

OTi DALI 50/220...240/1A4 LT2 L G2

OPTOTRONIC Intelligent – DALI LEDset LT2 (SELV) | Linear constant current LED driver – Dimmable



Product family features

- Line frequency: 0 Hz | 50 Hz | 60 Hz
- Versatile DALI window driver up to 80 W due to flexible output characteristic
- Supply voltage: 220...240 V
- Available with output current range: up to 2,100 mA
- Constant Lumen Output (CLO)
- Integrated customizable thermal management (Driver Guard)
- DALI-2 certified (Part -101,-102 and -207)

Product datasheet

Product family benefits

- Fully programmable via software (DALI Interface)
- Flexible current setting (LEDset2)
- Lifetime: up to 100,000 h (temperature at $T_C = 65\text{ °C}$, max. 10 % failure rate)
- High-quality dimming of 1...100 % by amplitude dimming (except 80 W versions)
- High quality of light thanks to <1% output ripple current
- Very high efficiency
- Very low standby power consumption: < 0.15 W *
- Fulfill safety requirement due to overload, overtemperature, Hot Plug protection

Versatile scope of application due to OSRAM DALI Technology:

- Easy to use in corridors and restrooms because of three-level Corridor function
- Touch DIM application: easy to control via pushbutton or sensor
- Energy efficient Touch DIM operation due to automatic switch-off at sufficient residual light
- Suitable for emergency Installations (acc. to EN 60598-2-22 and IEC 61347-2-13, appendix J) thanks to DC detection (0 Hz, pulsating DC), on/off switchable
- Feedback of power consumption and operating hours (Fit for SMART GRID)
- Suitable for buildings according to EPBD/BREEAM/LEED due to automatic Constant Lumen Output setting
- Luminaire information for easy maintenance

Areas of application

- Linear lighting for office, education, storage areas and retail
- Installation in emergency lighting systems according to IEC 61347-2-13, appendix J
- Suitable for luminaires of protection class I

Technical data

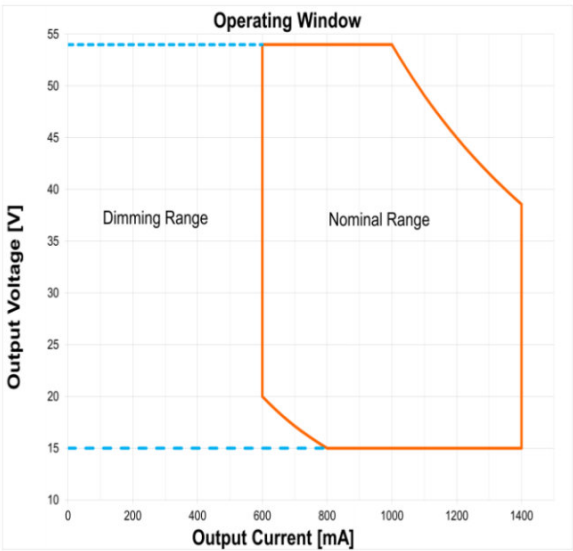
Electrical data

Nominal input voltage	220...240 V
Mains frequency	0/50/60 Hz
Input voltage AC	198...264 V
Input voltage DC	176...276 V
Current set	DALI / LEDset / Programmable
Total harmonic distortion	< 15 %
Power factor λ	0.76C...0.99
Efficiency in full-load	90 % ¹⁾
Device power loss	6.0 W
Protective conductor current	<0.5 mA
Inrush current	20 A
Max. ECG no. on circuit breaker 10 A (B)	13
Max. ECG no. on circuit breaker 16 A (B)	20
Max. ECG no. on circuit breaker 25 A (B)	-
Surge capability (L/N-Ground)	2 kV
Surge capability (L-N)	1 kV
Nominal output voltage	15...54 V
U-OUT (working voltage)	< 60 V
Nominal output current	600...1400 mA
Output current LEDset open	300 mA
Output current LEDset shorted	1400 mA
Default output current	300 mA ²⁾
Output current tolerance	± 3 % ³⁾
Output ripple current (100 Hz)	< 1 %
Output PSTLM	≤ 1
Output SVM	≤ 0.4
Nominal output power	12...50 W
Maximum output power	50 W
Galvanic isolation	SELV
Power loss in stand-by mode	<0.15 W

