

## OPTOTRONIC Outdoor

1DIM/AstroDIM – constant current LED drivers



### Areas of application

- Street and urban lighting
- Industry
- Suitable for outdoor applications in luminaires with IP > 65
- Suitable for use in outdoor luminaires of protection class I and II

### Product family benefits

- Easy and fast wireless luminaire programming
- Very high efficiency
- Optimized for AstroDIM operation
- 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 family 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)
- Standby power consumption: < 0.5 W
- Constant Lumen Output (CLO)
- Overtemperature protection via external NTC
- Integrated customizable thermal management (Driver Guard)

## Product family datasheet

### Technical data

#### Electrical data

Product description	Nominal voltage	Input voltage AC	Nominal current	Mains frequency	Power factor $\lambda$	Total harmonic distortion
OT 20/170...240/1A0 1DIMLT2 G1 CE	220...240 V	170...264 V	0.12 A	50...60 Hz	0.95/0.90	10 %
OT 40/170...240/1A0 1DIMLT2 G1 CE	220...240 V	170...264 V	0.20 A	50...60 Hz	0.95/0.90	10 %
OT 75/170...240/1A0 1DIMLT2 G1 CE	220...240 V	170...264 V	0.36 A	50/60 Hz	0.98/0.97	5 %
OT 110/170...240/1A0 1DIMLT2 G1 CE	220...240 V	170...264 V	0.54 A	50/60 Hz	0.98/0.97	5 %

Product description	Device power loss	Inrush current	Max. ECG no. on circuit breaker 10 A (B)	Max. ECG no. on circuit breaker 16 A (B)	Max. ECG no. on circuit breaker 25 A (B)
OT 20/170...240/1A0 1DIMLT2 G1 CE	3.5 W	25 A <sup>1)</sup>	23	36	57
OT 40/170...240/1A0 1DIMLT2 G1 CE	4.5 W	26 A <sup>2)</sup>	18	28	43
OT 75/170...240/1A0 1DIMLT2 G1 CE	5.3 W	54 A	8	12	20
OT 110/170...240/1A0 1DIMLT2 G1 CE	8.0 W	65 A	7	11	17

Product description	Max. no. of ECGs on 16A MCB with EBN-OS	Surge capability (L/N-Ground)	Surge capability (L-N)	Nominal output power	ECG efficiency
OT 20/170...240/1A0 1DIMLT2 G1 CE	100	8 kV	6 kV	22 W	87 %
OT 40/170...240/1A0 1DIMLT2 G1 CE	67	8 kV	6 kV	40 W	90 %
OT 75/170...240/1A0 1DIMLT2 G1 CE	30	10 kV	6 kV	75 W	93 %
OT 110/170...240/1A0 1DIMLT2 G1 CE	30	10 kV	6 kV	110 W	93 %

Product description	Nominal output voltage	U-OUT (working voltage)	Nominal output current	Output current tolerance	Output ripple current (100 Hz)
OT 20/170...240/1A0 1DIMLT2 G1 CE	10...38 V	60 V	70...1050 mA	$\pm 3$ %	5 %
OT 40/170...240/1A0 1DIMLT2 G1 CE	15...56 V	60 V	70...1050 mA	$\pm 3$ %	5 %
OT 75/170...240/1A0 1DIMLT2 G1 CE	35...115 V	120 V	70...1050 mA	$\pm 3$ %	6 %
OT 110/170...240/1A0 1DIMLT2 G1 CE	80...220 V	250 V	200...1050 mA	$\pm 3$ %	5 %

Product description	Minimum output current	Galvanic isolation	Nominal input voltage (SD port)
OT 20/170...240/1A0 1DIMLT2 G1 CE	70 mA	SELV	
OT 40/170...240/1A0 1DIMLT2 G1 CE	70 mA	SELV	
OT 75/170...240/1A0 1DIMLT2 G1 CE	70 mA	SELV	220...277 V
OT 110/170...240/1A0 1DIMLT2 G1 CE	70 mA	Double	220...277 V

