



Light is reliable

OPTOTRONIC® Compact LED drivers

Compact indoor drivers with a multitude of features:
OPTOTRONIC® Intelligent DALI, FIT and ECO

Light is OSRAM





Excellent reasons to choose OPTOTRONIC® drivers

With our OPTOTRONIC® drivers, users benefit from high-performance products that are characterized by high reliability, efficiency, flexibility and quality:

1. Maximum reliability thanks to long experience:

Re-use of know-how from well-proven OSRAM ECGs (electronic control gears) such as HALOTRONIC®, POWERTRONIC® and QUICKTRONIC®.

2. Premium lighting quality: Applications such as hospitality, museums or offices require the latest technology for the best quality of light (analog dimming and low ripple). The latest generation of OPTOTRONIC® Compact can be used when “mobile-camera-friendly”, “slow motion recording” and “smooth dimming” are key for success.

3. High energy efficiency: Up to 91 % (full load) and further energy saving with proprietary OSRAM light management systems (LMS).

4. Freedom of design: Same driver for built-in and independent mounting through optional kits, small form factors and similar to ECGs for traditional lamps.

5. Flexibility of application: Suitable for PrevaLED® modules, CoB (chip-on-board) LEDs and other modules available in the market.

6. Wide product portfolio: Various product families, window drivers, dimmable products and different wattages.

Future-proof solutions

Using OPTOTRONIC® drivers not only means using durable, high-performance products but also staying flexible in terms of future application: OPTOTRONIC® drivers can be perfectly adjusted for their respective tasks and, if required, also be optimized later on by means of top-quality accessories (e.g. cable clamps) from OSRAM.

OPTOTRONIC® Compact LED drivers

OPTOTRONIC® Compact drivers are the perfect solution for a wide variety of luminaire types and applications. Developed for spotlight and downlight applications as well as LED panels, the OPTOTRONIC® Compact drivers offer you maximum flexibility in the design of all your LED-based luminaires. Designed for the needs of your customer!

OPTOTRONIC® is a global brand with products suitable for the Americas. Please consult your sales contact for more information.

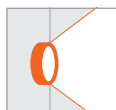
Main benefits at a glance

- Extensive portfolio: The right driver for each application
- Compact size for more creative freedom in luminaire design
- Housing adapted from well-known and proven traditional ECGs for easy installation into existing luminaires
- High level of efficiency and reliability
- Fully programmable and digital platform – see OPTOTRONIC® Intelligent DALI on pages 8 to 11

Where can OPTOTRONIC® Compact drivers be used?



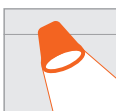
Pendant luminaires (round)



Wall and ceiling luminaires (round)



Home and decorative lighting



Spotlights



Downlights

Application areas

- Offices, e.g. reception areas and boardrooms
- Restaurants
- Public buildings, e.g. airports, cinemas, theaters, exhibition halls, schools and gyms
- High-end shops
- Retail outlets, e.g. supermarkets, bakeries, butcher shops and shops for leather goods



Our OPTOTRONIC® Compact portfolio

OSRAM is proud to present: Three product families that meet all your requirements

OTi
DALI

OPTOTRONIC® Intelligent DALI

Highest efficiency, full flexibility and maximum reliability

OT
FIT

OPTOTRONIC® FIT









High efficiency and maximum reliability

OTe

OPTOTRONIC® ECO

Cost-efficient and compact

OPTOTRONIC® Compact driver portfolio

					
					
		Dimmable (DALI): OPTOTRONIC® Intelligent DALI	Fixed output: OPTOTRONIC® FIT 3 currents settable	Fixed output: OPTOTRONIC® ECO	Dimmable (PC): OPTOTRONIC® ECO Phase Cut
Dimming	Comfort dimming AM+PWM/FULL AM	■			
	Lowest dimming level	1 %			10 %
	Type of dimming	■ DALI DT6			■ Trailing- or leading-edge phase control
	Touch DIM®	■			
	Corridor function	■			
DC operation	Emergency lighting ¹⁾	■	■		
	Fixed DC level		■		
	Adjustable DC level	■ (by software)			
Output current	Adjustable	■ (by software and/or resistor)	■ (CS)	■ (CS)	
	Current tolerances [%]	5	10	5	10
	Ripple at 100 Hz [%]	< 2	< 5	< 20...< 30	< 25...< 35
Functions and performances	Overtemperature protection	■	■	■	■
	Hot plug-in	■	■		
	CLO	■			
	Stand-by losses [W]	< 0.5			
	Input voltage range [V]	220-240	220-240	220-240	220-240
	Lifetime [h]	100 000 ²⁾	100 000 ²⁾	50 000 ³⁾	50 000 ²⁾
	T _a range [°C]	-20...+50	-25...+50	-20...+50	-20...+50
	Suitable for luminaire class	I + II	I + II	I + II	I + II

1) According to IEC 61347-2-13

2) Operation at max. T_c -10K, maximum failure rate of 10 %

3) Operation at max. T_c -5K, maximum failure rate of 10 %

AM = Amplitude Modulation

PWM = Pulse Width Modulation

DT6 = DALI Device Type 6

CS = Current Setting

CLO = Constant Lumen Output

Ceiling installation with cable clamps

OPTOTRONIC® Compact indoor drivers from OSRAM can easily be retrofitted with suitable cable clamps, if required. This way, in case an independent installation is required, the same driver can be used with the additional cable clamp. For through-wiring, the TL version is available for on/off and DALI versions.