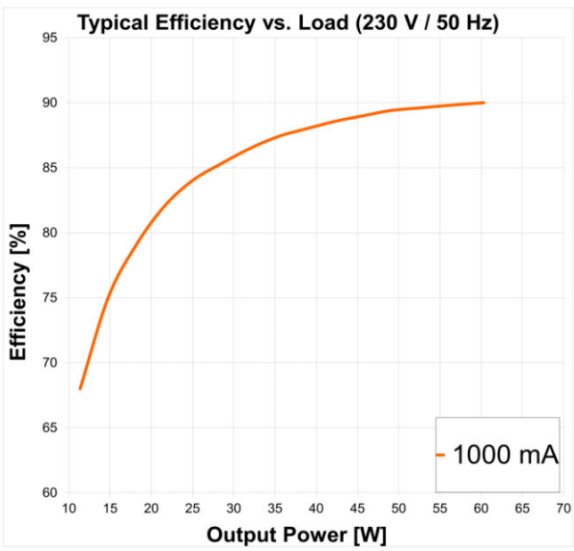
¹⁾ at 230 V, 50 Hz

²⁾ LEDset deactivated

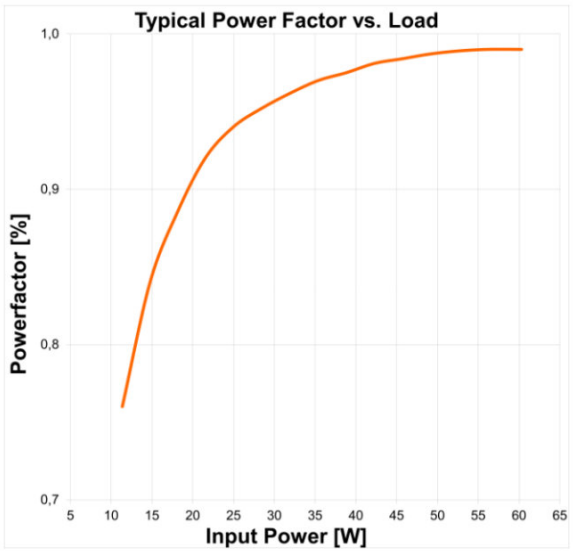
³⁾ When use DALI



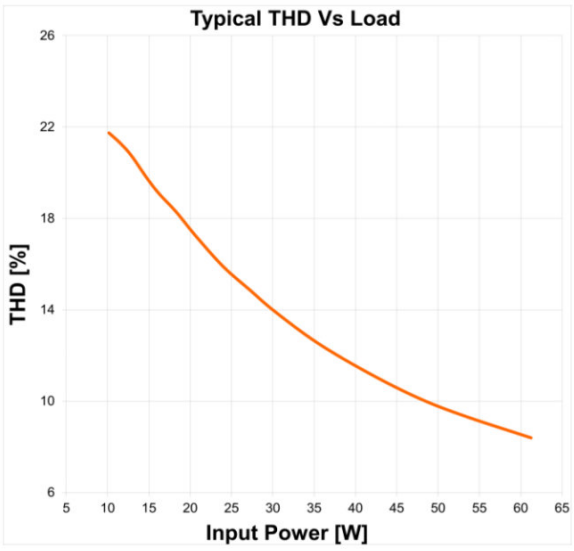
OTI DALI 50220-2401A4 LT2 L G2 Operating Window



