

## OTi DALI 10/220...240/700 NFC

OPTOTRONIC Intelligent – DALI LT2 NFC | Compact constant current LED drivers



### Areas of application

- Installation in emergency lighting systems according to IEC 61347-2-13, appendix J
- Suitable for use in luminaires with flexible current setting
- Suitable for indoor SELV installations
- Suitable for luminaires of protection classes I and II
- Suitable for downlights, spotlights and LED panels
- Installation via Cable Clamp Kit possible (depending on version of product)

### Product family benefits

- Versatile DALI window driver due to flexible output characteristic
- Very high efficiency
- Protection of the system thanks to thermal management and Smart Control
- High-quality dimming of 1...100 % by amplitude dimming
- Easy and fast output current setting via NFC

### Versatile scope of application due to OSRAM DALI Technology:

- 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



## Product datasheet

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### Product family features

- Supply voltage: 220...240 V
- Line frequency: 0 Hz | 50 Hz | 60 Hz
- Line voltage: 198...264 V
- According to EN 61347-1, 61347-2-13, 62384
- RI suppression according to EN 55015:2007+A1:2007/CDN
- Line harmonics according to EN 61000-3-2
- Immunity according to EN 61547
- Lifetime: up to 100,000 h
- Type of protection: IP20

## Technical data

### Electrical data

|  |                               |
|--|-------------------------------|
| Nominal input voltage                    | 220...240 V                   |
| Mains frequency                          | 0/50/60 Hz                    |
| Input voltage AC                         | 198...264 V <sup>1)</sup>     |
| Input voltage DC                         | 176...276 V                   |
| Total harmonic distortion                | 15 % <sup>2)</sup>            |
| Power factor $\lambda$                   | > 0.98 / > 0.94 <sup>3)</sup> |
| ECG efficiency                           | 82 % <sup>4)</sup>            |
| Device power loss                        | 3.5 W                         |
| Power loss in stand-by mode              | ≤ 0.15 W                      |
| Inrush current                           | 5 A <sup>5)</sup>             |
| Max. ECG no. on circuit breaker 10 A (B) | 82                            |
| Max. ECG no. on circuit breaker 16 A (B) | 130                           |
| 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                   | 2.5...45 V <sup>6)</sup>      |
| U-OUT (working voltage)                  | 60 V                          |
| Nominal output current                   | 150...700 mA <sup>7)</sup>    |
| Default output current                   | 350 mA                        |
| Output current tolerance                 | ± 3 %                         |
| Output ripple current (100 Hz)           | < 2 %                         |
| Nominal output power                     | 10 W <sup>8)</sup>            |
| Galvanic isolation                       | SELV                          |
| Current set                              | DALI / NFC                    |

<sup>1)</sup> Permitted voltage range

<sup>2)</sup> At full load, 220...240 V, 50 Hz / At half load, 220...240 V, 50 Hz

<sup>3)</sup> At Pmax, 220...240 V, 50 Hz / At 50% Pmax, 220...240 V, 50 Hz

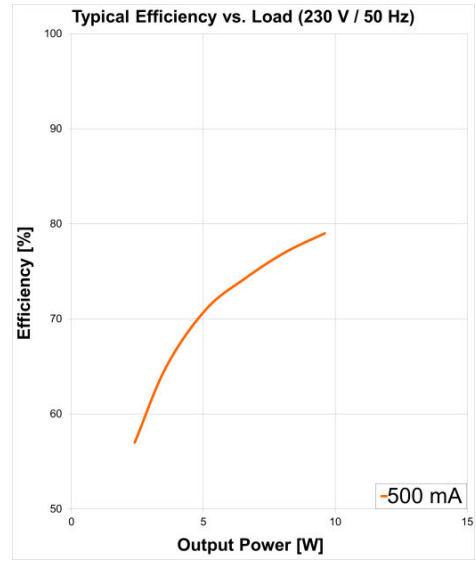
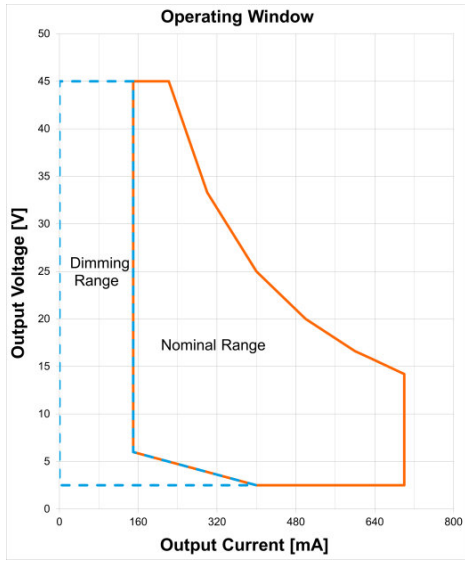
<sup>4)</sup> Typical / At full load and 230 V

