

OT WI 25/220...240/700 NFC BL LPI

OPTOTRONIC Wireless Intelligent – QBM NFC LP I | Compact constant current LED driver – Dimmable



Product family features

- Qualified Bluetooth mesh enabled by Silvair
- Works with OSRAM Hubsense
- Supply voltage: 220...240 V
- Line frequency: 0 Hz | 50 Hz | 60 Hz
- Line voltage: 198...264 V
- Lifetime: up to 100,000 h
- Type of protection: IP20
- Integrated cable clamp for luminaire and independent installation

Product family benefits

- Small housing for flexible luminaire designs
- Versatile QBM window driver due to flexible output characteristic
- Easy and fast output current setting via NFC
- Very high efficiency
- High-quality dimming of 1...100 % by amplitude dimming

Areas of application

- Suitable for downlights, spotlights and LED panels
- Suitable for use in luminaires with flexible current setting
- Installation in emergency lighting systems according to IEC 61347-2-13, appendix J
- Suitable for indoor SELV installations
- Suitable for luminaires of protection classes I and II



Technical data

Electrical data

| | |
|--|---|
| Nominal input voltage | 220...240 V |
| Mains frequency | 0,50,60 Hz |
| Input voltage AC | 198...264 V ¹⁾ |
| Input voltage DC | 176...276 V |
| Total harmonic distortion | < 10 % ²⁾ |
| Power factor λ | 0.50...0.95 |
| Efficiency in full-load | 88 % ³⁾ |
| Device power loss | - |
| Inrush current | 20 A ⁴⁾ |
| Max. ECG no. on circuit breaker 10 A (B) | 50 |
| Max. ECG no. on circuit breaker 16 A (B) | 80 |
| Surge capability (L/N-Ground) | 2 kV |
| Surge capability (L-N) | 1 kV |
| Nominal output voltage | 10...54 V ⁵⁾ |
| U-OUT (working voltage) | 60 V |
| Nominal output current | 180...700 mA ⁶⁾ |
| Output current tolerance | ± 3 % |
| Default output current | 500 mA |
| Output ripple current (100 Hz) | < 3 % ⁷⁾ |
| Output PSTLM | <1 |
| Output SVM | <0.4 |
| Nominal output power | 27 W |
| Maximum output power | 27 W ⁸⁾ |
| Galvanic isolation primary/secondary | SELV |
| Maximum TX power | 8 dBm ⁹⁾ |
| Current set | NFC |
| Radio frequency | 2.4 GHz |
| Wireless protocol | Qualified Bluetooth mesh enabled by Silvair |
| Wireless range | 10 m line of sight |
| Networked standby power | 0.15 W ³⁾ |

¹⁾ Permitted voltage range

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

³⁾ at 230 V, 50 Hz

⁴⁾ $t_{width} = 25 \mu s$ (measured at 50 % I_{peak})

⁵⁾ Maximum 60 V

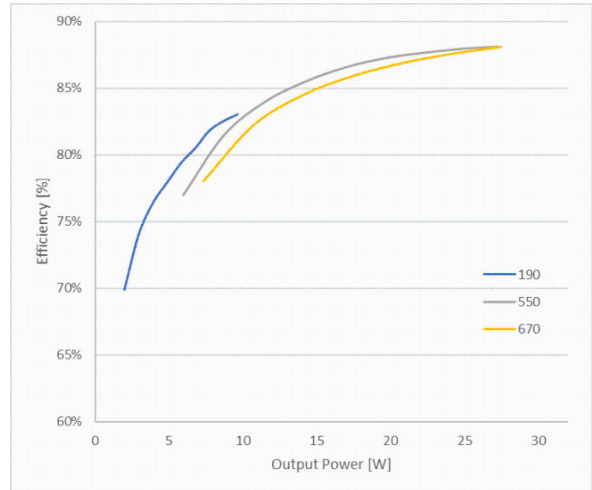
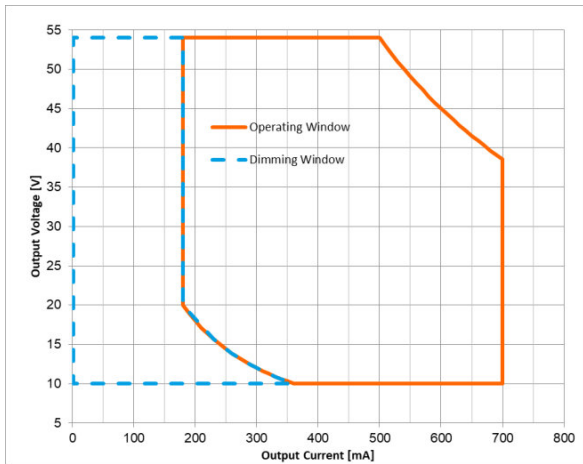
⁶⁾ $\pm 3\%$

