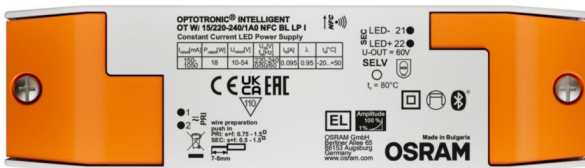


## OT WI 15/220-240/1A0 NFC BL LPI

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



Specifications are subject to changes without notice.

[www.inventronicsglobal.com](http://www.inventronicsglobal.com)

© 2024, Inventronics GmbH. All rights reserved. Inventronics is a licensee of the OSRAM brand. OSRAM is a trademark of ams OSRAM

[support@inventronicsglobal.com](mailto:support@inventronicsglobal.com)

### 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 <sup>1)</sup>                   |
| Input voltage DC                         | 176...276 V                                 |
| Current set                              | NFC   |
| Total harmonic distortion                | < 10 % <sup>2)</sup>                        |
| Power factor $\lambda$                   | 0.33C...0.98                                |
| Efficiency in full-load                  | 87.5 % <sup>3)</sup>                        |
| Protective conductor current             | not relevant                                |
| Inrush current                           | 20 A <sup>4)</sup>                          |
| Max. ECG no. on circuit breaker 10 A (B) | 82  |
| Max. ECG no. on circuit breaker 16 A (B) | 130   |
| Surge capability (L/N-Ground)            | 2 kV  |
| Surge capability (L-N)                   | 1 kV  |
| Nominal output voltage                   | 10...54 V <sup>5)</sup>                     |
| U-OUT (working voltage)                  | 60 V  |
| Nominal output current                   | 150...1050 mA <sup>6)</sup>                 |
| Default output current                   | 350 mA                                      |
| Output current tolerance                 | $\pm 3$ %                                   |
| Output ripple current (100 Hz)           | < 3 % <sup>7)</sup>                         |
| Output PSTLM                             | <1  |
| Output SVM                               | <0.4  |
| Nominal output power                     | 18 W  |
| Maximum output power                     | 18 W <sup>8)</sup>                          |
| Wireless protocol                        | Qualified Bluetooth mesh enabled by Silvair |
| Wireless range                           | 10 m line of sight                          |
| Radio frequency                          | 2.4 GHz                                     |
| Maximum TX power                         | +4 dBm                                      |
| Galvanic isolation DALI/mains            | not relevant                                |
| Galvanic isolation DALI/output           | not relevant                                |
| Networked standby power                  | 0.15 W <sup>3)</sup>                        |

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 %  $I_{peak}$ )