<sup>5)</sup>  $t_{width} = 100 \mu s$  (measured at 50 %  $I_{peak}$ )

<sup>6)</sup> Maximum 60 V

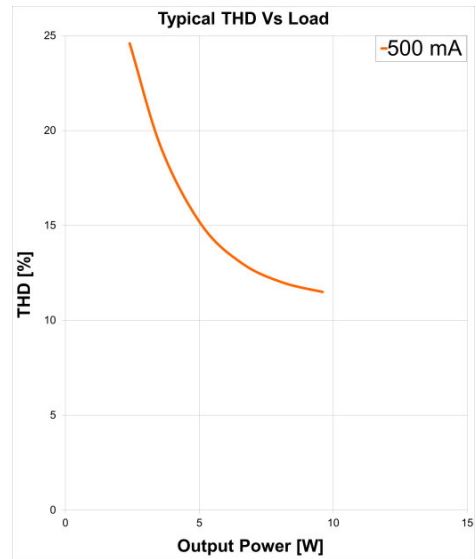
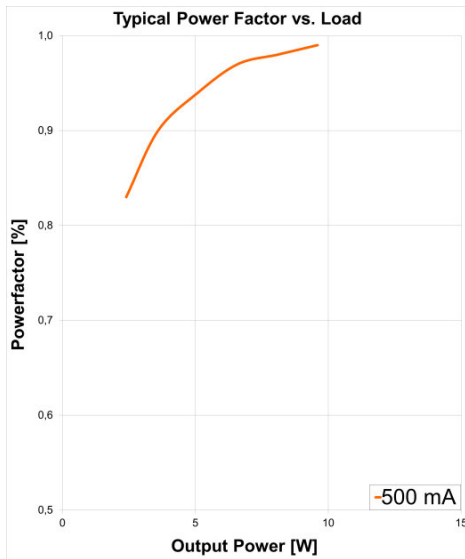
<sup>7)</sup> ± 3%

<sup>8)</sup> Partial load 1.5...10 W



Operating Window

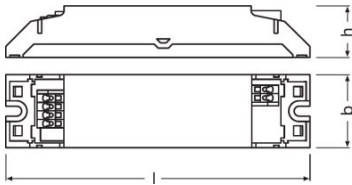
Typical Efficiency v Load 230 V 50 Hz



Typical Power Factor v Load

Typical THD v Load

## Dimensions & weight



|                                      |   |
|--------------------------------------|---|
| Mounting hole spacing, length        | 115.0 mm                                |
| Product weight                       | 50.00 g                                 |
| Cable cross-section, input side      | 0.2...1.5 mm <sup>2</sup> <sup>1)</sup> |
| Cable cross-section, output side     | 0.2...1.5 mm <sup>2</sup> <sup>1)</sup> |
| Wire preparation length, input side  | 8.0...9.1 mm                            |
| Wire preparation length, output side | 8.0...9.1 mm                            |
| Length                               | 124.0 mm                                |
| Width                                | 31.0 mm                                 |
| Height                               | 21.0 mm                                 |

<sup>1)</sup> Solid or flexible leads

## Colors & materials

|                 |         |
|-----------------|---------|
| Casing material | Plastic |
|-----------------|---------|

## Temperatures & operating conditions

|  |                        |
|--|------------------------|
| Ambient temperature range                | -20...+50 °C           |
| Maximum temperature at tc test point     | 75 °C <sup>1)</sup>    |
| Max.housing temperature in case of fault | 110 °C                 |
| Temperature range at storage             | -40...+85 °C           |
| Permitted rel. humidity during operation | 5...85 % <sup>2)</sup> |

<sup>1)</sup> Maximum at the T<sub>c</sub>-point

<sup>2)</sup> Maximum 56 days/year at 85 %

## Lifespan

|              |                                |
|--------------|--------------------------------|
| ECG lifetime | 50000 / 100000 h <sup>1)</sup> |
|--------------|--------------------------------|

<sup>1)</sup> T<sub>c</sub> = 75 °C, 0.2% / 1,000 h failure rate / T<sub>c</sub> = 65 °C, 0.1% / 1,000 h failure rate

