

## OT WI 40/220-240/1A0 NFC CA LPI

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



### Product family features

- Driver with integrated CASAMBI lighting control system
- 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 CASAMBI 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

Max. ECG no. on circuit breaker 10 A (B)	35
Max. ECG no. on circuit breaker 16 A (B)	55
Maximum output power	38 W <sup>1)</sup>
Nominal output current	350...1050 mA <sup>2)</sup>
Nominal output power	38 W
Nominal output voltage	10...54 V <sup>3)</sup>
Nominal input voltage	220...240 V
Input voltage AC	198...264 V <sup>4)</sup>
Input voltage DC	176...276 V
Efficiency in full-load	88 % <sup>5)</sup>
Galvanic isolation primary/secondary	SELV
Inrush current	20 A <sup>6)</sup>
Networked standby power	0.15 W <sup>5)</sup>
Power factor $\lambda$	0.70C...0.99
Mains frequency	0,50,60 Hz
Surge capability (L-N)	1 kV
Surge capability (L/N-Ground)	2 kV
U-OUT (working voltage)	60 V
Current set	NFC
Maximum TX power	8 dBm <sup>7)</sup>
Output current tolerance	$\pm 3$ %
Output ripple current (100 Hz)	$< 3$ % <sup>8)</sup>
Radio frequency	2.4 GHz
Total harmonic distortion	$< 10$ % <sup>9)</sup>
Wireless protocol	Casambi Evolution
Wireless range	10 m line of sight
Default output current	700 mA

1) Partial load 7...38 W

2)  $\pm 3\%$

3) Maximum 60 V

4) Permitted voltage range

5) at 230 V, 50 Hz

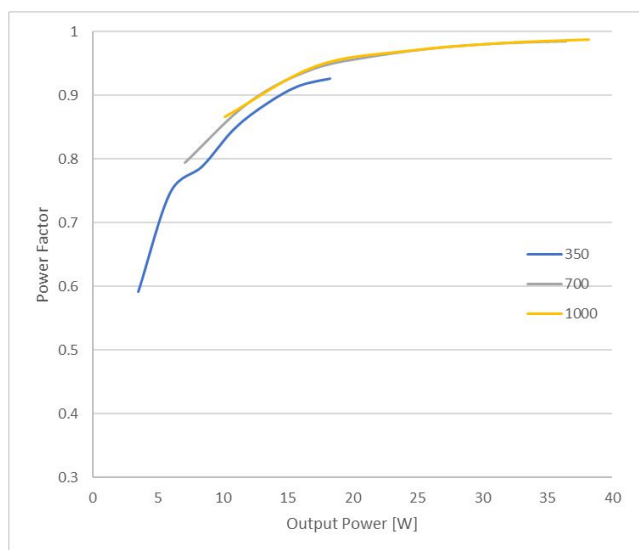
6)  $t_{\text{width}} = 25 \mu\text{s}$  (measured at 50 %  $I_{\text{peak}}$ )

7) 6.3 mW

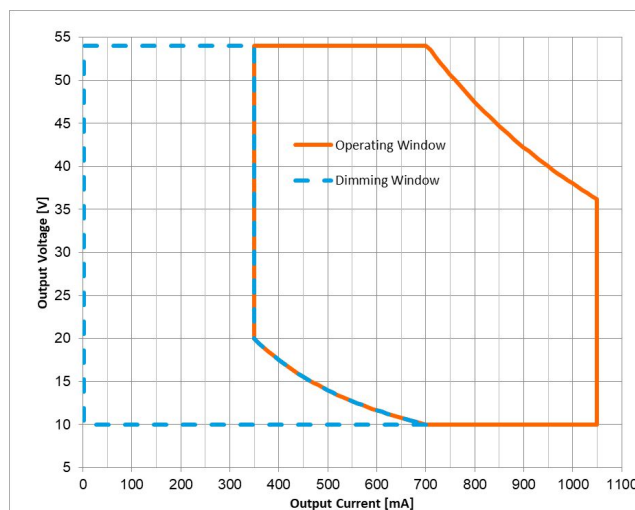
8) Ripple average at 100 Hz

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

Typical Power Factor v Load

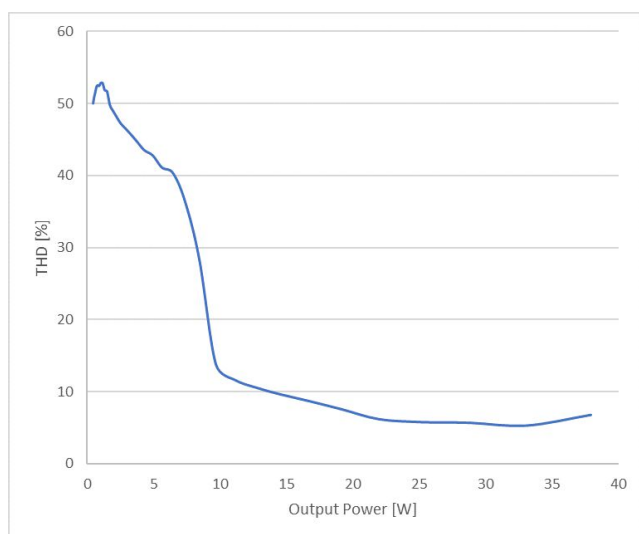


Operating Window



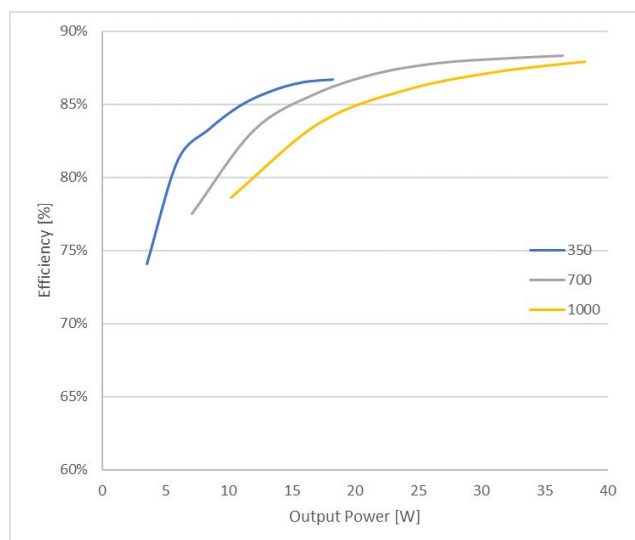
OTI DALI 40 NFC LP Typical Power Factor vs. Load

