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## OT Wi 40/220-240/1A0 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 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
- Compatible with the NLC wireless standard

### 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.

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### 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
Nominal input current at 230 V	0.20 A
Total harmonic distortion	< 10 % <sup>2)</sup>
Power factor $\lambda$	0.70C...0.99
Efficiency in full-load	88 % <sup>3)</sup>
Networked standby power	0.22 W <sup>3)</sup>
Inrush current	20 A <sup>4)</sup>
Max. ECG no. on circuit breaker 10 A (B)	35
Max. ECG no. on circuit breaker 16 A (B)	55
Surge capability (L-N)	1 kV
Surge capability (L/N-Ground)	2 kV
Nominal output voltage	10...54 V <sup>5)</sup>
U-OUT (working voltage)	60 V
Nominal output current	350...1050 mA <sup>6)</sup>
Minimum output current	3.5 mA
Default output current	700 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	7...38 W
Maximum output power	38 W <sup>8)</sup>
Galvanic isolation primary/secondary	SELV
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

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 %  $I_{peak}$ )

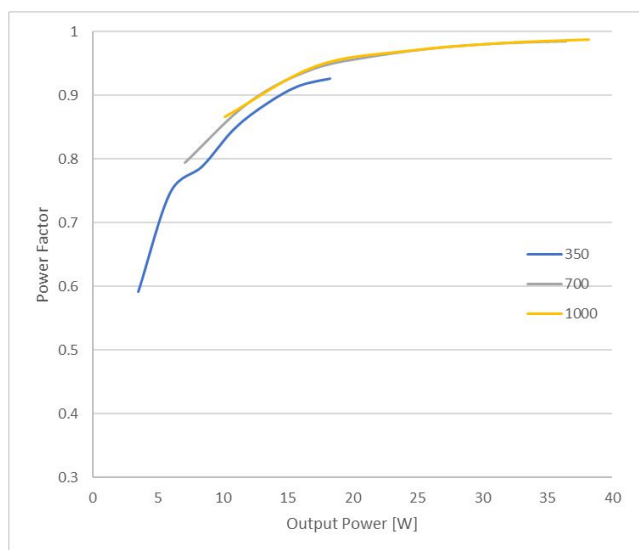
5) Maximum 60 V

6)  $\pm 3\%$

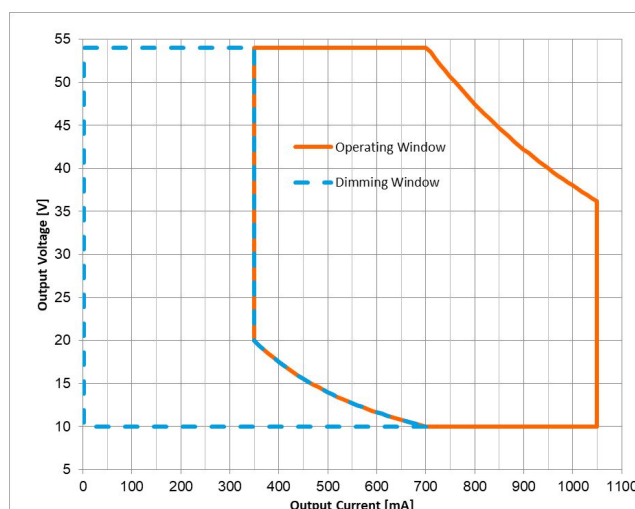
7) Ripple average at 100 Hz

8) Partial load 7...38 W

## Typical Power Factor v Load

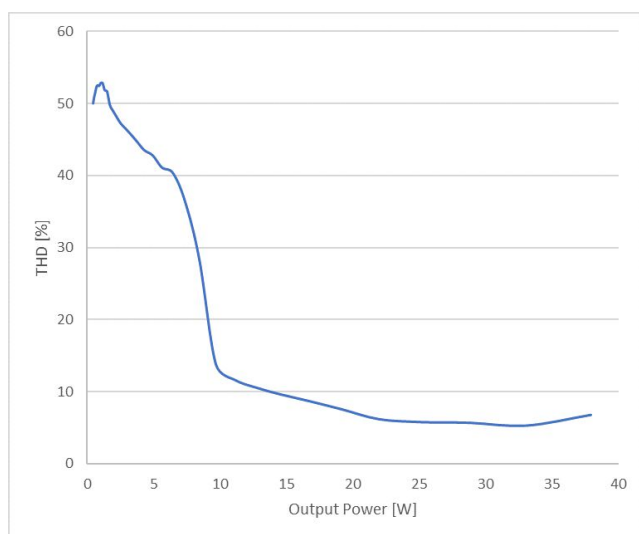


## Operating Window



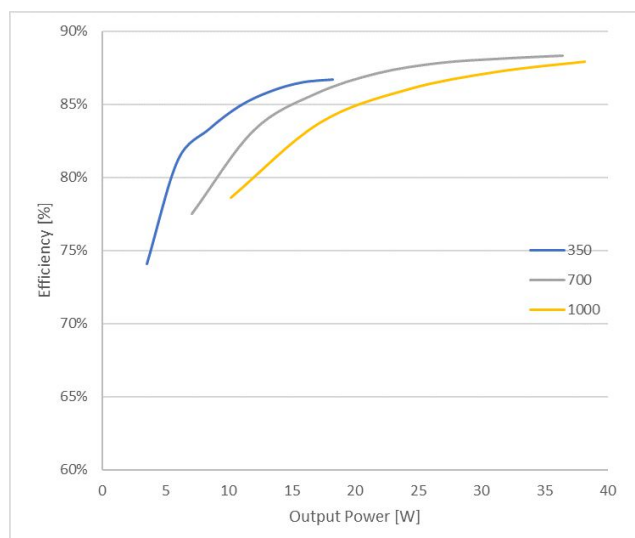
## OTI DALI 40 NFC LP Typical Power Factor vs. Load

### Typical THD v Load



## OTI DALI 40 NFC LP Operating window

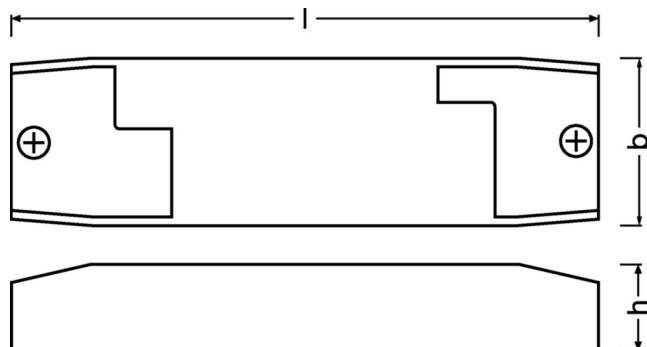
### Typical Efficiency v Load 230 V 50 Hz



## OTI DALI 40 NFC LP Typical THD Vs Load

## OTI DALI 40 NFC LP Typical Efficiency vs. Load (230 V / 50 Hz)

## Dimensions & weight



Product weight	120.00 g
Length	150.0 mm
Width	42.5 mm
Height	22.0 mm
Mounting hole spacing, length	108.0 mm
Cable cross-section, input side	0.75...1.5 mm <sup>2</sup> <sup>1)</sup>
Cable cross-section, output side	0.5...1.5 mm <sup>2</sup> <sup>1)</sup>
Wire preparation length, input side	7...8 mm
Wire preparation length, output side	7...8 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...+45 °C
Maximum temperature at tc test point	85 °C <sup>1)</sup>
Max.housing temperature in case of fault	110 °C
Temperature range at storage	-40...+85 °C
Permitted rel. humidity during operation	5...85 % <sup>2)</sup>