OTe 35/220-240/700 CS



OTe 25/220-240/700 CS



OT cable clamp
B-Style TL



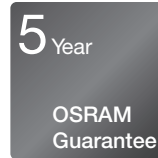
Guarantee and product identification

Applicable guarantee periods and OSRAM nomenclature/markings

Guarantee

OSRAM is committed to the high quality of its products. Any product that has failed because of a material or manufacturing defect will be refunded or given a credit note. The following guarantee periods apply to the OPTOTRONIC® Compact drivers:

OPTOTRONIC® Intelligent DALI	5 years ¹⁾
OPTOTRONIC® FIT	5 years ¹⁾
OPTOTRONIC® ECO CS/CS S	5 years ¹⁾
OPTOTRONIC® ECO PC	5 years ²⁾



All details on relevant guarantees and the general requirements can be found at:
www.osram.com/guarantee
 Project-specific guarantees on request.

- 1) Operating time of no more than 5 000 hours per year, not exceeding max. allowed T_c temperature
 2) Operating time of no more than 5 000 hours per year, operation at max. T_c -10 K

Nomenclature and marking (example)



Product family and dimming

OTi DALI: OPTOTRONIC® Intelligent DALI
 OT FIT: OPTOTRONIC® FIT
 OTe: OPTOTRONIC® ECO

Power (out) ³⁾

10: 10 W
 13: 13 W
 15: 15 W
 18: 18 W
 25: 25 W
 35: 35 W
 50: 50 W

Supply voltage

220-240: 220-240 V

Output current (max.)

350: 350 mA
 420: 420 mA
 500: 500 mA
 700: 700 mA
 1A0: 1000 mA
 1A4: 1400 mA

Control (current)

CS: Current setting
 PC: Phase cut
 LT2: LEDset 2nd Generation

Additional features

S: For built-in installation only
 FAN: 12 V auxiliary output for active cooling (fan)

OTe 35 220-240 700 CS S

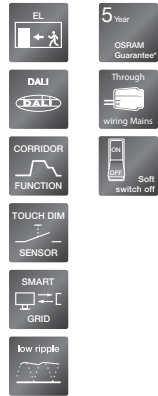
3) For detailed power values, please see product data sheet (www.osram.com)

OPTOTRONIC® Intelligent DALI

Highest efficiency, full flexibility and maximum reliability



OPTOTRONIC® Intelligent (OTi) DALI driver



Product features

- Window driver with adjustable output current via DALI or LEDset2 interface (resistor)
- Suitable for class I and class II luminaires
- Lifetime of up to 100 000 hours¹⁾ and high ambient temperature of up to +50 °C
- Improved protection of LED modules thanks to hot plug-in function with automatic switch-on of light
- Stepless and color-consistent dimming with DALI (from 100 % to 1 %, hybrid (comfort) dimming/full amplitude dimming)
- Amplitude dimming (OTi DALI 15)
- Programmable features: CLO (constant lumen output), corridor function, Touch DIM® (Sensor), emergency lighting
- Suitable for emergency lighting systems with central battery according to IEC 61347-2-13
- Soft switch-off; enabling best experience of light (recommended for cinemas, theaters, decorative lighting etc.)

Technical data

Product reference	I _{out} (mA)	U _{out} (V)	P _{out} (W)	Eff. max. (%)	T _a (°C)	T _c (°C)	Lifetime (h)	I _{out} accur. (%)	Isolation	Ripple at 100Hz (%)
OTi DALI 15/220-240/1A0 LT2	150-1050	7.5-54	3-18	88	-20...50	70/60	50k ^{2)/} 100k ¹⁾	5	SELV	<1
OTi DALI 25/220-240/700 LT2	180-700	12-54	12...54	86	-20...50	75/65	50k ^{2)/} 100k ¹⁾	5	SELV	<2
OTi DALI 35/220-240/1A0 LT2	350-1050	15-54	15...54	86	-20...50	75/65	50k ^{2)/} 100k ¹⁾	5	SELV	<2
OTi DALI 50/220-240/1A4 LT2 FAN	600-1400	15-54	15...54	91	-20...50	75/65	50k ^{2)/} 100k ¹⁾	5	SELV	<2