## Additional product data



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 A division of Intelligent Group Solutions Ltd

## Product datasheet

|              |    |
|--------------|----|
| Encapsulated | No |
|--------------|----|

### Capabilities

|  |                         |
|--|-------------------------|
| Suitable for through-wiring            | No                      |
| Dimmable                               | Yes                     |
| Dimming interface                      | DALI                    |
| Dimming range                          | 1...100 % <sup>1)</sup> |
| Dimming method                         | Amplitude Modulation    |
| Overheating protection                 | Automatic reversible    |
| Overload protection                    | Automatic reversible    |
| Short-circuit protection               | Automatic reversible    |
| No-load proof                          | Yes                     |
| Max. cable length to lamp/LED module   | 2.0 m                   |
| Suitable for fixtures with prot. class | I / II                  |
| Type of connection, output side        | Push terminal           |
| Suitable for emergency lighting        | Yes                     |
| Constant lumen function                | Programmable            |
| Programming interface                  | DALI, NFC               |
| Number of channels                     | 1                       |

<sup>1)</sup> For maximum nominal output current

### Programming

|                        |            |
|------------------------|------------|
| Tuner4TRONIC           | Yes        |
| Tuner4TRONIC Field App | Yes        |
| Programming device     | DALI / NFC |

### Programmable features

|                       |     |
|-----------------------|-----|
| Operating Current     | Yes |
| Tuning Factor         | Yes |
| Constant Lumen        | Yes |
| Lamp Operating Time   | Yes |
| Driver Guard          | Yes |
| DALI Settings         | Yes |
| Emergency Mode        | Yes |
| DALI-2 Luminaire Data | No  |
| Configuration Lock    | Yes |
| Soft Switch Off       | Yes |
| Dim to Dark           | Yes |
| TouchDIM + Sensor     | No  |



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## Product datasheet

|                                     |    |
|-------------------------------------|----|
| <b>Corridor Functionality</b>       | No |
| <b>Tunable White CCT</b>            | No |
| <b>Tunable White High precision</b> | No |
| <b>OEM Key</b>                      | No |













### Certificates & standards

|                                  |   |
|----------------------------------|---|
| <b>Approval marks – approval</b> | ENEC 10 / VDE / EMC / EL / CE / DALI-2 / CCC  |
| <b>Standards</b>                 | 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/Acc. to IEC 62386-101:Ed2/Acc. to IEC 62386-102:Ed2/Acc. to IEC 62386-207:Ed1 |
| <b>Protection class</b>          | II  |
| <b>Type of protection</b>        | IP20  |

### Logistical data

|                       |              |
|-----------------------|--------------|
| <b>Commodity code</b> | 850440829000 |
|-----------------------|--------------|

### Download Data

| File  |  |
|---|--|
|  | User instruction<br>OPTOTRONIC LED Power Supply  |
|  | Product Datasheet<br>Technical datasheet OTi DALI 10 NFC   |
|  | Certificates<br>OT EMC 40050085 200220   |
|  | Certificates<br>VDE EMC Certificate 40011668   |
|  | Certificates<br>OT ENEC 40038447 010420  |
|  | Certificates<br>OT EMC 40044675 170420   |
|  | Declarations of conformity<br>EATON(CEAG) Conformity declaration AM07730_OTi_DALI_10_220-240_700_NFC |
|  | Declarations of conformity<br>INOTEC Conformity declaration AM07730 OTiD ALI 10 220-240 700 NFC      |
|  | Declarations of conformity<br>EU Declaration of Conformity 3758701                                   |
|  | Declarations of conformity<br>OTi DALI LT2 CE 3365628 121119   |
|  | CAD data<br>OTi DALI 10 NFC IGS 140120   |
|  | CAD data<br>OTi DALI 10 NFC STEP 140120  |



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## Product datasheet



CAD Data 2-dim  
OTI DALI 10 NFC CAD2PDF 140120



CAD data 3-dim  
OTI DALI 10 NFC CAD3PDF 140120

### Logistical Data

| Product code  | Product description              | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Volume               | Gross weight |
|---------------|----------------------------------|------------------------------|--------------------------------------|----------------------|--------------|
| 4052899562639 | OTi DALI<br>10/220...240/700 NFC | Shipping carton box<br>20    | 165 mm x 258 mm x 71 mm              | 3.02 dm <sup>3</sup> | 1253.00 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.myosram.com](http://www.myosram.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.