

# PRODUCT DATASHEET OT 110/170...240/1A0 4DIMLT2 G2 CE

OPTOTRONIC® Constant current LED power supplies with 4DIM-DALI and NFC | Constant Current - Outdoor - dimmable



### Areas of application

- Street and urban lighting
- Industry
- Suitable for outdoor applications in luminaires with IP > 54
- Suitable for use in outdoor luminaires of protection class I and II

### **Product benefits**

- 4DIM functionality in one device (StepDIM, AstroDIM, MainsDIM, DALI)
- DALI-2 certified incl. Parts 251, 252, 253
- Easy and fast wireless luminaire programming
- Very high efficiency
- Wide current output range: 200 mA...1050 mA
- High surge protection: up to 10 kV (in protection class I or II)
- Great flexibility due to wide operating temperature range of -40...55 °C or 60 °C
- Protection through double isolation between mains input and LED output

### **Product features**

- Supply voltage: 220...240 V
- Current output range: 70...1,050 mA
- Easy and fast wireless luminaire programming via NFC
- Flexible current setting with one additional wire (LEDset2)
- AstroDIM for autonomous dimming with five independent levels (astro, time mode)
- Allows for energy saving in twilight phases
- MainsDIM function for dimming via reduction of line voltage amplitude
- Isolated DALI interface for bidirectional telemanagement systems
- Standby power consumption: < 0.35 W</li>

- Constant Lumen Output (CLO)
- Overtemperature protection via external NTC
- Integrated customizable thermal management (Driver Guard)

### **TECHNICAL DATA**

# Electrical data

Nominal wattage	110.00 W
Nominal output power	110 W <sup>1)</sup>
Nominal voltage	220240 V
Nominal output voltage	80220 V
Input voltage AC	170240 V
Input voltage DC	176276 V <sup>2)</sup>
U-OUT (working voltage)	250 V
Nominal current	0.52 A
Nominal output current	2001050 mA
Inrush current	65 A <sup>3)</sup>
Output current tolerance	±3 % 4)
Output ripple current (100 Hz)	< 5 %
Mains frequency	0/50/60 Hz
Total harmonic distortion	< 5 % <sup>5)</sup>
Power factor $\lambda$	> 0.98 6)
ECG efficiency	93 %
Device power loss	8,0 W
Max. ECG no. on circuit breaker 25 A (B)	19
Surge capability (L/N-Ground)	10 kV
Surge capability (L-N)	6 kV
Galvanic isolation	Double

<sup>1)</sup> Max. 75% in DC operating mode

### Photometrical data

Flickering metric (Pst LM)	≤1
Stroboscope effect metric (SVM)	≤0.4

# **Dimensions & Weight**

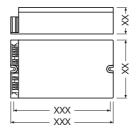
<sup>2)</sup> Additional fuse needed in DC operation

<sup>3)</sup>  $t_{width}$  = 70  $\mu$ s (measured at 50 %  $b_{eak}$ )

<sup>4) +/- 5%</sup> for LEDset down to 300mA

<sup>5)</sup> At full power

<sup>6)</sup> At full load



Length	150.00 mm
Mounting hole spacing, length	134 mm
Width	90.00 mm
Height	40.00 mm
Cable cross-section, input side	0,21,5 mm <sup>2</sup>
Cable cross-section, output side	0,21,5 mm <sup>2</sup>
Wire preparation length, input side	8,59,5 mm
Product weight	780.00 g

### Colors & materials

Casing material	Plastic
Body material	Plastic

# Temperatures & operating conditions

Ambient temperature range	-40+55 °C
Maximum temperature at tc test point	85 °C
Max.housing temperature in case of fault	110 °C
Permitted rel. humidity during operation	585 % <sup>1)</sup>

<sup>1)</sup> Maximum 56 days/year at 85 %

# Lifespan

ECG lifetime	50000 h / 100000 h <sup>1)</sup>
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<sup>1)</sup> At maximum T  $_{\!c}$  = 85°C / 10% failure rate / At T  $_{\!c}$  = 73°C / 10% failure rate

# **Capabilities**

Dimmable	Yes
Dimming interface	4DIM / AstroDIM / DALI / MainsDIM / StepDIM
Dimming range	10100 %
Overheating protection	Automatic reversible
Overload protection	Automatic reversible

No-load proof	Yes
Short-circuit protection	Automatic reversible
Max. cable length to lamp/LED module	10 m
Suitable for fixtures with prot. class	1/11

### Certificates & Standards

Approval marks – approval	CE / ENEC / VDE / VDE-EMC / CCC / EL / RCM
Standards	Acc. to EN 61347-1 / Acc. to EN 61347-2-13 / Acc. to EN 62384 / Acc. to EN 55015:2006 + A1:2007 + A2:2009 / Acc. to EN 61547 / Acc. to FCC 47 part 15 class B / Acc. to IEC 61000-3-2 / Acc. to IEC 62386-101 / Acc. to IEC 62386-102 / Acc. to IEC 62386-207 / UL-8750
Protection class	I/II
Type of protection	IP20

### **LOGISTICAL DATA**

Temperature range at storage	-40+85 °C

# Energy labelling regulation data acc EU 2019/2015

Networked standby power for CLS < 0.50 W
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### **DOWNLOAD DATA**

	Documents and certificates
PDF	User instruction
PDF	Declarations Of Conformity CE
PDF	Certificates

### **LOGISTICAL DATA**

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4052899981959	Unpacked 1			
4052899982048	Shipping box 10	385 mm x 300 mm x 125 mm	8141.00 g	14.44 dm³

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.