Product reference	Product number	LxWxH (mm)	Cable clamp	Product number Cable clamp	Packaging (pcs)	PrevaLED® match
OTi DALI 15/220-240/1A0 LT2	4052899 324879	95x53x30	OT CABLE CLAMP F-STYLE	4052899 325555	20	■
OTi DALI 25/220-240/700 LT2	4052899 919457	103x67x29.5	OT CABLE CLAMP B-STYLE	4052899 077881	20	■
			OT CABLE CLAMP B-STYLE TL	4052899 268227	20	■
OTi DALI 35/220-240/1A0 LT2	4052899 919440	103x67x29.5	OT CABLE CLAMP B-STYLE	4052899 077881	20	■
			OT CABLE CLAMP B-STYLE TL	4052899 268227	20	■
OTi DALI 50/220-240/1A4 LT2 FAN	4052899 919433	110x75x25	OT CABLE CLAMP A-STYLE	4052899 089570	20	■
			OT CABLE CLAMP A-STYLE TL	4052899 325982	20	■

OT cable clamps

Thanks to additional cable clamps, each OTi DALI driver can be used for built-in as well as independent installation. The cable clamp with through-wiring (A-Style TL and B-Style TL) allows for the easy and cost-efficient installation of multiple luminaires.



A-Style



A-Style TL



B-Style



B-Style TL



F-Style

* For details on our guarantee requirements, go to www.osram.com/guarantee

1) Operation at max. T_c -10K, maximum failure rate of 10 %

2) At max. T_c temperature, maximum failure rate of 10 %

Individual DALI programming

OTi DALI Compact drivers offer wide operating windows and thus ensure a high degree of flexibility. Therefore, LED generation upgrades can be easily managed, allowing for future-proof solutions, and the number of different product versions in the warehouse can be reduced.

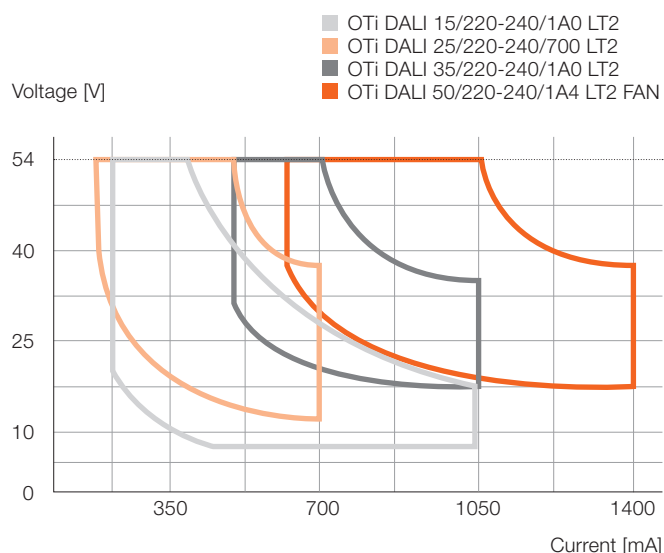
Adjustment of the current is possible in three different ways:

- Programming by OSRAM software (T4T Progy Probe 48 V)
- Use of a simple resistor (LEDset2)
- Automatic recognition via the LEDset2 interface when connected to certain PrevaLED® or other LED modules with LEDset wire

LEDset

Various operating windows are optimized for different general lighting applications and target lumen packages. Please find out more about the programming feature on page 10.

OPTOTRONIC® Intelligent DALI operating range



For detailed data, please see product data sheet (www.osram.com)

Example:

- OTi DALI 50/220-240/1A4 LT2 FAN:
Voltage: 15–54 V
Current: 600–1400 mA



OPTOTRONIC® Intelligent DALI

Special OTi features go way beyond the normal DALI standard

New flexibility thanks to programmable DALI LED drivers

The DALI LED drivers of the second generation (OSRAM DALI) allow for full digital programming via the DALI magic hardware and a specific free OEM software:

- Tuner4TRONIC® (T4T)
- No need for an external resistor to set the current in case of digital programming
- Settings can be locked to prevent unauthorized changes

OEMs can download T4T at:

www.osram.com/T4T



SMART GRID

The OSRAM DALI LED drivers can monitor the power consumption, the lamp operating hours (resettable) and the operating temperature of the driver. Advantage: SMART GRID can also analyze the lighting, thus allowing for an even more efficient operation of the system.



Touch DIM® function ¹⁾

The Touch DIM® function offers a simple and cost-effective way of manual dimming and switching of up to 20 OTi DALI LED drivers via standard pushbuttons. Moreover, the lighting level can be automatically controlled with special, directly connectable Touch DIM® light and presence sensors, leading to energy savings of more than 50 %. In addition to this plug & play functionality, the Touch DIM® function also allows an individual parameterization via DALI magic and Tuner4TRONIC®.



Corridor function ¹⁾

The corridor function provides direct connection to commercially available motion sensors. A pre-installed program runs "out of the box" in the device. It can be individually adjusted via DALI magic and Tuner4TRONIC®. Three dimming levels and the associated overrun times can be adjusted individually as required. Advantage: Simple and energy-efficient lighting in application areas such as stairwells, corridors and parking blocks.



Emergency light (according to IEC 61347-2-13)

OTi DALI and OT FIT drivers have an EL quality label and are designed for emergency lighting according to IEC 61347-2-13. In addition to the functions used in accordance with the DALI standard, e.g. system failure level (fractionation of the control line), DALI LED drivers offer an optional automatic detection of the DC supply, which sets a pre-programmed luminous flux between 0 and 100 % (factory setting: 15 %). This variably adjustable luminous flux value is protected from inadvertent overwriting by a locking bit. The setting can be carried out via the bus system or DALI magic and Tuner4TRONIC®.



