The trusted value of OSRAM Digital Systems continues with Inventronics Global – where experience meets innovation.

OTi DALI 50/220-240/1A4 NFC

OPTOTRONIC Intelligent - DALI NFC | Compact constant current LED driver - Dimmable



Product family features

- Supply voltage: 220...240 V

- Line frequency: 0 Hz | 50 Hz | 60 Hz

Line voltage: 198...264 VLifetime: up to 100,000 hType of protection: IP20

Product family benefits

- Versatile DALI window driver due to flexible output characteristic
- Locking and unlocking of luminaire/driver data
- Advanced luminaire/driver data (power, energy, operating hours...) for analytics
- DALI-2 certified incl. Parts 251, 252, 253
- Easy and fast output current setting via NFC
- Very high efficiency
- High-quality dimming of 1...100 % by amplitude dimming







Product - technical datasheet

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)

Versatile scope of application due to 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

Technical data

Electrical data

| Nominal input voltage | 220240 V |
|--|--------------------------|
| Mains frequency | 0/50/60 Hz |
| Input voltage AC | 198264 V ¹⁾ |
| Input voltage DC | 176276 V |
| Nominal input current at 230 V | 0.28 A |
| Total harmonic distortion | < 10 % ²⁾ |
| Power factor λ | 0.88C0.99 |
| Efficiency in full-load | 91 % ³⁾ |
| Device power loss | 6.2 W |
| Networked standby power | ≤0.15 W ³⁾ |
| Inrush current | 30 A ⁴⁾ |
| Max. ECG no. on circuit breaker 10 A (B) | 12 |
| Max. ECG no. on circuit breaker 16 A (B) | 20 |
| Surge capability (L-N) | 1 kV |
| Surge capability (L/N-Ground) | 2 kV |
| Protective conductor current | not relevant |
| Nominal output voltage | 1554 V ⁵⁾ |
| U-OUT (working voltage) | 60 V |
| Nominal output current | 6001400 mA ⁶⁾ |
| Minimum output current | 6 mA |
| Default output current | 1050 mA |
| Output current tolerance | ±3 % |
| Output ripple current (100 Hz) | < 3 % ⁷⁾ |
| Output PSTLM | ≤1 |
| Output SVM | ≤0.4 |
| Nominal output power | 1555 W ⁸⁾ |
| Maximum output power | 55 W |
| Galvanic isolation primary/secondary | SELV |
| Galvanic isolation DALI/mains | Basic |
| Galvanic isolation DALI/output | SELV |

¹⁾ Permitted voltage range

²⁾ At full load, 220...240 V, 50 Hz / see graphs

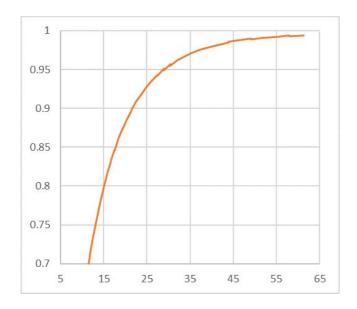
³⁾ at 230 V, 50 Hz 4) t width = 200 µs (measured at 50 % I peak) 5) Maximum 60 V

^{6) ±3%}

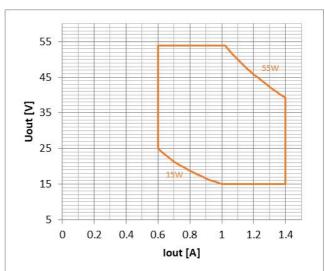
⁷⁾ Ripple average at 100 Hz

⁸⁾ Partial load 22...55 W

Typical Power Factor v Load

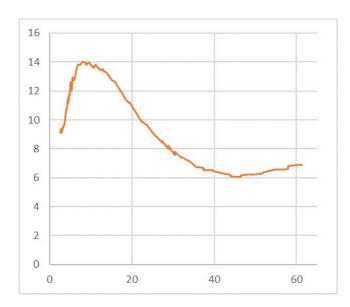


Operating Window



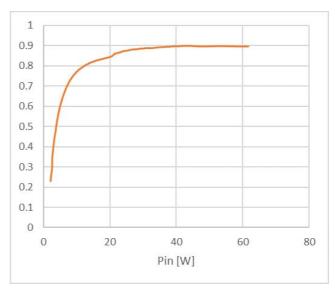
OTI DX DALI 50 NFC Typical Power Factor vs. Load

