

## PRODUCT DATASHEET

### OT 165/170...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

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

## TECHNICAL DATA

### Electrical data

Nominal wattage	165.00 W
Nominal output power	165 W <sup>1)</sup>
Nominal voltage	220...240 V
Nominal output voltage	130...260 V
Input voltage AC	170...264 V
Input voltage DC	176...276 V <sup>2)</sup>
U-OUT (working voltage)	300 V
Nominal current	0.76 A
Nominal output current	200...1050 mA
Inrush current	77 A <sup>3)</sup>
Output current tolerance	±3 % <sup>4)</sup>
Output ripple current (100 Hz)	< 5 %
Mains frequency	0/50/60 Hz
Total harmonic distortion	< 5 % <sup>5)</sup>
Power factor $\lambda$	> 0.98 <sup>6)</sup>
ECG efficiency	93.5 %
Device power loss	11.5 W
Max. ECG no. on circuit breaker 25 A (B)	14
Surge capability (L/N-Ground)	10 kV
Surge capability (L-N)	6 kV
Galvanic isolation	Double
Power loss in stand-by mode	< 0.25 W

1) Max. 75% in DC operating mode

2) Additional fuse needed in DC operation

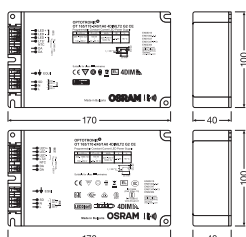
3) At 180  $\mu$ s

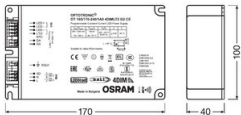
4) +/- 5% for LEDset down to 300mA

5) At full power

6) At full load

### Dimensions & Weight





Length	170.00 mm
Mounting hole spacing, length	160,0 mm
Width	100.00 mm
Height	40.00 mm
Cable cross-section, input side	0.2...1.5 mm <sup>2</sup>
Cable cross-section, output side	0.2...1.5 mm <sup>2</sup>
Wire preparation length, input side	8,5...9,5 mm
Product weight	980.00 g

Colors & materials

Casing material	Plastic
Body material	Plastic

Temperatures & operating conditions

Ambient temperature range	-40...+55 °C
Maximum temperature at tc test point	90 °C
Max.housing temperature in case of fault	110 °C
Permitted rel. humidity during operation	5...85 % <sup>1)</sup>

1) Maximum 56 days/year at 85 %

Lifespan

ECG lifetime	50000 h / 100000 h <sup>1)</sup>
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1) At maximum T<sub>c</sub> = 90°C / 10% failure rate / At T<sub>c</sub> = 78°C / 10% failure rate

Additional product data

Encapsulated	Yes
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Capabilities

Dimmable	Yes
Dimming interface	4DIM / AstroDIM / DALI / MainsDIM / StepDIM
Dimming range	10...100 %
Overheating protection	Automatic reversible
Overload protection	Automatic reversible
No-load proof	Yes

Short-circuit protection	Automatic reversible
Max. cable length to lamp/LED module	2,0 m
Suitable for fixtures with prot. class	I / II
Type of connection, output side	Push terminal

### Certificates & Standards

Approval marks – approval	CE / ENEC / VDE / VDE-EMC / CCC / EL / BIS
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 61000-3-3 / 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
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### Energy labelling regulation data acc EU 2019/2015

Networked standby power for CLS	< 0.25 W
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### DOWNLOAD DATA

Documents and certificates		Document name
	User instruction / safety instructions	OPTOTRONIC® Outdoor
	User instruction / safety instructions	10932717 OPTOTRONIC Outdoor
	Declarations of conformity	EU Declaration of Conformity 3813028
	Certificates	OT 165 4DIM LT2 G2 EATON AM27702 210520
	Certificates	VDE EMC Certificate 40044675 (EN)
	Certificates	OT outdoor ENEC 40050684 100220
	Certificates	OT 165 4DIM LT2 G2 INOTEC AM27702 210520
	Certificates	OT 165 4DIM G2 CE BIS 34496 170420
	Certificates	OT ENEC 40050684 060421

Documents and certificates		Document name
	Certificates	OT 165 4DIM G2 CE BIS 34496 170420
	Certificates	OT 165 4DIM LT2 G2 EATON AM27702 210520
	Certificates	OT 165 4DIM LT2 G2 INOTEC AM27702 210520
	Certificates	OT 165 4DIMLT2 G2 CE UK DoC 4310787 010621
	Certificates	OT EMC 40044675 250621

## LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4062172053952	Unpacked 1		284.00 g	
4062172053969	Shipping box 10	395 mm x 148 mm x 248 mm	10536.00 g	14.50 dm <sup>3</sup>

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.