

# OPTOTRONIC Outdoor Programmable LED Power Supplies

79367 / OT180W/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
- 347-480 V<sub>AC</sub> 50/60 Hz - Available in both: - Universal Input Voltage 120-277 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

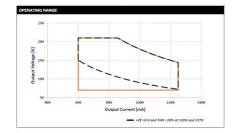
#### Technical data

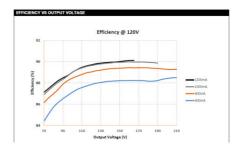
## **General product information**

OT180WUNV1250C2DIMP6 10/CS 1/SKU		
OT180W/UNV/1250C/2DIM/P6		
OSRAM		
180W Programable High Current Outdoor LED Powe Supply UNV 2DIM		
Output current, Dimming level, LED thermal protection, AstroDIM, LEDSet Gen2, Constant Lumen output, End of life indicator		
51645; Software		
Constant Current		
79367		

#### **Electrical data**

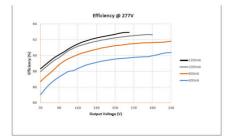
Nominal Total Max Wattage	180 W
Nominal Voltage	120-277 V

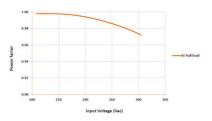




79367 - OT180W - Operating Range

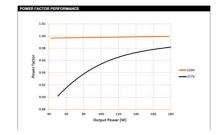
79367 - OT180W Efficiency vs Output Voltage

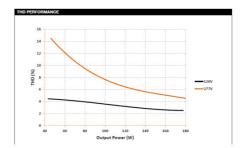




79367 - OT180W - Efficiency vs Output Voltage - 277V

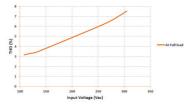
79367 - OT180W Power Factor vs Input Voltage

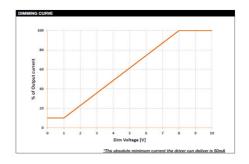




79367 - OT180W Power Factor vs Output Voltage

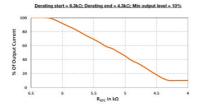
79367 - OT180W THD Performance Output Power

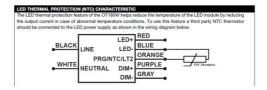




79367 - OT180W THD vs Performance Input Voltage

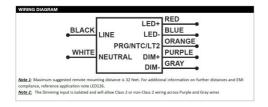
79367 - OT180W - Dimming Curve

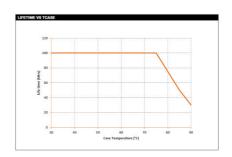




79367 - OT180W LED Thermal Protection Output Current

79367 - OT180W LED Thermal Protection Wiring Diagram





79367 - OT180W - Wiring Diagram

79367 - OT180W - Lifetime - Case - Temp

#### **Electrical specifications - Dimming**

Dimming Control	0 – 10V (Isolated), AstroDIM <sup>1)</sup>	
Dimming Range	10-100% (50mA min)	
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	≥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, 190 µs		
Inrush Current (Apk, T@50% of Apk) 277V	131A,190µs		
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 <sup>1)</sup>
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## **Electrical specifications - Output**

LED Power-Up Time	< 0.5sec
Line Regulation	< 5%
Load Regulation	< 5%
Max. Output Power (W)	180W
Output Current (mA)	600-1250mA 1mA resolution, 700mA default
Output Ripple Current	< 30% @ 1250mA
Output Short-Circuit Protection	Yes, non- latching
Output Voltage (VDC)	70-210VDC
Over Load Protection	Power fold back @185W
Over Voltage Protection	Yes, non- latching

#### **Environmental specifications**

Ambient Operating Temperature	-40°C to 55°C		
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
79367	4052899166103	Unpacked (SKU)	1		
79367	4052899156739	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.

 $<sup>^{1)}</sup>$  External NTC cannot leave the fixture. The PRG/ NTC control circuit terminals or lead wires are not isolated

#### Disclaimer

For information on specific product warranties, visit www.osram.us/warranty. Specifications are subject to change without notice.

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