

# OT WI 25/220...240/700 NFC CA LP

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



#### Product family features

- Supply voltage: 220...240 V

- Line frequency: 0 Hz | 50 Hz | 60 Hz

Line voltage: 198...264 VLifetime: up to 100,000 hType of protection: IP20

#### 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**

| Naminal input voltage                    | 220, 240 V              |
|--|-------------------------|
| Nominal input voltage                    | 220240 V                |
| Mains frequency                          | 0,50,60 Hz              |
| Input voltage AC                         | 198264 V <sup>1)</sup>  |
| Input voltage DC                         | 176276 V                |
| Total harmonic distortion                | < 10 % <sup>2)</sup>    |
| Power factor $\lambda$                   | 049C099                 |
| Efficiency in full-load                  | 88 % <sup>3)</sup>      |
| Device power loss                        | -                       |
| Inrush current                           | 20 A <sup>4)</sup>      |
| Max. ECG no. on circuit breaker 10 A (B) | 50                      |
| Max. ECG no. on circuit breaker 16 A (B) | 80                      |
| Surge capability (L/N-Ground)            | 2 kV                    |
| Surge capability (L-N)                   | 1 kV                    |
| Nominal output voltage                   | 1054 V <sup>5)</sup>    |
| U-OUT (working voltage)                  | 60 V                    |
| Nominal output current                   | 180700 mA <sup>6)</sup> |
| Output current tolerance                 | ±3 %                    |
| Default output current                   | 500 mA                  |
| Output ripple current (100 Hz)           | < 3 % <sup>7)</sup>     |
| Output PSTLM                             | ≤1                      |
| Output SVM                               | ≤0.4                    |
| Nominal output power                     | 27 W                    |
| Maximum output power                     | 27 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                        | Casambi Evolution       |
| 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

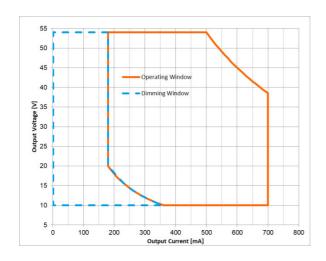
<sup>&</sup>lt;sup>3)</sup> at 230 V, 50 Hz

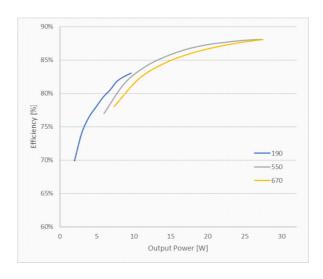
<sup>4)</sup>  $_{t \text{ width}}$  = 25 µs (measured at 50 % I  $_{peak}$ ) 5) Maximum 60 V

<sup>6) ±3%</sup> 

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

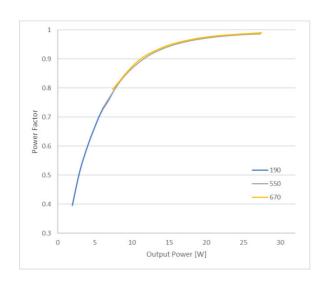
8) Partial load 3.6...27 W

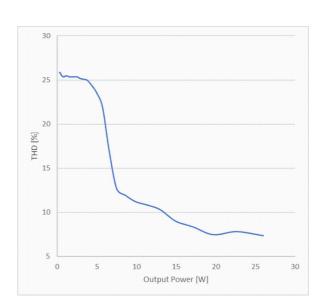




OTI DALI 25 NFC LP Operating window

OTI DALI 25 NFC LP Typical Efficiency vs. Load (230 V  $\,$  50 Hz)



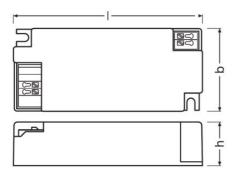


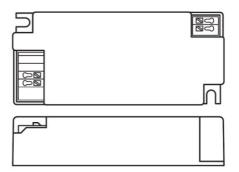
OTI DALI 25 NFC LP Typical Power Factor vs. Load

OTI DALI 25 NFC LP Typical THD Vs Load

<sup>&</sup>lt;sup>9)</sup> 2.512 mW

### Dimensions & weight





| Mounting hole spacing, length        | 88.0 mm                   |
|--------------------------------------|---------------------------|
| Mounting hole spacing, width         | 34.0 mm                   |
| Product weight                       | 12000 g                   |
| Cable cross-section, input side      | 0.51.5 mm <sup>2</sup> 1) |
| Cable cross-section, output side     | 0.51.5 mm <sup>2</sup> 1) |
| Wire preparation length, input side  | 78 mm                     |
| Wire preparation length, output side | 78 mm                     |
| Length                               | 970 mm                    |
| Width                                | 425 mm                    |
| Height                               | 220 mm                    |

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

#### Colors & materials

### Temperatures & operating conditions

| Ambient temperature range                | -20+50 °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 | 585 % <sup>2)</sup> |

 $<sup>^{1)}</sup>$  Maximum at the Tc-point

### Lifespan

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

<sup>1)</sup> T  $_{\rm C}$  = 85 °C, 0.2% / 1,000 h failure rate / T  $_{\rm C}$  = 75 °C, 0.1% / 1,000 h failure rate

 $<sup>^{2)}\,\</sup>mathrm{Maximum}$  56 days/year at 85 %

### Additional product data

| Encapsulated | No |
|--------------|----|
|--------------|----|

### **Capabilities**

| Dimmable                               | Yes                  |
|--|----------------------|
| Dimming interface                      | Bluetooth CASAMBI    |
| Dimming range                          | 1100 %               |
| 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 | 1/11                 |
| Type of connection, input side         | Push terminal        |
| Type of connection, output side        | Push terminal        |
| Suitable for emergency lighting        | Yes                  |
| Constant lumen function                | Programmable         |
| Programming interface                  | NFC                  |
| Reset                                  | Manual <sup>2)</sup> |
| Control interface                      | Casambi              |
| 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

### **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 |

 $<sup>^{2)}</sup>$  see additional product information

| Emergency Mode     | Yes |
|--------------------|-----|
| Configuration Lock | Yes |
| Soft Switch Off    | Yes |
| Dim to Dark        | Yes |
| OEM Key            | No  |

### **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 |
| Protection class          | Ш  |
| Type of protection        | IP20   |

## Logistical data

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

#### **Environmental information**

| Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACh) |  |  |  |  |  |
|---|--|--|--|--|--|
| Date of Declaration   | 11-10-2023   |  |  |  |  |
| Primary Article Identifier  | 4062172227995  |  |  |  |  |
| 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                                      | 73292d02-6436-4706-87d6-43c5e7ceb7fb   |  |  |  |  |

#### 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.

#### Download Data

|          | File  |
|----------|---|
| Z        | User instruction OPTOTRONIC LED Power Supply        |
| <b>大</b> | Certificates OT ENEC 40038447 260623                |
| <u> </u> | CAD data<br>OT WI NFC CA BL LP IGS 130722           |
| <u> </u> | CAD data<br>OT WI NFC CA BL LP STEP 130722          |
| <u> </u> | CAD Data 2-dim<br>OT WI NFC CA BL LP CAD2PDF 130722 |
| <u> </u> | CAD data 3-dim<br>OT WI NFC CA BL LP CAD3PDF 130722 |

#### 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 |
|---------------|----------------------------------|------------------------------|--------------------------------------|----------|--------------|
| 4062172227995 | OT WI 25/220240/700<br>NFC CA LP | Shipping carton box<br>20    | 208 mm x 122 mm x 107 mm             | 2.72 dm³ | 2490.00 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.

#### Disclaimer

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