⁷⁾ Ripple average at 100 Hz

Product datasheet

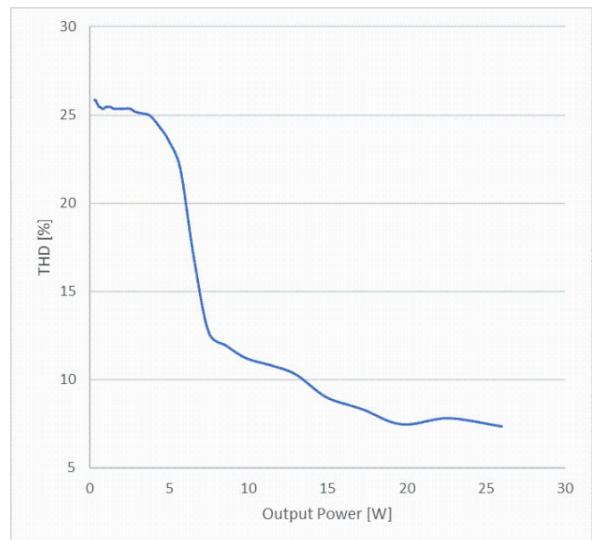
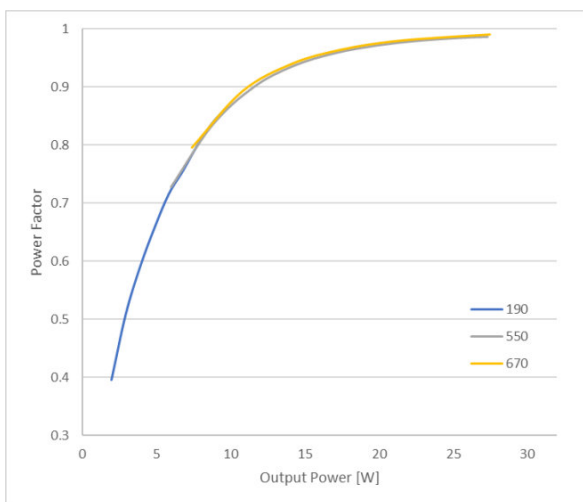
8) Partial load 3.6...27 W

9) 2,512 mW



OTI DALI 25 NFC LP Operating window

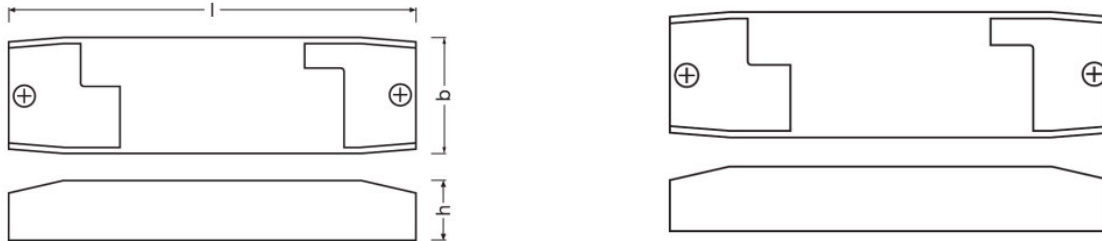
OTI DALI 25 NFC LP Typical Efficiency vs. Load (230 V 50 Hz)



OTI DALI 25 NFC LP Typical Power Factor vs. Load

OTI DALI 25 NFC LP Typical THD Vs Load

Dimensions & weight



| | |
|---|--|
| Mounting hole spacing, length | 108.0 mm |
| Product weight | 150.00 g |
| Cable cross-section, input side | 0.75...1.5 mm ² ¹⁾ |
| Cable cross-section, output side | 0.5...1.5 mm ² ¹⁾ |
| Wire preparation length, input side | 7...8 mm |
| Wire preparation length, output side | 7...8 mm |
| Length | 150.0 mm |
| Width | 42.5 mm |
| Height | 22.0 mm |

¹⁾ Solid or flexible leads

Colors & materials

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

Temperatures & operating conditions

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

¹⁾ Maximum at the T_c-point

²⁾ Maximum 56 days/year at 85 %

Lifespan

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

¹⁾ T_c = 85°C, 0.2% / 1,000 h failure rate / T_c = 75°C, 0.1% / 1,000 h failure rate