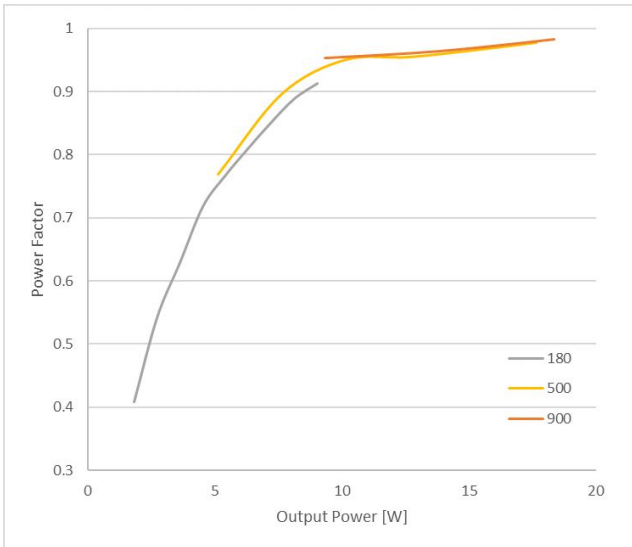
5) Maximum 60 V

6)  $\pm 3\%$

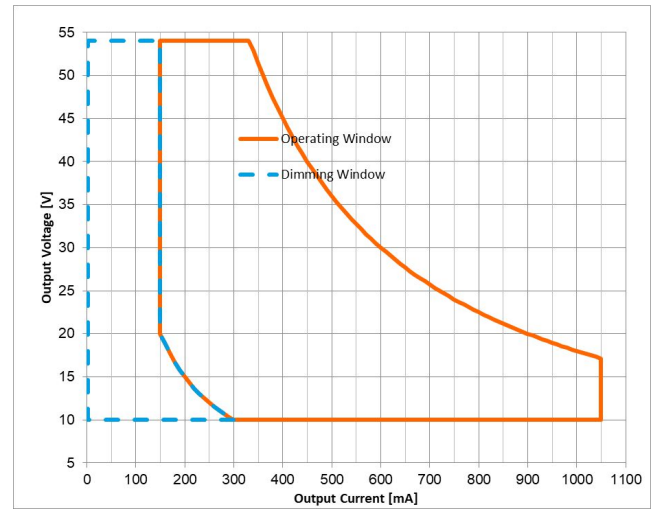
7) Ripple average at 100 Hz

8) Partial load 3...18 W

## Typical Power Factor v Load

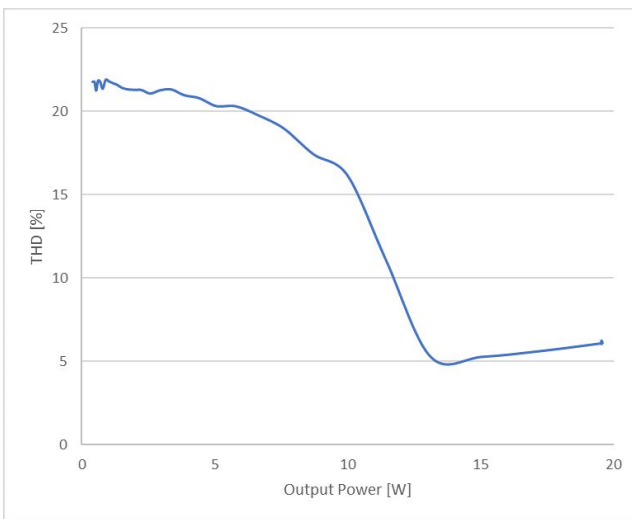


## Operating Window



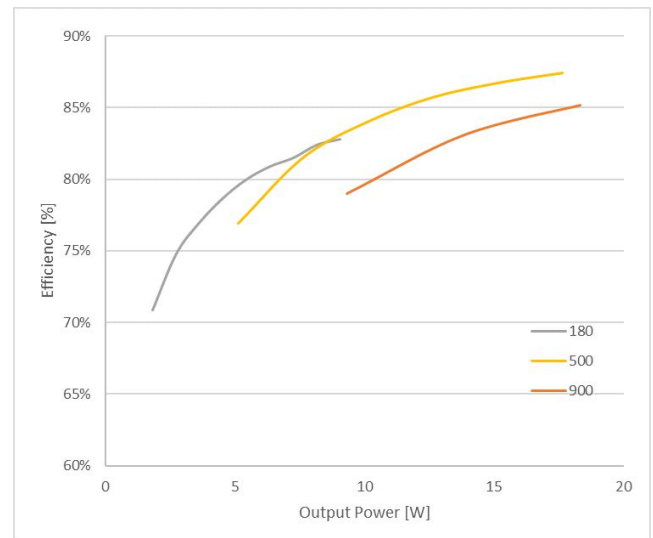
## OTI DALI 15 NFC LP Typical Power Factor vs. Load