CLO (constant lumen output)

The CLO functionality is an essential part of OSRAM DALI LED drivers. Activating this function provides stable lighting conditions over the entire lifetime of LED modules. Year by year, the lumen output of LED modules decreases due to the loss of phosphoric components. In order to balance this out, the CLO function increases the output current smoothly over the entire lifetime of the modules – it typically starts with 85 % of the LED power. This not only ensures stable lighting but also saves energy and increases the lifetime of the LEDs.

¹⁾ Useful information for the installation of the Touch DIM® and corridor function can be found in the technical application guide QUICKTRONIC® Intelligent DALI DIM (www.osram.com/oem-download)

LEDset 2nd Generation standardization

With the experience gained from the LEDset technology and as a reaction to the growing demand of OEMs to introduce a standardized multi-vendor electrical interface for SSL systems, OSRAM now presents an enhanced version of LEDset with plenty of new features: LEDset 2nd Generation.

A smart electrical interface between the LED driver and the LED modules is the missing link essential to the maturity of the SSL components business. With the LEDset 2nd Generation standardized electrical interface for SSL systems, OSRAM offers a technology that closes this link and fully matches the requirements:

- Cost-efficient
- Reliable
- Easy and ready to use

LEDset 2nd Generation is an analog 3-wire interface, including LED supply, allowing basic communication between an LED driver and one or more LED modules. The interface supports the following main functions:

- Output current setting of constant-current drivers to single LED modules as well as to series/parallel-connected LED modules
- Best matching of driver and modules working point (e.g. lm/W)
- Self-configuration according to system structure, automatic tracking of technology development (future-proof)
- Easy mode of operation (plug & play)
- Additional monitoring and protection features (e.g. thermal protection of the LED modules)
- Added value for OEMs: reliable TCO proposition, reduced structural costs

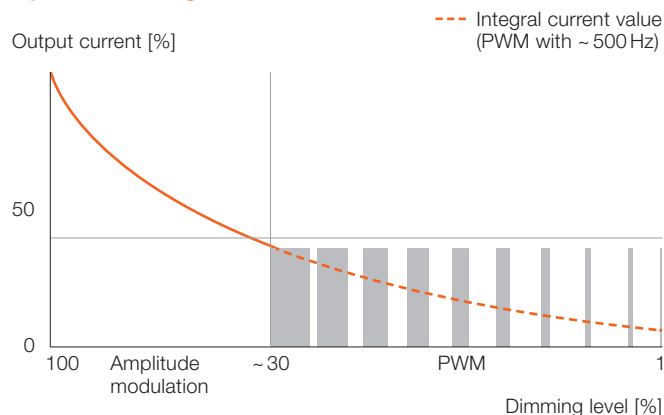
Several OSRAM LED modules, e.g. PrevaLED® Cube and PrevaLED® Core, support the LEDset 2nd Generation and therefore offer huge advantages in system combinations.

Hybrid (comfort) dimming technology

OPTOTRONIC® Intelligent DALI LED drivers dim from 100 % to 1 %. In order to achieve optimum dimming, e.g. by ensuring that it is not visible and by avoiding stroboscopic effects, OSRAM combines two dimming methods: amplitude modulation and pulse width modulation (PWM).

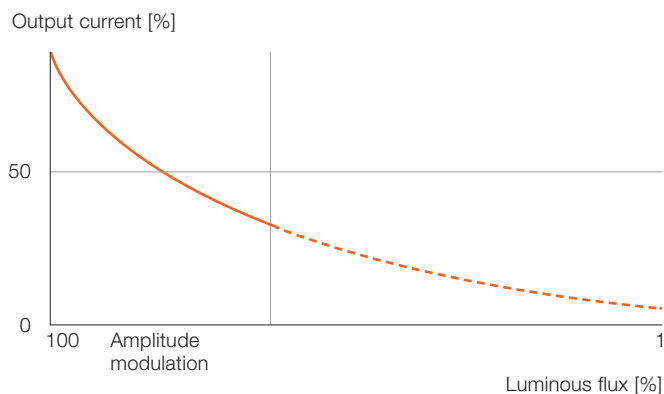
From 100 % to around 30 %, the drivers are dimmed by amplitude modulation. This is done by the adjustment of the current amplitude: the amplitude is decreased to dim the lighting down. The dimming levels between 1 % and around 30 % are controlled by pulse width modulation (PWM). This combination offers the best way to ensure a smooth, non-flicker dimming behavior.

Hybrid dimming



High-quality, smooth and mobile-camera-friendly dimming is realized by amplitude dimming. OTi DALI 15 is the first product enabling high-quality dimming down to 1 % in the entire operating window.