Additional product data

Product datasheet

| | |
|-----------------|---------------|
| Encapsulated | No |
| Predecessor EAN | 4062172115049 |

Capabilities

| | |
|--|-------------------------------------|
| Dimmable | Yes |
| Dimming interface | Qualified Bluetooth mesh by Silvair |
| Dimming range | 1...100 % |
| Dimming method | Amplitude Modulation |
| Overheating protection | Automatic reversible |
| Overload protection | Automatic 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 / II |
| Type of connection, input side | Push terminal |
| Type of connection, output side | Push terminal |
| Suitable for through-wiring | No |
| Suitable for emergency lighting | Yes |
| Constant lumen function | Programmable |
| Programming interface | NFC |
| Reset | Manual ²⁾ |
| Control interface | qualified Bluetooth mesh |
| Detection angle (Light sensor) | - |
| Detection angle (PIR) | - |
| Number of channels | 1 |

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

²⁾ see additional product information

Programming

| | |
|------------------------|-----|
| Box programming | Yes |
| Tuner4TRONIC | Yes |
| Tuner4TRONIC Field App | No |
| Programming device | NFC |

Programmable features

| | |
|---------------------|-----|
| Constant Lumen | Yes |
| Lamp Operating Time | Yes |
| Driver Guard | Yes |

Product datasheet

| | |
|--------------------|-----|
| Emergency Mode | Yes |
| Configuration Lock | Yes |
| Soft Switch Off | Yes |
| Dim to Dark | Yes |
| OEM Key | No |

Certificates & standards

| | |
|---------------------------|--|
| Approval marks – approval | CE / UKCA / EL / EAC |
| 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 62479/Acc. to ETSI EN 300 328/Acc. to ETSI EN 301 489-17/Acc. to ETSI EN 301 489 - 1 |
| Protection class | II |
| Type of protection | IP20 |

Logistical data

| | |
|----------------|--------------|
| Commodity code | 850440959000 |
|----------------|--------------|

Environmental information







| Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH) | |
|---|--|
| Date of Declaration | 17-01-2023 |
| Primary Article Identifier | 4062172227919 |
| Candidate List Substance 1 | Lead |
| 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 | bdf53761-e9e1-44a9-9a84-26dd02762e8e |

Product datasheet

Additional product information

- By integrating the device into a casing the wireless range could be affected, in particular by metal surfaces. Therefore, the wireless range needs to be verified after integration.
- The device can be put into operation using the OSRAM HubSense Commissioning Tool version 1.30.1 (<https://platform.hubsense.eu>), subject to prior acceptance of the Terms of Use and the Privacy Policy.
- OSRAM may terminate or suspend the use of the HubSense Commissioning Tool at any time and for any or no reason in its sole discretion, even if access and use is continued to be allowed to others.
- The device complies with Bluetooth mesh Standard v1.0. It can also be used in 3rd party Bluetooth mesh network, that complies with this standard and that supports the mesh models of this device, and with certain 3rd party commissioning tools, that support the mesh models of this device. In order to ensure correct interoperability a verification with the 3rd party network components and the 3rd party commissioning tool is necessary in advance. Please contact OSRAM (support@hubsense.eu) to receive the actual list of supported models for this device.
- OSRAM shall have no liability for any 3rd party commissioning tool and does not make any representations, express or implied, about the availability and/or performance of such commissioning tool.
- OSRAM shall have no liability for and does not make any representations, express or implied, about the connectivity of OSRAM QBM products with any other products.
- Reset to factory setting: (1) Power off device and disconnect from mains, apply short circuit between LED+ and LED-, (2) connect device to mains and power on for at least 2 seconds, (3) power off device, disconnect from mains and remove short circuit. Reset completed.

Download Data

| File | |
|---|--|
|  | User instruction OPTOTRONIC LED Power Supply |
|  | Certificates OT ENEC 40038447 130722 |
|  | CAD data OT WI NFC CA BL LPI IGS 130722 |
|  | CAD data OT WI NFC CA BL LPI STEP 130722 |
|  | CAD Data 2-dim OT WI NFC CA BL LPI CAD2PDF 130722 |
|  | CAD data 3-dim OT WI NFC CA BL LPI CAD3PDF 130722 |

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 |
|---------------|--------------------------------------|------------------------------|--------------------------------------|----------------------|--------------|
| 4062172227919 | OT WI 25/220...240/700 NFC BL LPI | Shipping carton box 20 | 314 mm x 122 mm x 107 mm | 4.10 dm ³ | 3121.00 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.

Disclaimer

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