

OPTOTRONIC Outdoor Programmable LED Power Supplies

79366 / OT180W/UNV/800C/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

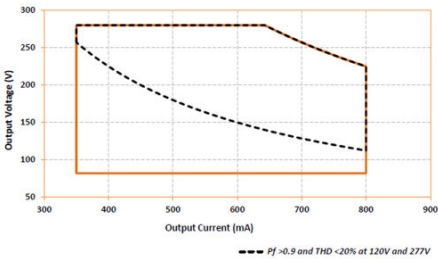
Technical data

General product information

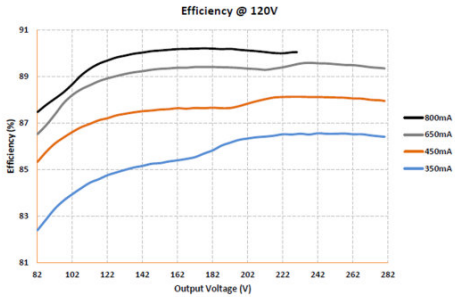
Product Name	OT180WUNV800C2DIMP6 10/CS 1/SKU
Ordering Abbreviation	OT180W/UNV/800C/2DIM/P6
Brand Name	OSRAM
General Description	180W Programable Low current Outdoor LED Power Supply UNV 2DIM
Programmable Features	Output current, Dimming level, LED thermal protection, AstroDIM, LEDSet Gen2, Constant Lumen output, End of life indicator
Programming Tool	51645; Software
Type	Constant Current
Product Number	79366

Electrical data

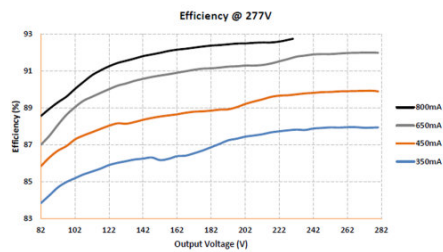
Nominal Total Max Wattage	180 W
Nominal Voltage	120-277 V



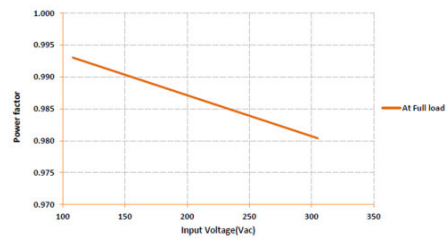
79366 - OT180W - Operating - Range



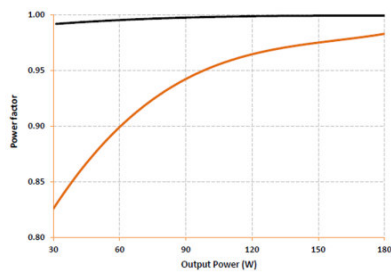
79366 - OT180W - Efficiency vs Output Voltage 120V



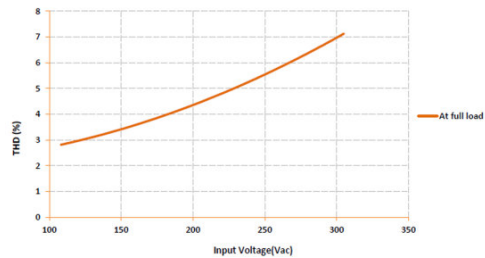
79366 - OT180W - Efficiency vs Output Voltage 277V



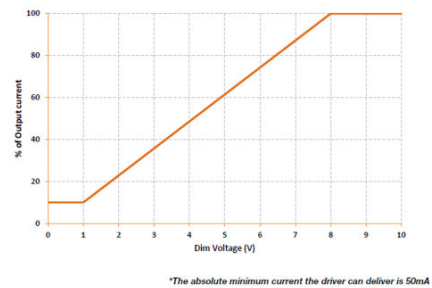
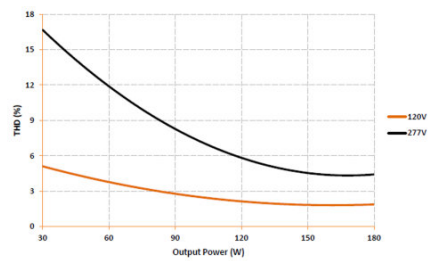
79366 - OT180W - Power Factor Performance Input Voltage



79366 - OT180W - Power Factor Performance Output Power



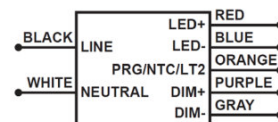
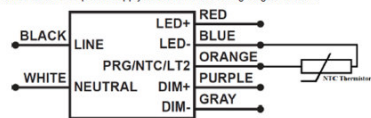
79366 - OT180W - THD Performance Input Voltage



79366 - OT180W - THD Performance Output Power

79366 - OT180W - Dimming - Curve

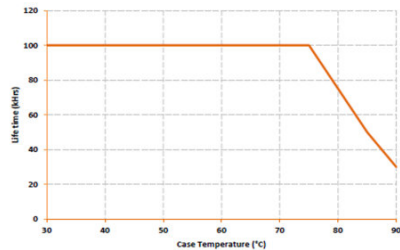
The LED thermal protection feature of the OT180W helps reduce the temperature of the LED module by reducing the output current in case of abnormal temperature conditions. To use this feature a third party NTC thermistor should be connected to the LED power supply as shown in the wiring diagram below.



Note 1: Maximum suggested remote mounting distance is 32 feet. For additional information on further distances and EMI compliance reference application note LED126.
Note 2: The Dimming input is isolated and will allow Class 2 or non-Class 2 wiring across Purple and Gray wires

79366 - OT180W - LED - Thermal - Protection - NTC

79366 - OT180W - Wiring - Diagram



79366 - OT180W - Lifetime - Case - Temp

Electrical specifications - Dimming

Dimming Control	0 – 10V (Isolated), AstroDIM 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	≥90%
Efficiency @ Full load 277V	≥92%
Frequency Range (Hz)	50 – 60 Hz (+/- 10%)
Input Current (A) 120V	1.7
Input Current (A) 277V	0.75
Input Voltage (VAC)	120V-277V (+/- 10%)
Inrush Current (Apk, T@50% of Apk) 120V	44A, 190μs
Inrush Current (Apk, T@50% of Apk) 277V	131A, 190μs
Power Factor @ Full load 120V	>0.95
THD @ Full load 120V	<15%
THD @ Full load 277V	<20%

Electrical specifications - Output

LED Power-Up Time	< 0.5sec
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Product datasheet

Line Regulation	< 5%
Load Regulation	< 5%
Max. Output Power (W)	180W
Output Current (mA)	350-800mA, 1mA resolution (programmable), 530mA Default
Output Ripple Current	< 20% @ 800mA
Output Short-Circuit Protection	Yes, non- latching
Output Voltage (VDC)	82-280VDC
Over Load Protection	Power fold back @ 185W
Over Temperature Protection	Yes, fold back at 90°C, auto recovery
Over Voltage Protection	Yes, non- latching

Environmental specifications

Ambient Operating Temperature	-40°C to 55°C
Case Temperature (Tc)	85°C ¹⁾
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
UL File number	E320395

¹⁾ Warranty applicable only at 85°C

Packaging Information

Item number	EAN/UPC	Packaging	Quantity	Outside dimensions l x w x h	Gross weight
79366	4052899166097	Unpacked (SKU)	1	9.5 in x 2.4 in x 1.5 in	2.2 lb
79366	4052899156722	Shipping box (Case)	10	13.9 in x 10.1 in x 4.1 in	22.5 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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