### Typical THD v Load



## OTI DALI 15 NFC LP Operating window

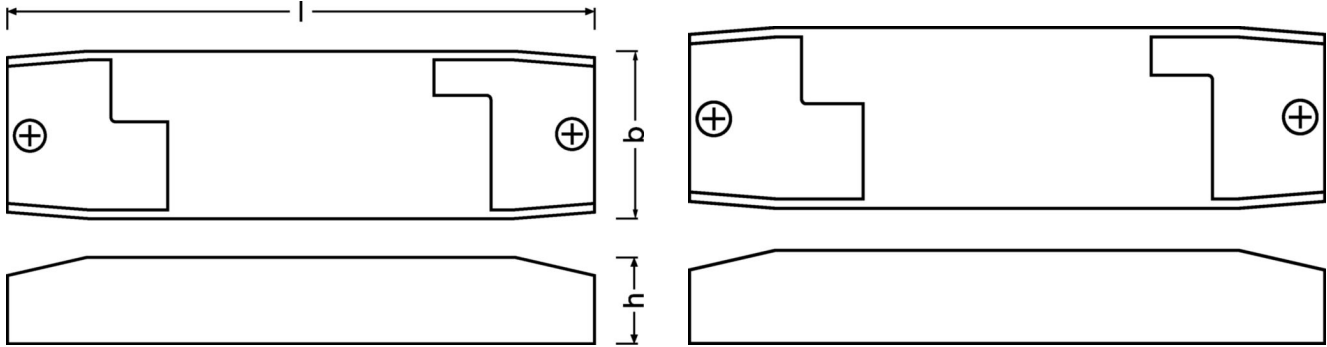
### Typical Efficiency v Load 230 V 50 Hz



## OTI DALI 15 NFC LP Typical THD Vs Load

## OTI DALI 15 NFC LP Typical Efficiency vs. Load (230 V / 50 Hz)

## Dimensions & weight



|   |  |
|---|--|
| <b>Length</b>                               | 150.0 mm                                 |
| <b>Width</b>                                | 42.5 mm                                  |
| <b>Height</b>                               | 22.0 mm                                  |
| <b>Mounting hole spacing, length</b>        | 108.0 mm                                 |
| <b>Mounting hole spacing, width</b>         | not relevant mm                          |
| <b>Cable cross-section, input side</b>      | 0.75...1.5 mm <sup>2</sup> <sup>1)</sup> |
| <b>Cable cross-section, output side</b>     | 0.5...1.5 mm <sup>2</sup> <sup>1)</sup>  |
| <b>Wire preparation length, input side</b>  | 7...8 mm                                 |
| <b>Wire preparation length, output side</b> | 7...8 mm                                 |
| <b>Product weight</b>                       | 150.00 g                                 |

1) Solid or flexible leads

## Colors & materials

|                        |         |
|------------------------|---------|
| <b>Casing material</b> | Plastic |
| <b>Product color</b>   | White   |

## Temperatures & operating conditions

|   |                        |
|---|------------------------|
| <b>Ambient temperature range</b>                | -20...+50 °C           |
| <b>Maximum temperature at tc test point</b>     | 80 °C <sup>1)</sup>    |
| <b>Max.housing temperature in case of fault</b> | 110 °C                 |
| <b>Temperature range at storage</b>             | -40...+85 °C           |
| <b>Permitted rel. humidity during operation</b> | 5...85 % <sup>2)</sup> |

1) Maximum at the Tc-point

2) Maximum 56 days/year at 85 %

## Lifespan

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

1)  $T_c = 80^\circ\text{C}$ , 0.2% / 1,000 h failure rate /  $T_c = 70^\circ\text{C}$ , 0.1% / 1,000 h failure rate

## Additional product data

|                        |               |
|------------------------|---------------|
| <b>Encapsulated</b>    | No            |
| <b>Predecessor EAN</b> | 4062172115025 |