Typical THD v Load



OTI DX DALI 50 NFC Operating window

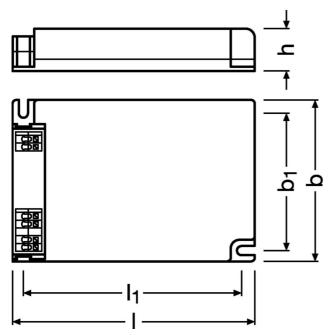
Typical Efficiency v Load 230 V 50 Hz



OTI DX DALI 50 NFC Typical THD Vs Load

OTI DX DALI 50 NFC Typical Efficiency vs. Load (230 V / 50 Hz)

Dimensions & weight



| Product weight | 175.00 g |
|--------------------------------------|--------------------------|
| Length | 110.0 mm |
| Width | 75.0 mm |
| Height | 25.0 mm |
| Mounting hole spacing, length | 99.0 mm |
| Mounting hole spacing, width | 64.0 mm |
| Cable cross-section, input side | 0.51.5 mm² ¹⁾ |
| Cable cross-section, output side | 0.21.5 mm² ¹⁾ |
| Wire preparation length, input side | 8.09.0 mm |
| Wire preparation length, output side | 8.09.0 mm |
| Cable/wire length, output side | 2000 mm |

¹⁾ Solid or flexible leads

Colors & materials

| Casing material | Plastic |
|-----------------|---------|
| Product color | White |

Temperatures & operating conditions

| Ambient temperature range | -20+50 °C |
|--|---------------------|
| Maximum temperature at tc test point | 80 °C ¹⁾ |
| Max.housing temperature in case of fault | 110 °C |
| Temperature range at storage | -40+85 °C |
| Permitted rel. humidity during operation | 585 % ²⁾ |

¹⁾ Maximum at the Tc-point

²⁾ Maximum 56 days/year at 85 %

Lifespan

| ECG lifetime | 50000 h / 100000 h ¹⁾ |
|--------------|----------------------------------|

1) $T_c = 80$ °C, 0.2% / 1,000 h failure rate / $T_c = 70$ °C, 0.1% / 1,000 h failure rate

Additional product data

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

Capabilities

| Programming interface | DALI, NFC |
|--|-------------------------------|
| Control interface | DALI-2, Touch DIM, Corridor |
| Dimmable | Yes |
| Dimming interface | DALI-2 / Touch DIM / Corridor |
| Dimming range | 1100 % |
| Dimming method | Amplitude Modulation |
| DALI-2 Diagnostic Data | Yes ¹⁾ |
| DALI-2 Energy Data | Yes ²⁾ |
| Constant lumen function | Programmable |
| Max. cable length to lamp/LED module | 2.0 m ³⁾ |
| Suitable for fixtures with prot. class | 1/11 |
| Suitable for emergency lighting | Yes |
| Type of connection, input side | Push terminal |
| Type of connection, output side | Push terminal |
| Suitable for through-wiring | Yes with optional cable clamp |
| Number of channels | 1 |
| Overheating protection | Automatic reversible |
| Overload protection | Automatic reversible |
| Short-circuit protection | Automatic reversible |
| Intended for no-load operation | No |
| No-load proof | Yes |

¹⁾ Acc. DALI part 253 2) Acc. DALI part 252

³⁾ Output wires must be routed as close as possible to each other

Programming

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

Programmable features

| DALI Settings | Yes |
|------------------------|--------|
| DALI-2 Luminaire Data | Yes 1) |
| TouchDIM + Sensor | Yes |
| Corridor Functionality | Yes |
| Dim to Dark | Yes |
| Soft Switch Off | Yes |
| Tuning Factor | Yes |
| Configuration Lock | Yes |
| Driver Guard | Yes |
| Emergency Mode | Yes |