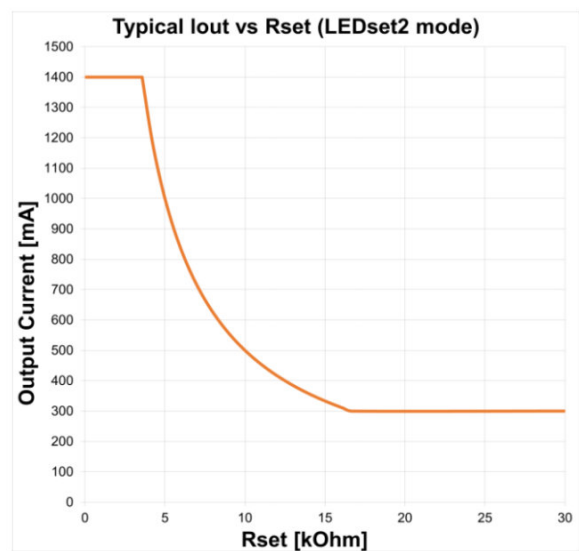
OTI DALI 50220-2401A4 LT2 L G2 Typical Efficiency vs. Load (230 V 50 Hz)



OTI DALI 50220-2401A4 LT2 L G2 Typical Power Factor vs. Load



OTI DALI 50220-2401A4 LT2 L G2 Typical THD Vs Load



OTI DALI 50220-2401A4 LT2 L G2 Typical I_{out} vs R_{set} (LEDset2 mode)

Dimensions & weight



Mounting hole spacing, length	350.0 mm
Product weight	240.00 g
Cable cross-section, input side	0.5...1.5 mm ²
Cable cross-section, output side	0.5...1.5 mm ²
Wire preparation length, input side	8.0...9.0 mm
Wire preparation length, output side	8.0...9.0 mm
Length	360.0 mm
Width	30.0 mm
Height	21.0 mm

Colors & materials

Casing material	Metal
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Temperatures & operating conditions

Ambient temperature range	-25...+50 °C
Maximum temperature at tc test point	75 °C
Max.housing temperature in case of fault	110 °C
Temperature range at storage	-40...+85 °C
Permitted rel. humidity during operation	5...85 % ¹⁾

¹⁾ Maximum 56 days/year at 85 %

Lifespan

ECG lifetime	50000 / 100000 h ¹⁾
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¹⁾ At maximum $T_c = 75^{\circ}\text{C}$ / 10% failure rate / At $T_c = 65^{\circ}\text{C}$ / 10% failure rate

Additional product data

Encapsulated	No
Predecessor EAN	4052899028098

Capabilities

Programming interface	DALI, LEDset
Dimmable	Yes
Dimming interface	DALI-2 / Touch DIM / Touch DIM Sensor
Dimming range	1...100 %
Dimming method	Amplitude Modulation
Constant lumen function	Programmable
Overheating protection	Automatic reversible
Overload protection	Non-reversible
Short-circuit protection	Automatic reversible
No-load proof	Yes
Intended for no-load operation	No
Max. cable length to lamp/LED module	2.0 m ¹⁾
Suitable for fixtures with prot. class	I
Suitable for emergency lighting	Yes
Type of connection, input side	Push terminal
Type of connection, output side	Push terminal
Control interface	DALI
Number of channels	1

Product datasheet

DALI-2 Energy Data	Yes
DALI-2 Diagnostic Data	Yes

1) Output wires must be routed as close as possible to each other

Programming

Programming device	DALI magic
Tuner4TRONIC	Yes
Tuner4TRONIC Field App	Yes

Programmable features

Operating Current	Yes
Constant Lumen	Yes
Lamp Operating Time	Yes
Driver Guard	Yes
DALI Settings	Yes
Emergency Mode	Yes
DALI-2 Luminaire Data	Yes
Soft Switch Off	Yes
Dim to Dark	Yes
TouchDIM + Sensor	Yes
Corridor Functionality	Yes
OEM Key	Yes