## Product family datasheet

Product description	Surge capability (L/N – SD)	Surge capability (SD – Ground)
OT 20/170...240/1A0 1DIMLT2 G1 CE		
OT 40/170...240/1A0 1DIMLT2 G1 CE		
OT 75/170...240/1A0 1DIMLT2 G1 CE	6 kV	10 kV
OT 110/170...240/1A0 1DIMLT2 G1 CE	6 kV	10 kV

1) At 150 µs

2) At 180 µs

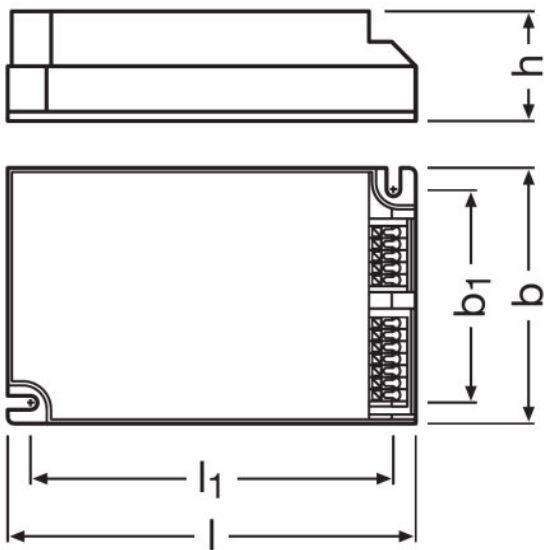
### Dimensions & weight

Product description	Length	Width	Height	Mounting hole spacing, length	Mounting hole spacing, width	Product weight
OT 20/170...240/1A0 1DIMLT2 G1 CE	123.0 mm	79.0 mm	33.0 mm	111.0 mm	67.0 mm	210.00 g
OT 40/170...240/1A0 1DIMLT2 G1 CE	123.0 mm	79.0 mm	33.0 mm	111.0 mm	67.0 mm	210.00 g
OT 75/170...240/1A0 1DIMLT2 G1 CE	133.0 mm	77.0 mm	40.0 mm	122.5 mm	-	301.00 g
OT 110/170...240/1A0 1DIMLT2 G1 CE	150.0 mm	90.0 mm	40.0 mm	134.0 mm	-	795.00 g

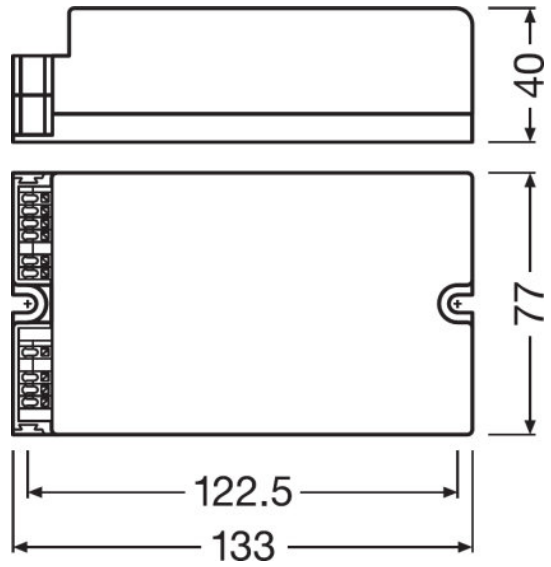
Product description	Cable cross-section, input side	Cable cross-section, output side	Wire preparation length, input side
OT 20/170...240/1A0 1DIMLT2 G1 CE	0.2...1.5 mm <sup>2</sup>	0.2...1.5 mm <sup>2</sup>	8.5...9.5 mm
OT 40/170...240/1A0 1DIMLT2 G1 CE	0.2...1.5 mm <sup>2</sup>	0.2...1.5 mm <sup>2</sup>	8.5...9.5 mm
OT 75/170...240/1A0 1DIMLT2 G1 CE	0.2...1.5 mm <sup>2</sup>	0.2...1.5 mm <sup>2</sup>	8.5...9.5 mm
OT 110/170...240/1A0 1DIMLT2 G1 CE	0.2...1.5 mm <sup>2</sup>	0.2...1.5 mm <sup>2</sup>	8.5...9.5 mm