Amplitude dimming



OPTOTRONIC® FIT

High efficiency and maximum reliability



OPTOTRONIC® FIT (OT FIT) driver



Product features

- Three selectable output currents (CS = current setting)
- Suitable for class I and class II luminaires
- Lifetime of up to 100 000 hours¹⁾ and high ambient temperature of up to +50 °C
- Improved protection of LED modules thanks to hot plug-in function
- Low ripple for a higher quality of light
- Suitable for emergency lighting systems with central battery according to IEC 61347-2-13



Technical data

Product reference	I _{out} (mA)	U _{out} (V)	P _{out} (W)	Eff. max. (%)	T _a (°C)	T _c (°C)	Lifetime (h)	I _{out} accur. (%)	Isolation	Ripple at 100 Hz (%)
OT FIT 15/220-240/350 CS	250/300/350	27-54	7-19	≥ 83	-25...50	75/65	50 k ²⁾ /100 k ¹⁾	10	SELV	< 5
OT FIT 25/220-240/500 CS	400/450/500	27-54	11-27	≥ 85	-25...50	75/65	50 k ²⁾ /100 k ¹⁾	10	SELV	< 5
OT FIT 35/220-240/700 CS	550/600/700	27-54	15-37.5	≥ 87	-25...50	75/65	50 k ²⁾ /100 k ¹⁾	10	SELV	< 5
OT FIT 50/220-240/1A0 CS	800/900/1050	27-54	56	≥ 89	-25...50	75/65	50 k ²⁾ /100 k ¹⁾	10	SELV	< 6

Product reference	Product number	LxWxH (mm)	Cable clamp	Product number Cable clamp	Packaging (pcs)	PrevaLED® match
OT FIT 15/220-240/350 CS	4052899 919426	103x67x29.5	OT CABLE CLAMP B-STYLE, ... TL	see page 8	20	■
OT FIT 25/220-240/500 CS	4052899 919419	103x67x29.5	OT CABLE CLAMP B-STYLE, ... TL	see page 8	20	■
OT FIT 35/220-240/700 CS	4052899 919402	103x67x29.5	OT CABLE CLAMP B-STYLE, ... TL	see page 8	20	■
OT FIT 50/220-240/1A0 CS	4052899 166318	103x67x29.5	OT CABLE CLAMP B-STYLE, ... TL	see page 8	20	■

OT cable clamps

Thanks to additional cable clamps, each OT FIT driver can be used for built-in as well as independent installation. The cable clamp with through-wiring (B-Style TL) allows for the easy and cost-efficient installation of multiple luminaires.



B-Style



B-Style TL

* For details on our guarantee requirements, go to www.osram.com/guarantee

1) Operation at max. T_c -10 K, maximum failure rate of 10 %

2) At max. T_c temperature, maximum failure rate of 10 %

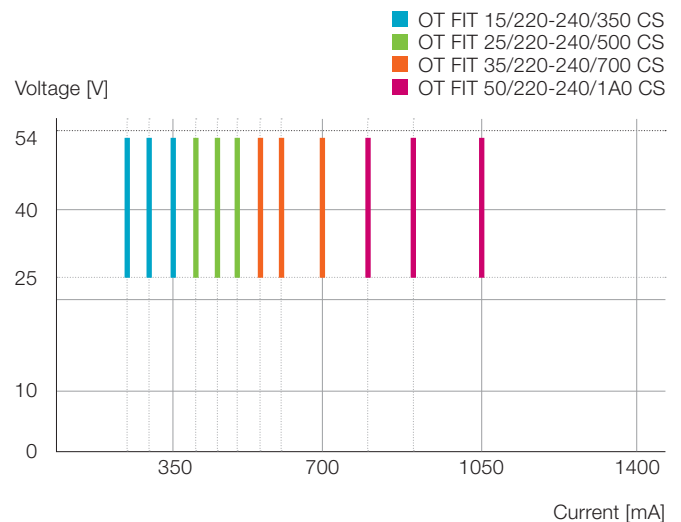
Multiple current setting

Each OPTOTRONIC® FIT driver offers three selectable currents. Multiple current setting has two main advantages: It reduces the number of different product versions in the warehouse and steps between currents are kept small (starting from 50 mA), avoiding any need for LED drivers with intermediate currents.

Features of the current setting

- CS (current setting) of OT FIT offers the easiest way to choose the output current and to avoid typical mistakes when using DIP switches
- Each product offers at least one or two typical currents used in the market and, by default, the highest standard current is provided

OPTOTRONIC® FIT operating range



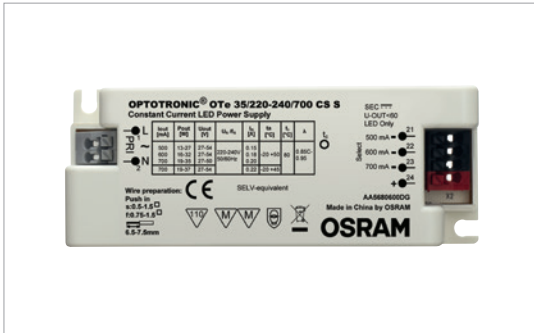
Example:

- OT FIT 50/220-240/1A0 CS:
Voltage: 27–54 V
Current: 800/900/1050 mA



OPTOTRONIC® ECO

Cost-efficient and compact



Product features

- Three selectable output currents (CS = current setting)
- Suitable for class I and class II luminaires
- Lifetime of up to 50 000 hours¹⁾ and high ambient temperature of up to +50/55 °C
- Several housing designs for different applications (track lighting, downlights and spotlights) with form factor derived from conventional ECGs
- More than 10 different selectable currents for overdriving/underdriving of LEDs

OPTOTRONIC® ECO driver (OTe 35/220-240/700 CS S)

Housing (A)

Technical data

Product reference	I _{out} (mA)	U _{out} (V)	P _{out} (W)	Eff. max. (%)	T _a (°C)	T _c (°C)	Lifetime (h)	I _{out} accur. (%)	Isolation	Ripple at 100 Hz (%)
OTe 25/220-240/420 CS	290/350/420	27-54	8-23	≥ 85	-20...50	75/65	35 k ²⁾ /50 k ¹⁾	5	SELV	< 20
OTe 25/220-240/700 CS	500/600/700	18-36	9-25	≥ 85	-20...50	80/70	35 k ²⁾ /50 k ¹⁾	5	SELV	< 25
OTe 35/220-240/700 CS	500/600/700	27-54	13-37	≥ 87	-20...50	75/65	35 k ²⁾ /50 k ¹⁾	5	SELV	< 25
OTe 35/220-240/700 CS S	500/600/700	27-54	13-37	≥ 87	-20...50	80/70	35 k ²⁾ /50 k ¹⁾	5	SELV	< 25
OTe 35/220-240/1A0 CS	800/925/1050	17-34	14-36	≥ 87	-20...50	80/70	35 k ²⁾ /50 k ¹⁾	5	SELV	< 30
OTe 35/220-240/1A0 CS S	800/925/1050	17-34	14-36	≥ 87	-20...50	80/70	35 k ²⁾ /50 k ¹⁾	5	SELV	< 25
OTe 50/220-240/1A0 CS	800/925/1050	27-54	22-56	≥ 87	-20...50	85/75	35 k ²⁾ /50 k ¹⁾	5	SELV	< 20
OTe 50/220-240/1A4 CS	1150/1250/1400	18-36	21-50	≥ 87	-20...50	80/70	35 k ²⁾ /50 k ¹⁾	5	SELV	< 25
OTe 50/220-240/1A0 CS FAN	700/900/1050	27-54	22-56	≥ 88	-20...50	95/85	35 k ²⁾ /50 k ¹⁾	5	SELV	< 30

Product reference	Product number	LxWxH (mm)	Cable clamp	Product number	Packaging Cable clamp (pcs)	PrevaLED® match
OTe 25/220-240/420 CS	4052899 917538	97x43x29.5 (C)	OT CABLE CLAMP D-STYLE	4052899 077904	40 ³⁾	■
OTe 25/220-240/700 CS	4052899 917545	97x43x29.5 (C)	OT CABLE CLAMP D-STYLE	4052899 077904	40 ³⁾	■
OTe 35/220-240/700 CS	4052899 917569	103x67x29.5 (B)	OT CABLE CLAMP B-STYLE, ... TL	see page 8	20	■
OTe 35/220-240/700 CS S	4052899 917552	110x43x29.5 (A)	built-in installation only	–	–	■
OTe 35/220-240/1A0 CS	4052899 917668	103x67x29.5 (B)	OT CABLE CLAMP B-STYLE, ... TL	see page 8	20	■
OTe 35/220-240/1A0 CS S	4052899 917651	110x43x29.5 (A)	built-in installation only	–	–	■
OTe 50/220-240/1A0 CS	4052899 917576	103x67x29.5 (B)	OT CABLE CLAMP B-STYLE, ... TL	see page 8	20	■
OTe 50/220-240/1A4 CS	4052899 917583	103x67x29.5 (B)	OT CABLE CLAMP B-STYLE, ... TL	see page 8	20	■
OTe 50/220-240/1A0 CS FAN	4052899 919396	103x67x29.5 (B)	OT CABLE CLAMP B-STYLE, ... TL	see page 8	20	■

OT cable clamps

Thanks to additional cable clamps, most of the OTe drivers can be used for built-in as well as independent installation. The cable clamp with through-wiring (B-Style TL) allows for the easy and cost-efficient installation of multiple luminaires.



B-Style



B-Style TL



D-Style



OPTOTRONIC® ECO driver
(OTe 50/220-240/1A0 CS)
Housing (B)



OPTOTRONIC® ECO driver
(OTe 25/220-240/420 CS)
Housing (C)

* For details on our guarantee requirements, go to www.osram.com/guarantee

1) Operation at max. T_c -5 K, maximum failure rate of 10 %

2) At max. T_c temperature, maximum failure rate of 10 %

3) Two cable clamps D-Style needed per OTe

Multiple current setting

Each non-dimmable OPTOTRONIC® ECO driver offers three selectable currents. Multiple current setting has two main advantages: It reduces the number of different product versions in the warehouse and steps between currents are kept small (starting from 60 mA), avoiding any need for LED drivers with intermediate currents.