Typical THD v Load



OTI DALI 40 NFC LP Operating window

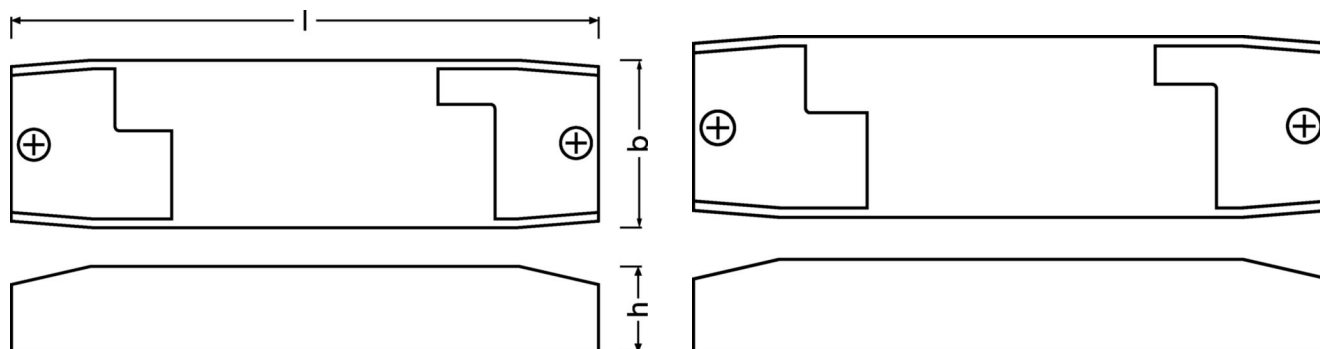
Typical Efficiency v Load 230 V 50 Hz



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
Height	22.0 mm
Width	42.5 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>
Mounting hole spacing, length	108.0 mm
Wire preparation length, input side	7...8 mm
Wire preparation length, output side	7...8 mm

1) Solid or flexible leads

## Colors & materials

Casing material	Plastic
Product color	White

## Temperatures & operating conditions

Ambient temperature range	-20...+45 °C
Max.housing temperature in case of fault	110 °C
Maximum temperature at tc test point	85 °C <sup>1)</sup>
Permitted rel. humidity during operation	5...85 % <sup>2)</sup>
Temperature range at storage	-40...+85 °C

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

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

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

## Programming

Box programming	Yes
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## Programmable features

Dim to Dark	Yes
Configuration Lock	Yes
DALI-2 Luminaire Data	No
Driver Guard	Yes
Emergency Mode	Yes
Soft Switch Off	Yes
Tuning Factor	Yes

## Certificates & standards

Type of protection	IP20
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 / BIS

## Logistical data

Commodity code	85044095900
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## Additional product information

- Download Casambi app from App store or Google play. For the correct functioning of the Casambi app refer to the Casambi website: <http://www.casambi.com>.
- The Casambi App is provided to you by Casambi. OSRAM shall have no liability for the Casambi app and does not make any representations, express or implied, about the availability and/or performance of the Casambi app.
- The Casambi cloud services are provided to you by Casambi. OSRAM shall have no liability for the Casambi cloud services and does not make any representations, express or implied, about the availability and/or performance of the Casambi cloud services.
- OSRAM shall have no liability for and does not make any representations, express or implied, about the connectivity of Casambi ready products of OSRAM with any other Casambi ready products.
- There are two places in the app where you can unpair a Casambi enabled device from a network.
  1. Go to the 'Luminaires' tab and tap 'edit'. Unpair a luminaire by tapping the ("X") that will appear in the corner of the relevant luminaire icon. You can also double-tap a luminaire icon to open the "luminaire properties" screen, and then scroll down and tap 'Unpair device'.
  2. Go to the "Nearby devices" screen found under the 'More' tab. Tap on the device you wish to unpair and select 'Unpair device'. This will unpair the luminaire if you have modification (administrator) rights to the network. If you don't have the modification rights to the network that the device is paired to then you need to have access to the devices power switch to be able to unpair. Tap on the device you wish to unpair and select 'Unpair device' and the app will open the 'Unpair' screen. Tap on the 'Start' button and an orange "Time bar" will appear and start to move across the screen. During the time it takes the bar to move across the screen, flick the power switch off and back on again. This should unpair the device. If unpairing succeeds then there is a message that luminaire has been unpaired. If it does not succeed then try again but switch the power off and on again more slowly (This may be needed for devices that use an additional power supply; such as a CBU-PWM4). If unpairing continues to be unsuccessful then it is probably the case that the power switch is not correct for the device you are trying to unpair.

## 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.



### 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	▶UI OT WI NFC CA LP I

## Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4062172228077	OT WI 40/220-240/1A0 NFC CA LPI	Shipping carton box 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 40/220-240/1A0 NFC CA LPI	PRH101 -USB	▶ 6977078996938
OT WI 40/220-240/1A0 NFC CA LPI	CPR30 -USB	▶ 6977078996945

## Disclaimer

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