Product family datasheet

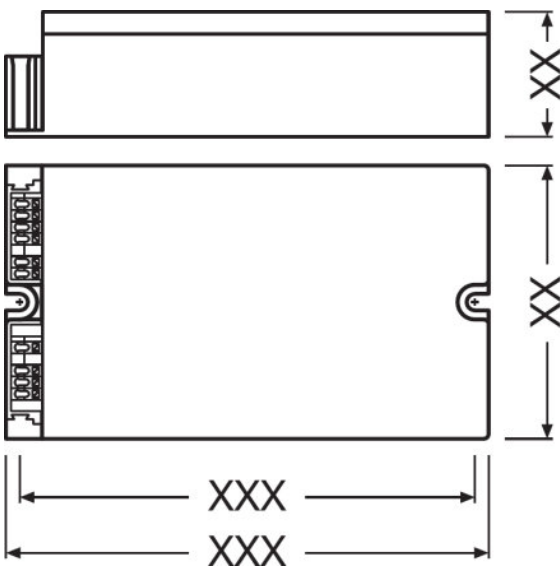
Product line drawing



OT 20/170...240/1A0 1DIMLT2 G1 CE, OT 40/170...240/1A0 1DIMLT2 G1 CE



OT 75/170...240/1A0 1DIMLT2 G1 CE



OT 110/170...240/1A0 1DIMLT2 G1 CE

## Product family datasheet

### Temperatures & operating conditions

Product description	Ambient temperature range	Maximum temperature at tc test point	Max.housing temperature in case of fault	Permitted rel. humidity during operation
OT 20/170...240/1A0 1DIMLT2 G1 CE	-40...+60 °C	75 °C	120 °C	5...85 % <sup>1)</sup>
OT 40/170...240/1A0 1DIMLT2 G1 CE	-40...+60 °C	80 °C	120 °C	5...85 % <sup>1)</sup>
OT 75/170...240/1A0 1DIMLT2 G1 CE	-40...+55 °C	80 °C	110 °C	5...85 % <sup>1)</sup>
OT 110/170...240/1A0 1DIMLT2 G1 CE	-40...+55 °C	85 °C	110 °C	5...85 % <sup>1)</sup>

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

### Lifespan

Product description	ECG lifetime
OT 20/170...240/1A0 1DIMLT2 G1 CE	85000 h
OT 40/170...240/1A0 1DIMLT2 G1 CE	85000 h
OT 75/170...240/1A0 1DIMLT2 G1 CE	100000 h
OT 110/170...240/1A0 1DIMLT2 G1 CE	100000 h

### Capabilities

Product description	Dimmable	Dimming interface	Dimming range	Suitable for fixtures with prot. class
OT 20/170...240/1A0 1DIMLT2 G1 CE	Yes	AstroDIM	10...100 %	I / II
OT 40/170...240/1A0 1DIMLT2 G1 CE	Yes	AstroDIM	10...100 %	I / II
OT 75/170...240/1A0 1DIMLT2 G1 CE	Yes	AstroDIM	10...100 %	I / II
OT 110/170...240/1A0 1DIMLT2 G1 CE	Yes	AstroDIM	10...100 %	I / II

Product description	Constant lumen function	NTC input	Overheating protection
OT 20/170...240/1A0 1DIMLT2 G1 CE	Programmable	Yes	Automatic reversible
OT 40/170...240/1A0 1DIMLT2 G1 CE	Programmable	Yes	Automatic reversible
OT 75/170...240/1A0 1DIMLT2 G1 CE	Programmable	Yes	Automatic reversible
OT 110/170...240/1A0 1DIMLT2 G1 CE	Programmable	Yes	Automatic reversible

Product description	Overload protection	Short-circuit protection	No-load proof	Max. cable length to lamp/LED module
OT 20/170...240/1A0 1DIMLT2 G1 CE	Automatic reversible	Automatic reversible	Yes	2.0 m
OT 40/170...240/1A0 1DIMLT2 G1 CE	Automatic reversible	Automatic reversible	Yes	2.0 m
OT 75/170...240/1A0 1DIMLT2 G1 CE	Automatic reversible	Automatic reversible	Yes	2.0 m
OT 110/170...240/1A0 1DIMLT2 G1 CE	Automatic reversible	Automatic reversible	Yes	2.0 m