¹⁾ Acc. DALI part 251

Certificates & standards

| Approval marks – approval | CE / EL / ENEC / DALI-2 |
|---------------------------|---|
| Standards | EN 61347-1 / EN 61347-2-13 / EN 55015 / EN 61547 / EN 61000-3-2 / EN 62384 / EN 62386 / IEC 62386-101:Ed2 / IEC 62386-102:Ed2 / IEC 62386-207:Ed1 |
| Type of protection | IP20 |

Logistical data

| Commodity code | 85044083900 |
|----------------|-------------|

Environmental information

| Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACh) | |
|---|-------------------------------|
| Date of Declaration | 12-11-2025 |
| Primary Article Identifier | 4062172061889 6977770437906 |
| Declaration No. in SCIP database | In work |
| SCIP_STATUS | In work |
| SCIP_ID | |



Product - technical 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.



Product - technical datasheet

Download Data

| File | | |
|------------------------|------------|---|
| Certificates | PDF | ►OTI DALI 50 NFC INOTEC 080121 |
| Certificates | PDF | ►OTI DALI 50 NFC EATON 080121 |
| Certificates | PDF | ►OTI DALI NFC BIS 45164 231023 |
| Certificates | PDF | ►OT ENEC 40038447 270224 |
| CAD data | Compressed | CAD data OTi DALI 50/220-240/1A4 NFC built in IGS |
| CAD data | Compressed | ►CAD data OTi DALI 50/220-240/1A4 NFC built in STEP |
| CAD data PDF | Compressed | CAD data OTi DALI 50/220-240/1A4 NFC built in pdf |
| Mandatory Publications | PDF | ►OTI DX DALI NFC CE 3770568 09 200125 |
| Mandatory Publications | PDF | ►OTI DALI DX NFC UK DoC 4281072 040923 |
| User instruction | PDF | ►UI OTI DALI NFC |

Logistical Data

| Product code | Product description | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Volume | Gross weight |
|------------------------|--------------------------------|-------------------------------|--------------------------------------|----------|--------------|
| 4062172061889 OSRAM | OTi DALI 50/220-240/1A4 NFC | Shipping carton box 20 Pieces | 389 x 234 x 72 mm | 6.55 dm³ | 200.90 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 Inventronics driver can be configured using the Tuner4TRONIC software. This requires registering on www.inventronicsglobal.com/ds and downloading theTuner4TRONIC 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, Inventronics can read out operating data from devices for maintenance and service purposes even when a password key has been assigned. In individual cases, Inventronics 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.

Accessories Optional

| Product description | Accessory name | Accessory code |
|-----------------------------|---------------------------|-----------------------|
| OTi DALI 50/220-240/1A4 NFC | OT CABLE CLAMP A-STYLE | 4 052899089570 |
| OTi DALI 50/220-240/1A4 NFC | OT CABLE CLAMP A-STYLE | 4 050732499425 |
| OTi DALI 50/220-240/1A4 NFC | OT CABLE CLAMP A-STYLE | ▶6977770432048 |
| OTi DALI 50/220-240/1A4 NFC | OT CABLE CLAMP A-STYLE TL | 4 052899325982 |
| OTi DALI 50/220-240/1A4 NFC | OT CABLE CLAMP A-STYLE TL | ▶6977770432062 |
| OTi DALI 50/220-240/1A4 NFC | PRH101 -USB | ▶6977078996938 |
| OTi DALI 50/220-240/1A4 NFC | PRH101 -USB | ▶6937186112354 |
| OTi DALI 50/220-240/1A4 NFC | CPR30+ | ▶6977078996945 |
| OTi DALI 50/220-240/1A4 NFC | CPR30+ | ▶6937186112378 |

Disclaimer

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