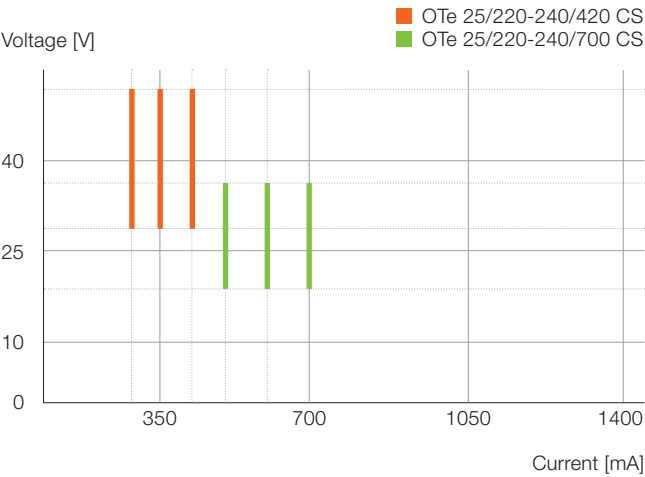
Features of the current setting

- CS (current setting) of OTe offers the easiest way to choose the output current without the need for accessories (resistor, wire etc.) and to avoid typical mistakes when using DIP switches
- Current setting is provided at the output side, isolated from the mains and at a low safety voltage below 60 V

Freedom of LED current setting

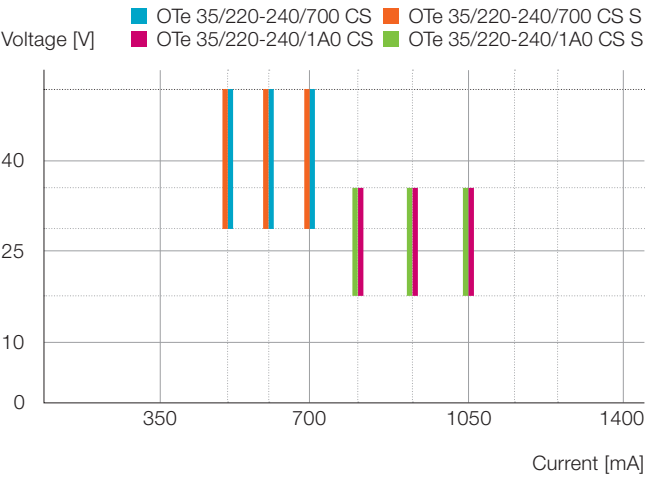
- Each product offers at least one or two typical currents used in the market
- More than 10 different currents are available up to 1.4 A
- Two voltage ranges with partial overlapping (18–36 V/27–54 V or 17–34 V/27–54 V) provide high flexibility, ensuring that the right driver is used for existing and coming CoB technologies as well as single LED chains

OPTOTRONIC® ECO operating range – OTe 25



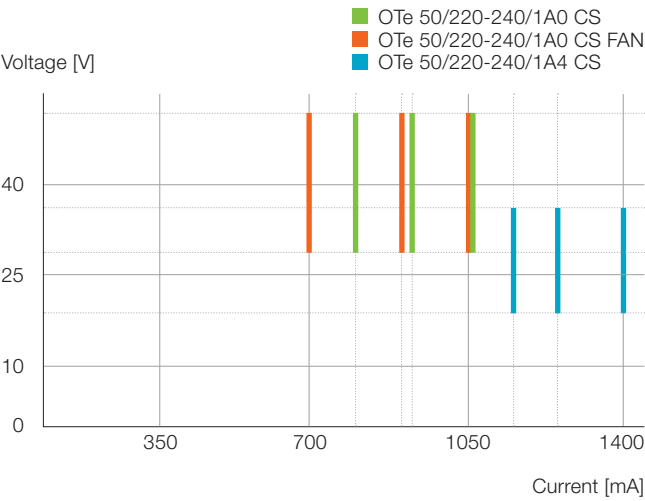
For detailed data, please see product data sheet (www.osram.com)

OPTOTRONIC® ECO operating range – OTe 35



For detailed data, please see product data sheet (www.osram.com)

OPTOTRONIC® ECO operating range – OTe 50



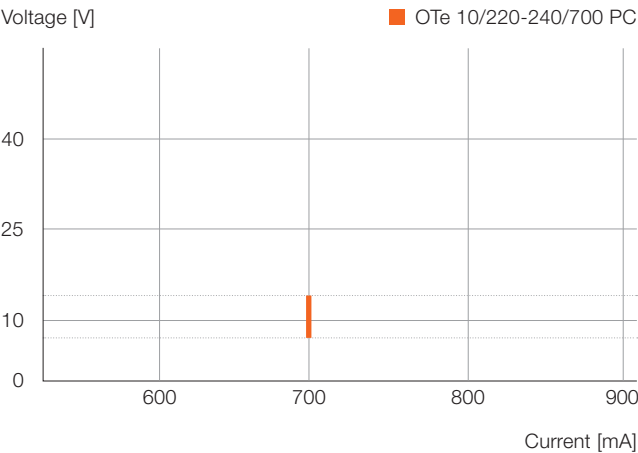
For detailed data, please see product data sheet (www.osram.com)

