

## 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

### 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
Total harmonic distortion	< 10 % <sup>2)</sup>
Power factor $\lambda$	0.35...0.95
Efficiency in full-load	87.5 % <sup>3)</sup>
Device power loss	-
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>
Output current tolerance	$\pm 3$ %
Default output current	350 mA
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>
Galvanic isolation primary/secondary	SELV
Maximum TX power	8 dBm <sup>9)</sup>
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 <sup>3)</sup>

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

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

<sup>3)</sup> at 230 V, 50 Hz

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

<sup>5)</sup> Maximum 60 V

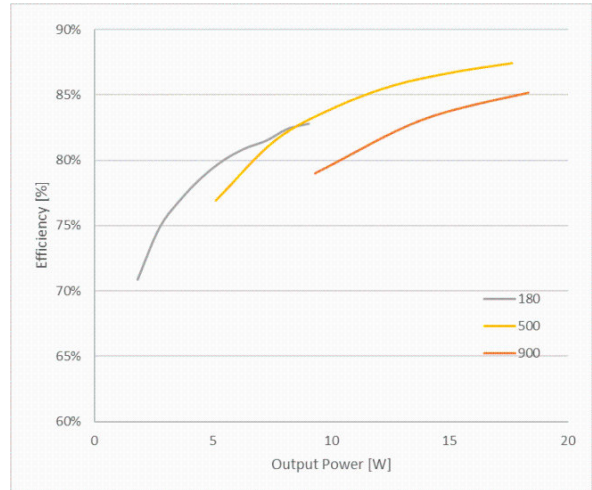
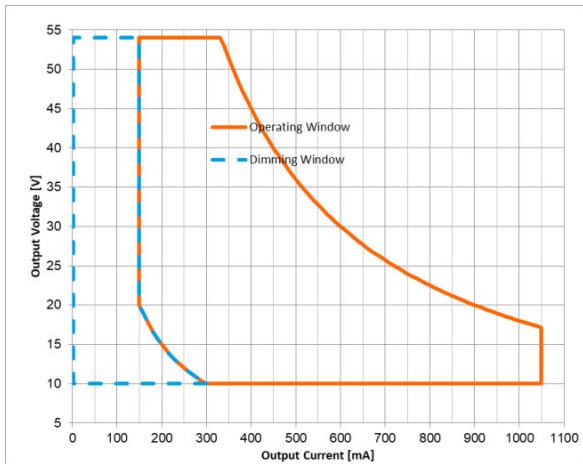
<sup>6)</sup>  $\pm 3\%$

<sup>7)</sup> Ripple average at 100 Hz

# Product datasheet

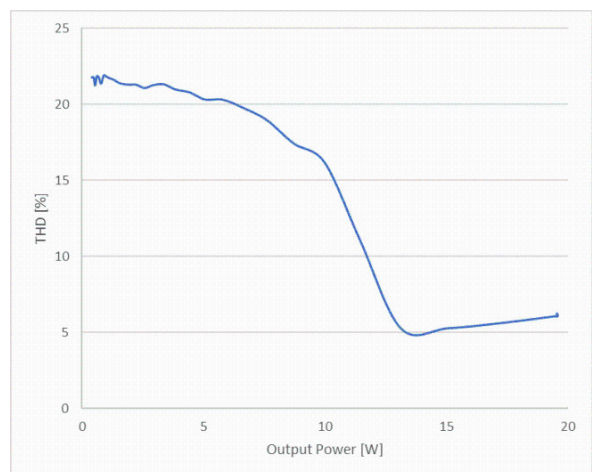
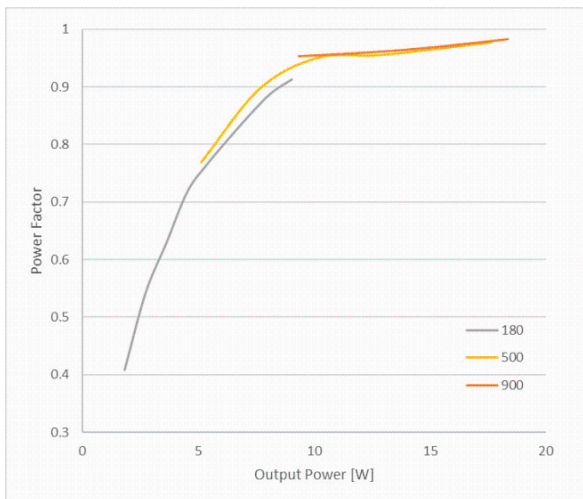
8) Partial load 3...18 W

9) 2,512 mW



OTI DALI 15 NFC LP Operating window

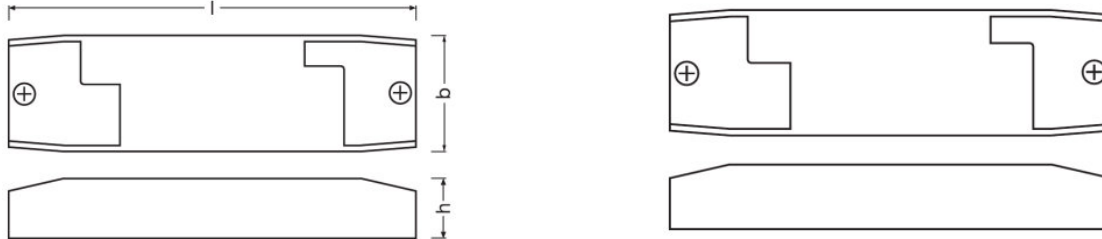
OTI DALI 15 NFC LP Typical Efficiency vs. Load (230 V 50 Hz)



OTI DALI 15 NFC LP Typical Power Factor vs. Load

OTI DALI 15 NFC LP Typical THD Vs Load

## Dimensions & weight



<b>Mounting hole spacing, length</b>	108.0 mm
<b>Product weight</b>	150.00 g
<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>Length</b>	150.0 mm
<b>Width</b>	42.5 mm
<b>Height</b>	22.0 mm

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

## Colors & materials

<b>Casing material</b>	Plastic
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## 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>

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

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

## Lifespan

<b>ECG lifetime</b>	50000 / 100000 h <sup>1)</sup>
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<sup>1)</sup> T<sub>c</sub> = 80°C, 0.2% / 1,000 h failure rate / T<sub>c</sub> = 70°C, 0.1% / 1,000 h failure rate

## Additional product data

## Product datasheet

Encapsulated	No
Predecessor EAN	4062172115025

### 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 <sup>1)</sup>
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 <sup>2)</sup>
Control interface	qualified Bluetooth mesh
Detection angle (Light sensor)	-
Detection angle (PIR)	-
Number of channels	1

<sup>1)</sup> Output wires must be routed as close as possible to each other

<sup>2)</sup> 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
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### Environmental information







Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)	
Date of Declaration	18-01-2023
Primary Article Identifier	4062172227872
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	6fa5822c-1e39-4ddd-b9cc-f02a0803b277

## 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](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	
	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

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### 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.

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### 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 20	314 mm x 122 mm x 107 mm	4.10 dm <sup>3</sup>	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.

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### Disclaimer

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