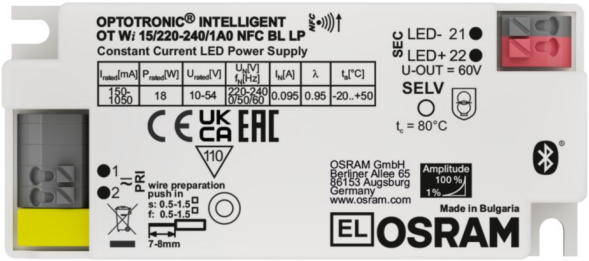
OT WI 15/220-240/1A0 NFC BL LP

OPTOTRONIC Wireless Intelligent – QBM NFC LP | 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

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

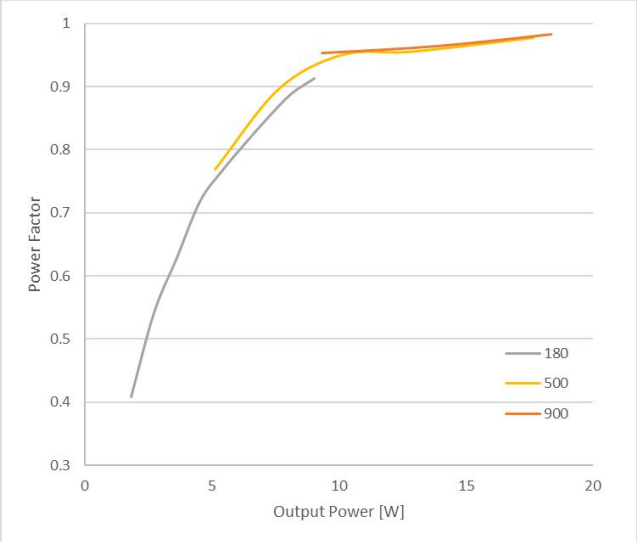
Technical data

Electrical data

Nominal output voltage	10…54 V [1)]
Input voltage DC	176…276 V
Nominal output current	150…1050 mA [2)]
Inrush current	20 A [3)]
Max. ECG no. on circuit breaker 10 A (B)	82
Max. ECG no. on circuit breaker 16 A (B)	130
Nominal output power	18 W
Input voltage AC	198…264 V [4)]
Power factor λ	0.33C…0.98
U-OUT (working voltage)	60 V
Surge capability (L-N)	1 kV
Surge capability (L/N-Ground)	2 kV
Mains frequency	0,50,60 Hz
Protective conductor current	not relevant
Nominal input voltage	220…240 V
Total harmonic distortion	< 10 % [5)]
Output current tolerance	±3 %
Maximum output power	18 W [6)]
Output ripple current (100 Hz)	< 3 % [7)]
Maximum TX power	+4 dBm
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 [8)]

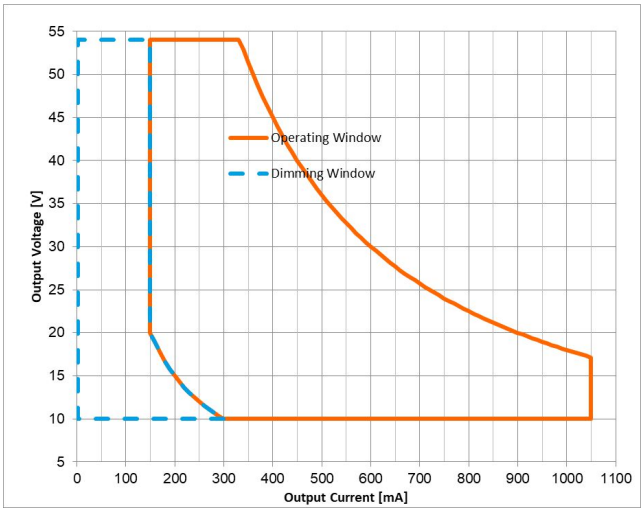
1) Maximum 60 V
2) ±3%
3) t_{width} = 25 µs (measured at 50 % I_{peak})
4) Permitted voltage range
5) At full load, 220…240 V, 50 Hz / see graphs
6) Partial load 3…18 W
7) Ripple average at 100 Hz
8) at 230 V, 50 Hz

Typical Power Factor v Load



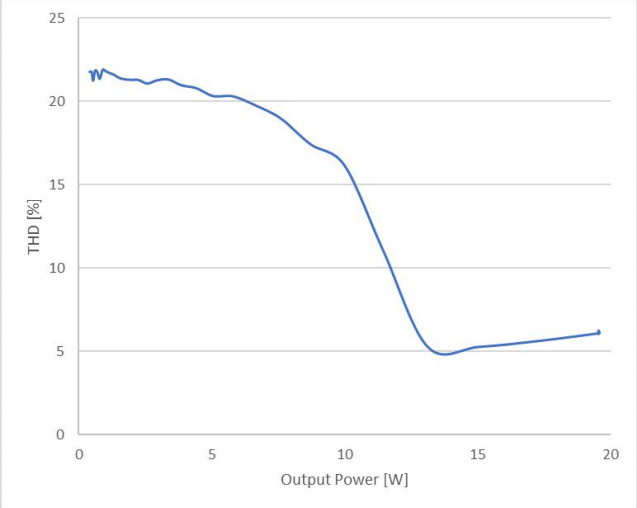
OTI DALI 15 NFC LP Typical Power Factor vs. Load