Certificates & standards

Approval marks – approval	CE / EL / VDE-ENEC / VDE-EMC / EAC / CCC / RCM / BIS
Standards	Acc. to EN 61347-1/Acc. to EN 61347-2-13/Acc. to EN 55015/Acc. to EN 61547/Acc. to EN 61000-3-2/Acc. to EN 62384/Acc. to EN 62386
Type of protection	IP20

Logistical data

Commodity code	85044083900
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Environmental information

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)	
Date of Declaration	19-05-2023
Primary Article Identifier	4052899551787 4062172082501
Candidate List Substance 1	Lead

Product datasheet

CAS No. of substance 1	7439-92-1
Safe Use Instruction	The identification of the Candidate List substance is sufficient to allow safe use of the article.
Declaration No. in SCIP database	dbbedbb7-6b4a-4fe5-a147-6f04dc010c9f 6111931f-971b-4e02-bd7e-bdb46d261c54

Download Data

File	
	User instruction OPTOTRONIC LED Power Supply
	Certificates OTI DALI LT2 L G2 CB DE1 60134 040320
	Certificates OT ENEC 40038447 260623
	Declarations of conformity EATON(CEAG)-Conformity declaration AN00954 OTI DALI 50220-2401A4 LT2 L G2
	Declarations of conformity INOTEC-Conformity declaration AN00954 OTI DALI 50220-2401A4 LT2 L G2
	Declarations of conformity OTi DALI LT2 L G2 UK DoC 4281083 040923
	Declarations of conformity OTI DALI LT2 L G2 CE 3634324 030921
	Declarations of conformity EATON(CEAG)-Conformity declaration AM06314_OTiDALI50_220-240_1A4_LT2_L_G2
	Declarations of conformity INOTEC- Conformity declaration AM06314_OTiDALI50_220-240_1A4_LT2_L_G2
	CAD data OTI DALI LT2L G2 IGS 060220
	CAD data OTI DALI LT2L G2 STEP 060220
	CAD Data 2-dim OTI DALI LT2L G2 CAD2PDF 060220
	CAD data 3-dim OTI DALI LT2L G2 CAD3PDF 060220

Product datasheet

Ecodesign regulation information:

Intended for use with LED modules.
The forward voltage of the LED light source shall be within the defined operating window of the control gear in all operating conditions including dimming if applicable.

Separate control gear and light sources must be disposed of at certified disposal companies in accordance with Directive 2012/19/EU (WEEE) in the EU and with Waste Electrical and Electronic Equipment (WEEE) Regulations 2013 in the UK. For this purpose, collection points for recycling centres and take-back systems (CRSO) are available from retailers or private disposal companies, which accept separate control gear and light sources free of charge. In this way, raw materials are conserved and materials are recycled.

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899551787	OTi DALI 50/220...240/1A4 LT2 L G2	Shipping carton box 20	385 mm x 160 mm x 100 mm	6.16 dm ³	5146.00 g

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.

Data privacy

This OSRAM driver can be configured using the Tuner4TRONIC software. This requires registering on www.mynosram.com and downloading the Tuner4TRONIC software from the Internet. The Tuner4TRONIC software enables users to access and view the operational data of a luminaire or driver via the corresponding programming interfaces. A password key (Config Lock) must be set up in the driver via the Tuner4TRONIC software in order to control which users can access and view operational data. Follow the instructions for password setup. To grant an external person or company rights to access or view operational data, you can assign password keys. In this case, however, you are responsible for ensuring that the third party concerned takes notice of the information described here. However, OSRAM can read out operating data from devices for maintenance and service purposes even when a password key has been assigned. In individual cases, OSRAM will also use its access rights in order to optimize or improve driver hardware and driver functions. In accordance with data privacy principles, any user of operating data (luminaire manufacturers, third parties with access rights) must ensure that personal data (e.g. name, address, location IDs) are only merged with the prior written consent of the person (end user) concerned. The respective user of the operating data is responsible for providing evidence of consent.

Disclaimer

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.