1) Maximum at the Tc-point

2) Maximum 56 days/year at 85 %

### Lifespan

ECG lifetime	50000 h / 100000 h <sup>1)</sup>
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1)  $T_c = 85^\circ\text{C}$ , 0.2% / 1,000 h failure rate /  $T_c = 75^\circ\text{C}$ , 0.1% / 1,000 h failure rate

### Additional product data

Encapsulated	No
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### Capabilities

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

DALI-2 Luminaire Data	No
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 / EL
Standards	EN 61347-1 / EN 61347-2-13 / EN 55015 / EN 61547 / EN 61000-3-2 / EN 62384 / EN 62479 / ETSI EN 300 328 / ETSI EN 301 489-17 / ETSI EN 301 489 - 1
Type of protection	IP20

### Logistical data

Commodity code	85044095900
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### Environmental information

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)	
Date of Declaration	03-07-2025
Primary Article Identifier	4062172227933   6977770431720
Declaration No. in SCIP database	In work
SCIP_STATUS	In work
SCIP_ID	

#### 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.



### 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 Inventronics HubSense Commissioning Tool version 1.30.1 (<https://platform.hubsense.eu>), subject to prior acceptance of the Terms of Use and the Privacy Policy.
- Inventronics 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 Inventronics ([support@hubsense.eu](mailto:support@hubsense.eu)) to receive the actual list of supported models for this device.
- Inventronics 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.
- Inventronics shall have no liability for and does not make any representations, express or implied, about the connectivity of Inventronics 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 CA BL LP LPI CE 4388804 05 200125
Mandatory Publications	PDF	▶ OT WI NFC CA BL LP LPI UK DoC 4388806 02 180624
User instruction	PDF	▶ OPTOTRONIC LED Power Supply

#### Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4062172227933 OSRAM	OT Wi 40/220-240/1A0 NFC BL LPI	Shipping carton box 20 Pieces	314 x 122 x 107 mm	4.10 dm <sup>3</sup>	126.05 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 40/220-240/1A0 NFC BL LPI	PRH101 -USB	▶ 6977078996938
OT Wi 40/220-240/1A0 NFC BL LPI	PRH101 -USB	▶ 6937186112354
OT Wi 40/220-240/1A0 NFC BL LPI	CPR30 -USB	▶ 6977078996945
OT Wi 40/220-240/1A0 NFC BL LPI	CPR30 -USB	▶ 6937186112378

#### Disclaimer

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