## Capabilities

|   |                                     |
|---|-------------------------------------|
| <b>Programming interface</b>                  | NFC                                 |
| <b>Control interface</b>                      | qualified Bluetooth mesh            |
| <b>Dimmable</b>                               | Yes                                 |
| <b>Dimming interface</b>                      | Qualified Bluetooth mesh by Silvair |
| <b>Dimming range</b>                          | 1...100 %                           |
| <b>Dimming method</b>                         | Amplitude Modulation                |
| <b>DALI-2 Diagnostic Data</b>                 | No                                  |
| <b>DALI-2 Energy Data</b>                     | No                                  |
| <b>Constant lumen function</b>                | Programmable                        |
| <b>Max. cable length to lamp/LED module</b>   | 2.0 m <sup>1)</sup>                 |
| <b>Suitable for fixtures with prot. class</b> | I / II                              |
| <b>Suitable for emergency lighting</b>        | Yes                                 |
| <b>Type of connection, input side</b>         | Push terminal                       |
| <b>Type of connection, output side</b>        | Push terminal                       |
| <b>Suitable for through-wiring</b>            | No                                  |
| <b>Number of channels</b>                     | 1                                   |
| <b>Overheating protection</b>                 | Automatic reversible                |
| <b>Overload protection</b>                    | Automatic reversible                |
| <b>Short-circuit protection</b>               | Automatic reversible                |
| <b>Intended for no-load operation</b>         | No                                  |
| <b>No-load proof</b>                          | Yes                                 |

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

## Programming

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

## Programmable features

|                        |              |
|------------------------|--------------|
| Emergency Mode         | Yes          |
| DALI-2 Luminaire Data  | No           |
| Corridor Functionality | not relevant |
| Dim to Dark            | Yes          |
| Soft Switch Off        | Yes          |
| Tuning Factor          | Yes          |
| Configuration Lock     | Yes          |
| Driver Guard           | Yes          |
| Emergency Mode         | Yes          |

## Certificates & standards

|                           |  |
|---------------------------|--|
| Approval marks – approval | CE / UKCA / ENEC / EAC / EL  |
| 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 |
| Type of protection        | IP20   |
| Protection class          | 2  |

## Logistical data

|                |             |
|----------------|-------------|
| Commodity code | 85044095900 |
|----------------|-------------|

## Environmental information

| Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH) |               |
|---|---------------|
| Date of Declaration   | 17-06-2024    |
| Primary Article Identifier  | 4062172227872 |
| Declaration No. in SCIP database                                      | In work       |

### 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](mailto: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                   |            |                                     |
|------------------------|------------|-------------------------------------|
| Certificates           | PDF        | ▶OT ENEC 40038447 270224            |
| CAD data 3-dim         | Compressed | ▶OT WI NFC CA BL LPI CAD3PDF 130722 |
| CAD data 2-dim         | Compressed | ▶OT WI NFC CA BL LPI CAD2PDF 130722 |
| CAD data               | Compressed | ▶OT WI NFC CA BL LPI IGS 130722     |
| CAD data               | Compressed | ▶OT WI NFC CA BL LPI STEP 130722    |
| Mandatory Publications | PDF        | ▶OT WI NFC LP CE 4388804 080722     |
| Mandatory Publications | PDF        | ▶OT WI NFC LP UK DoC 4388806 080722 |
| User instruction       | PDF        | ▶OPTOTRONIC LED Power Supply        |

## 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 |
|---------------|---------------------------------|----------------------------------|--------------------------------------|----------------------|--------------|
| 4062172227872 | OT WI 15/220-240/1A0 NFC BL LPI | Shipping carton box<br>20 Pieces | 314 x 122 x 107 mm                   | 4.10 dm <sup>3</sup> | 121.00 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

## Accessories Optional

| Product description             | Accessory name | Accessory code  |
|---------------------------------|----------------|-----------------|
| OT WI 15/220-240/1A0 NFC BL LPI | PRH101 -USB    | ▶ 6977078996938 |
| OT WI 15/220-240/1A0 NFC BL LPI | CPR30 -USB     | ▶ 6977078996945 |

## Disclaimer

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