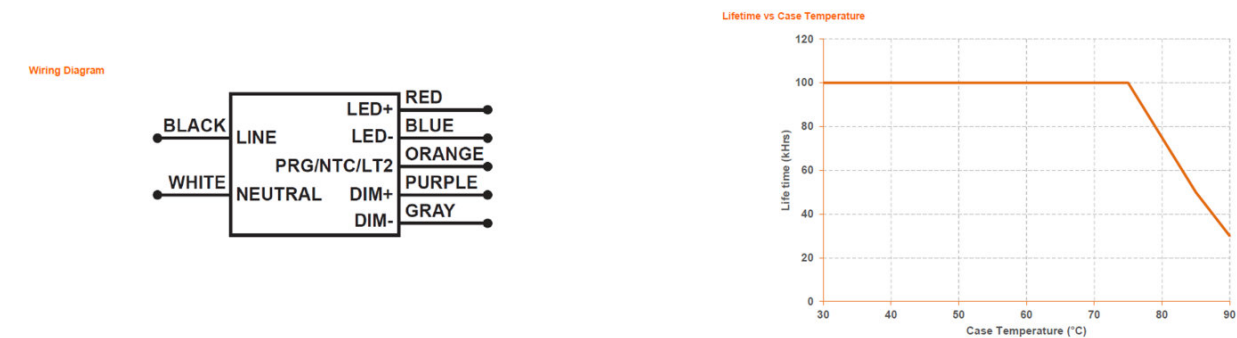
79369 - OT100W - Dimming Curve



79369 - OT100W LED Thermal Protection Output Current



79369 - OT100W LED Thermal Protection Wiring Diagram



79369 - OT100W - Wiring Diagram

79369 - OT100W - Lifetime Case Temperature

Electrical specifications - Dimming

Dimming Control	0 – 10V (Isolated) ¹⁾
Dimming Range	10-100% (50mA min)
Dimming Type	Analog

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

Electrical specifications - Input

Efficiency @ Full load 120V	≥88%
Efficiency @ Full load 277V	≥90%
Frequency Range (Hz)	50 – 60 Hz (+/- 10%)
Input Current (A) 120V	0.95
Input Current (A) 277V	0.4
Input Voltage (VAC)	120V-277V (+/- 10%)
Inrush Current (A _{pk} , T@50% of A _{pk}) 120V	53A, 145μs
Inrush Current (A _{pk} , T@50% of A _{pk}) 277V	131A, 153μs
Power Factor @ Full load 120V	>0.95
THD @ Full load 120V	<10%
THD @ Full load 277V	<10%

Electrical specifications - LED thermal protection (NTC)

NTC Value Active Range	≤25kΩ ¹⁾
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Product datasheet

Temperature Derating start	User defined
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¹⁾ External NTC cannot leave the fixture. The PRG/ NTC control circuit terminals or lead wires are not isolated.

Electrical specifications - Output

LED Power-Up Time	<1 sec
Line Regulation	<5%
Load Regulation	<5%
Max. Output Power (W)	100W
Output Current (mA)	600-1250mA (1mA step)
Output Ripple Current	< 25% @ 1250mA
Output Short-Circuit Protection	Yes, non-latching
Output Voltage (VDC)	30-100VDC
Over Load Protection	Power fold back @105W
Over Temperature Protection	Yes, Foldback at 100°C,
Over Voltage Protection	Yes, non-latching

Environmental specifications

Ambient Operating Temperature	-40°C to 55°C
Case Temperature (Tc)	85°C
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 C82.77-5 Cat C Low 6.0kV
UL Environmental Rating	Dry & Damp, Type HL
UL File number	E320395

Packaging Information

Item number	EAN/UPC	Packaging	Quantity	Outside dimensions l x w x h	Gross weight
79369	4052899166080	Unpacked (SKU)	1	6.6 in x 2.4 in x 1.5 in	1.3 lb
79369	4052899156715	Shipping box (Case)	20	15 in x 7.3 in x 7.7 in	27.9 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. Specifications are subject to change without notice.

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