## Product family datasheet

Product description	Number of channels
OT 20/170...240/1A0 1DIMLT2 G1 CE	1
OT 40/170...240/1A0 1DIMLT2 G1 CE	1
OT 75/170...240/1A0 1DIMLT2 G1 CE	1
OT 110/170...240/1A0 1DIMLT2 G1 CE	1

### Programmable features

Product description	Operating Current	Tuning Factor	Constant Lumen
OT 20/170...240/1A0 1DIMLT2 G1 CE	Yes	Yes	Yes
OT 40/170...240/1A0 1DIMLT2 G1 CE	Yes	Yes	Yes
OT 75/170...240/1A0 1DIMLT2 G1 CE	Yes	Yes	Yes
OT 110/170...240/1A0 1DIMLT2 G1 CE	Yes	Yes	Yes

Product description	Lamp Operating Time	Thermal Protection	Driver Guard
OT 20/170...240/1A0 1DIMLT2 G1 CE	Yes	Yes	Yes
OT 40/170...240/1A0 1DIMLT2 G1 CE	Yes	Yes	Yes
OT 75/170...240/1A0 1DIMLT2 G1 CE	Yes	Yes	Yes
OT 110/170...240/1A0 1DIMLT2 G1 CE	Yes	Yes	Yes

Product description	AstroDIM	StepDIM	MainsDIM
OT 20/170...240/1A0 1DIMLT2 G1 CE	Yes	No	No
OT 40/170...240/1A0 1DIMLT2 G1 CE	Yes	No	No
OT 75/170...240/1A0 1DIMLT2 G1 CE	Yes	No	No
OT 110/170...240/1A0 1DIMLT2 G1 CE	Yes	No	No

Product description	Presence Detection	DALI Settings	Emergency Mode
OT 20/170...240/1A0 1DIMLT2 G1 CE	No	No	No
OT 40/170...240/1A0 1DIMLT2 G1 CE	No	No	No
OT 75/170...240/1A0 1DIMLT2 G1 CE	No	No	No
OT 110/170...240/1A0 1DIMLT2 G1 CE	No	No	No

Product description	Luminaire Info	Configuration Lock
OT 20/170...240/1A0 1DIMLT2 G1 CE	Yes	Yes
OT 40/170...240/1A0 1DIMLT2 G1 CE	Yes	Yes
OT 75/170...240/1A0 1DIMLT2 G1 CE	Yes	Yes
OT 110/170...240/1A0 1DIMLT2 G1 CE	Yes	Yes

## Product family datasheet

### Certificates & standards

Product description	Type of protection	Standards
OT 20/170...240/1A0 1DIMLT2 G1 CE	IP20	Acc. to IEC 61347-1/Acc. to EN 61347-1/Acc. to IEC 61347-2-13/Acc. to EN 61347-2-13/Acc. to IEC/EN 62384/Acc. to EN 55015:2006 + A1:2007 + A2:2009/Acc. to CISPR 15:2005 + A1:2006 + A2:2008/Acc. to IEC 61547/Acc. to EN 61547/Acc. to IEC 61000-3-2/EN 61000-3-2/Acc. to IEC 61000-3-3/Acc. to EN 61000-3-3/Acc. to IEC 62386-101/Acc. to EN 62386-101/Acc. to IEC 62386-102/Acc. to EN 62386-102/Acc. to IEC 62386-207/Acc. to EN 62386-207
OT 40/170...240/1A0 1DIMLT2 G1 CE	IP20	Acc. to IEC 61347-1/Acc. to EN 61347-1/Acc. to IEC 61347-2-13/Acc. to EN 61347-2-13/Acc. to IEC/EN 62384/Acc. to EN 55015:2006 + A1:2007 + A2:2009/Acc. to CISPR 15:2005 + A1:2006 + A2:2008/Acc. to IEC 61547/Acc. to EN 61547/Acc. to IEC 61000-3-2/EN 61000-3-2/Acc. to IEC 61000-3-3/Acc. to EN 61000-3-3/Acc. to IEC 62386-101/Acc. to EN 62386-101/Acc. to IEC 62386-102/Acc. to EN 62386-102/Acc. to IEC 62386-207/Acc. to EN 62386-207
OT 75/170...240/1A0 1DIMLT2 G1 CE	IP20	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/UL-8750
OT 110/170...240/1A0 1DIMLT2 G1 CE	IP20	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/UL-8750

