

# OPTOTRONIC Linear Programmable LED Drivers

57454 / OTi30/120-277/1A0 DIM-1L AUXG2



The OPTOTRONIC programmable dimmable family consists of highly efficient linear constant current LED power supplies. One click programming through the OPTOTRONIC programmer allows OEMs to configure the output current with 1mA resolution. Also fully customizable by customers are the end of life indicator, LED thermal protection and the constant lumen maintenance features. The OPTOTRONIC programmer does not require the power supply to be powered up or connected to AC line voltage while programming. The power supplies are available with built-in 0-10V dimming protocol with models available in 1% to 10%. The auxiliary output has the capability to power various sensors and is optimized for the OSRAM Connected Lighting Module (CLM).

#### Product family features

- OEM Programmable with 1mA resolution to perfectly match LED load and maximize performance
- Integrated OEM programmable features include: Constant lumen maintenance End of life indication LED thermal protection
- Programming doesn't require powering up or connecting the power supply to AC line voltage
- Specification grade dimming down to 1% or 10% on 0-10V dimmers
- Available optional auxiliary output to power 12 V, 20 V, and 24 V low power applications
- Slim form factors
- Input voltage: Universal 120-277 V $_{AC}$  50/60Hz 347 V $_{AC}$  50/60 Hz
- UL Class 2 output for safe operation

#### Areas of application

- Indirect/direct
- Linear
- Recessed troffer

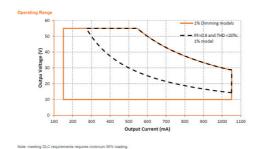
# Technical data

## General product information

Product Name	OTI301202771A0DIM1LAUXG2 10/CS 1/SKU		
Ordering Abbreviation	OTi30/120-277/1A0 DIM-1L AUXG2		
Brand Name	OSRAM		
General Description	OTi30 LIN UNV 0-10V G2 AUX		
Programmable Features	Output current, Dimming level, Dim-to-off, Soft Start, LED thermal protection, Auxiliary output voltage, Constant lumen output, End-of-life indicator		
Programming Tool	51645 & 51647/51648		
Туре	Constant Current, Class2		
Product Number	57454		

### **Electrical data**

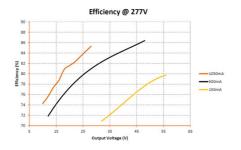
Nominal Total Max Wattage	30 W
Nominal Voltage	120-277 V

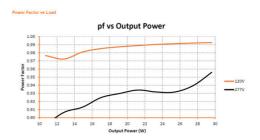




Operating Window

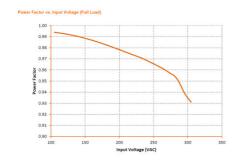
# Typical Efficiency v Load 120 V 60 Hz

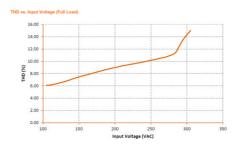




Typical Efficiency v Load 277 V 60 Hz

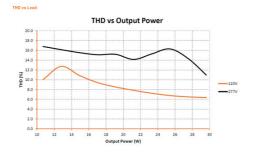
Typical Power Factor v Load





Typical Power Factor v Load

## Typical THD v Load



Typical THD v Load

#### Electrical specifications - Auxiliary output (for AUX models only)

Output Voltage (VDC) Aux Only	12/20/24V (configurable) <sup>1)</sup>	
Voltage Regulation	±10%	
Max. Output Power Aux Only	1W	

<sup>1)</sup> Default Vaux is 12V

## **Electrical specifications - Dimming**

Dimming Control 0 - 10V (Isolated) <sup>1)</sup>		
Dimming Input Isolation [CRM]	2.5kV	
Dimming Range 1-100%		
Dimming Type	Analog	
Dim-to-Off OFF/ON	0.7V/1V	
Source/Sink Current	0.2mA max	
Standby Power	1.4W(120V); 1.7W(277V)	

1) CAUTION: More than one power supply present

## **Electrical specifications - Input**

Efficiency @ Full load 120V	≥85%		
Efficiency @ Full load 277V	≥85%		
Frequency Range (Hz)	50 – 60 Hz (+/- 10%)		
Input Current (A) 120V	0.31		

Input Current (A) 277V	0.15	
Input Voltage (VAC)	120V-277V (+/- 10%)	
Inrush Current (Apk, T@50% of Apk) 120V	0.86, 50µs	
Inrush Current (Apk, T@50% of Apk) 277V	1.35, 60µs	
Power Factor @ Full load 120V	>0.9	
Power Factor @ Full load 277V	>0.9	
THD @ Full load 120V	<10%	
THD @ Full load 277V	<20%	

# Electrical specifications - LED thermal protection (NTC)

NTC Value Active Range	$\leq 25 k\Omega^{-1}$	
Temperature Derating start	User defined	

<sup>1)</sup> 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	<1sec
Line Regulation	<5%
Load Regulation	<5%
Max. Output Power (W)	30W
Output Current (mA)	150-1050mA, Default 700mA
Output Ripple Current	<20% @ 1050mA
Output Short-Circuit Protection	Yes, non-latching
Output Voltage (VDC)	10-55VDC
Over Load Protection	Yes, non-latching
Over Temperature Protection	Foldback at 110°C
Over Voltage Protection	Yes, non-latching

# **Environmental specifications**

Ambient Operating Temperature	-30°C to 50°C		
Case Temperature (Tc) 85°C Max, 75°C - 5 Year Warranty			
EMI Compliance	FCC Part 15 Class A		
Max. Relative Humidity (%)	85% non-condensing		
Max. Storage Temp.	70°C		
Sound Rating	Class A		
Transient Protection	NEMA SSL 1 - 2010, Non-Roadway 2.5KV		
UL Environmental Rating	Dry & Damp		
UL File number	E320395		

#### Packaging Information

ltem number	EAN/UPC	Packaging	Quantity	Outside dimensions l x w x h	Gross weight
57454	4062172018807	Unpacked (SKU)	1		
57454	4062172018814	Shipping box (Case)	10	12.2 in x 6.4 in x 2.4 in	5.5 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.OSRAM, OPTOTRONIC, PrevaLED and DEXAL are registered trademarks of OSRAM GmbH.SensiLUM is a trademark of OSRAM SYLVANIA Inc.All other trademarks are those of their respective owners.