Operating Window



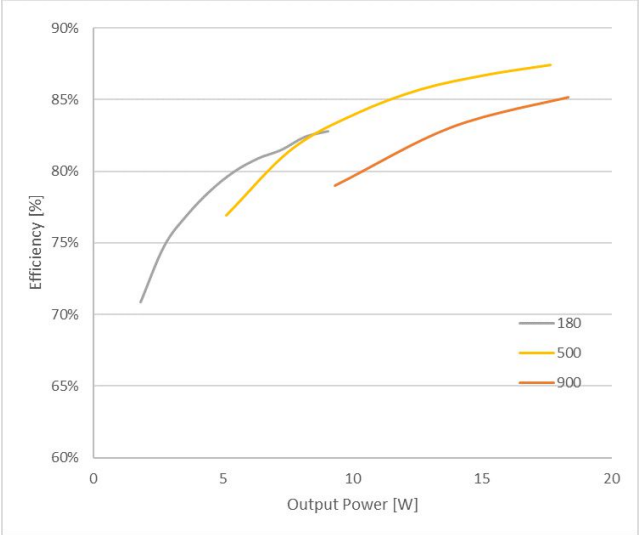
OTI DALI 15 NFC LP Operating window

Typical THD v Load



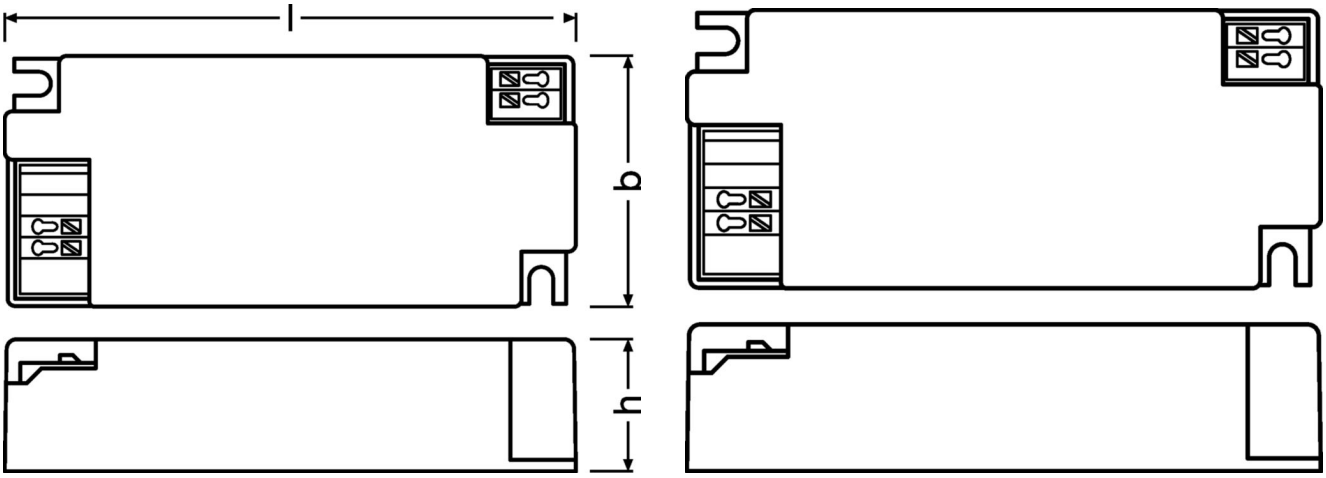
OTI DALI 15 NFC LP Typical THD Vs Load

Typical Efficiency v Load 230 V 50 Hz



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

Dimensions & weight



Product weight	120.00 g
Mounting hole spacing, width	34.0 mm
Mounting hole spacing, length	88.0 mm
Wire preparation length, output side	7…8 mm
Wire preparation length, input side	7…8 mm
Cable/wire length, output side	2000 mm
Cable cross-section, output side	0.5…1.5 mm² [1)]
Cable cross-section, input side	0.5…1.5 mm² [1)]
Length	97.0 mm
Height	22.0 mm

1) Solid or flexible leads

Colors & materials

Product color	White
Casing material	Plastic

Temperatures & operating conditions

Max.housing temperature in case of fault	110 °C
Maximum temperature at tc test point	80 °C [1)]
Ambient temperature range	-20…+50 °C
Temperature range at storage	-40…+85 °C
Permitted rel. humidity during operation	5…85 % [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
Predecessor EAN	4062172110129

Capabilities

Max. cable length to lamp/LED module	2.0 m [1)]
Dimming range	1…100 %
Dimming method	Amplitude Modulation
Dimming interface	Qualified Bluetooth mesh by Silvair
Suitable for through-wiring	No
Suitable for emergency lighting	Yes
Short-circuit protection	Automatic reversible
Overload protection	Automatic reversible
Overheating protection	Automatic reversible
Dimmable	Yes
Suitable for fixtures with prot. class	I / II
No-load proof	Yes
Type of connection, input side	Push terminal
Type of connection, output side	Push terminal
Constant lumen function	Programmable
Programming interface	NFC

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

Programming

Box programming	Yes

Programmable features

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

Certificates & standards

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
Approval marks – approval	CE / UKCA / ENEC / EAC / EL
Type of protection	IP20

Logistical data

Commodity code	85044095900

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		
Certificates	PDF	►OT ENEC 40038447 270224
CAD data 3-dim	Compressed	►OT WI NFC CA BL LP CAD3PDF 130722
CAD data 2-dim	Compressed	►OT WI NFC CA BL LP CAD2PDF 130722
CAD data	Compressed	►OT WI NFC CA BL LP IGS 130722
CAD data	Compressed	►OT WI NFC CA BL LP 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
4062172227810	OT WI 15/220-240/1A0 NFC BL LP	Shipping carton box 20 Pieces	208 x 122 x 107 mm	2.72 dm³	90.00 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 LP	PRH101 -USB	►6977078996938
OT WI 15/220-240/1A0 NFC BL LP	CPR30 -USB	►6977078996945

Disclaimer

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