Product description	Approval marks – approval
OT 20/170...240/1A0 1DIMLT2 G1 CE	CE / ENEC 10 / VDE / VDE-EMC / CQC
OT 40/170...240/1A0 1DIMLT2 G1 CE	CE / ENEC 10 / VDE / VDE-EMC / CQC
OT 75/170...240/1A0 1DIMLT2 G1 CE	CE / CQC / ENEC 10 / VDE / VDE-EMC
OT 110/170...240/1A0 1DIMLT2 G1 CE	CE / CQC / ENEC 10 / VDE / VDE-EMC

### Logistical data

Product description	Temperature range at storage	Commodity code
OT 20/170...240/1A0 1DIMLT2 G1 CE	-25...80 °C	850440829000
OT 40/170...240/1A0 1DIMLT2 G1 CE	-25...80 °C	850440829000
OT 75/170...240/1A0 1DIMLT2 G1 CE	-40...80 °C	850440829000
OT 110/170...240/1A0 1DIMLT2 G1 CE	-40...85 °C	850440829000

## Product family datasheet

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### Application advice

For more detailed application information and graphics please see product datasheet.















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### Sales and Technical Support

Sales and Technical Support [www.osram.com](http://www.osram.com)

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### Download Data

File	
	Brochures Technical application guide - 1DIMLT2 G1 LED drivers (EN)
	Certificates VDE ENEC Certificate 40043863
	Certificates VDE EMC Certificate 40038482
	Certificates CB Certificate DE1-59452
	Certificates VDE ENEC Certificate 40043863 appendix
	Certificates CCC Certificate 2018171002002021
	Declarations of conformity EU Declaration of Conformity 3584649
	Declarations of conformity Declaration of Conformity 3547530
	User instruction OPTOTRONIC Outdoor
	Certificates CB Test Certificate DE1-60243
	Certificates CCC Certificate 2018171002002244
	Declarations of conformity EU Declaration of Conformity 3605907 (EN)
	Certificates CCC Certificate 2018171002002265
	Declarations of conformity EU Declaration of Conformity 3629845

### Logistical Data

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## Product family datasheet

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
4052899517400	OT 20/170...240/1A0 1DIMLT2 G1 CE	Shipping carton box 20	400 mm x 277 mm x 122 mm	13.52 dm <sup>3</sup>	4651.00 g
4052899517424	OT 40/170...240/1A0 1DIMLT2 G1 CE	Shipping carton box 20	400 mm x 277 mm x 122 mm	13.52 dm <sup>3</sup>	4651.00 g
4052899541092	OT 75/170...240/1A0 1DIMLT2 G1 CE	Shipping carton box 20	609 mm x 289 mm x 118 mm	20.77 dm <sup>3</sup>	6584.00 g
4052899541115	OT 110/170...240/1A0 1DIMLT2 G1 CE	Shipping carton box 10	385 mm x 300 mm x 125 mm	14.44 dm <sup>3</sup>	8291.00 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.

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### Data privacy

This OSRAM driver can be configured using the Tuner4TRONIC software. This requires registering on [www.myosram.com](http://www.myosram.com) and downloading the Tuner4TRONIC software from the Internet. The Tuner4TRONIC software enables users to access and view the operational data of a luminaire or driver via the corresponding programming interfaces. A password key (Config Lock) must be set up in the driver via the Tuner4TRONIC software in order to control which users can access and view operational data. Follow the instructions for password setup. To grant an external person or company rights to access or view operational data, you can assign password keys. In this case, however, you are responsible for ensuring that the third party concerned takes notice of the information described here. However, OSRAM can read out operating data from devices for maintenance and service purposes even when a password key has been assigned. In individual cases, OSRAM will also use its access rights in order to optimize or improve driver hardware and driver functions. In accordance with data privacy principles, any user of operating data (luminaire manufacturers, third parties with access rights) must ensure that personal data (e.g. name, address, location IDs) are only merged with the prior written consent of the person (end user) concerned. The respective user of the operating data is responsible for providing evidence of consent.

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### Disclaimer

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