Example:

- OTe 50/220-240/1A0 CS FAN:
Voltage: 27–54 V
Current: 700/900/1050 mA

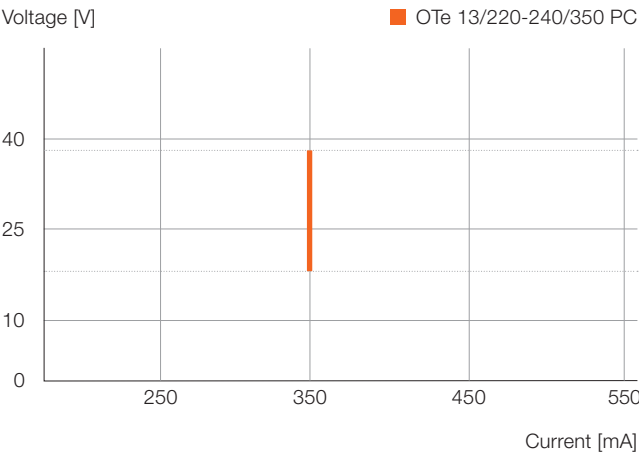


OPTOTRONIC® ECO operating range – OTe 10 (dimnable)



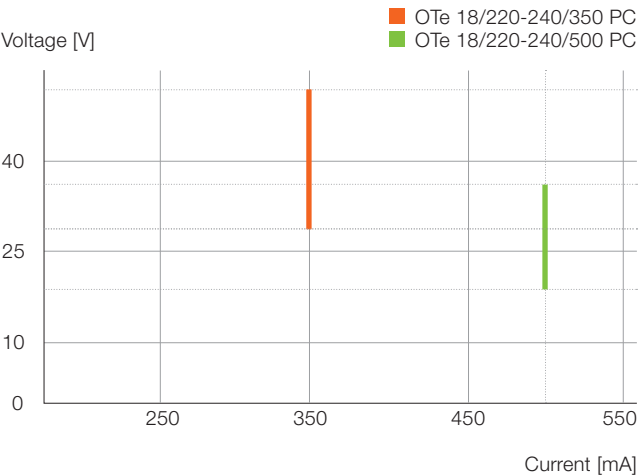
For detailed data, please see product data sheet (www.osram.com)

OPTOTRONIC® ECO operating range – OTe 13 (dimnable)



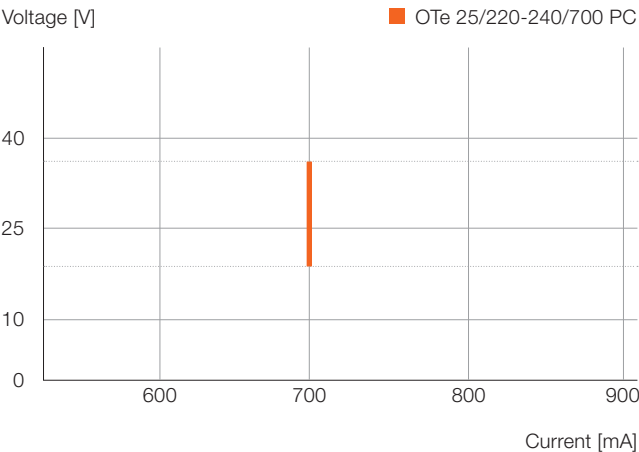
For detailed data, please see product data sheet (www.osram.com)

OPTOTRONIC® ECO operating range – OTe 18 (dimnable)



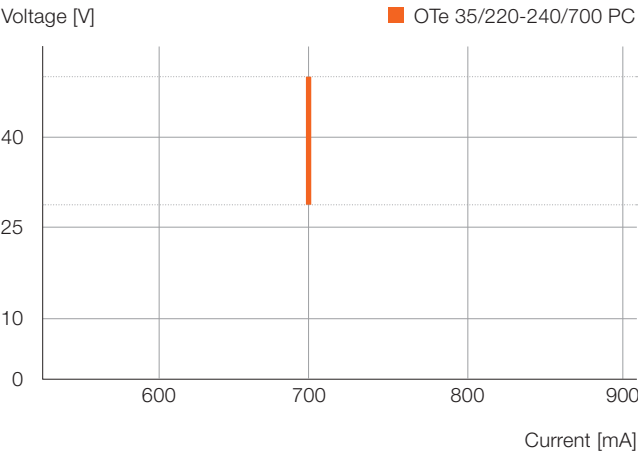
For detailed data, please see product data sheet (www.osram.com)

OPTOTRONIC® ECO operating range – OTe 25 (dimnable)



For detailed data, please see product data sheet (www.osram.com)

OPTOTRONIC® ECO operating range – OTe 35 (dimnable)



For detailed data, please see product data sheet (www.osram.com)

Example:

■ OTe 35/220-240/700 PC
Voltage: 27–50 V
Current: 700 mA

OPTOTRONIC® ECO

New versions now available: Dimmable via trailing- or leading-edge phase control



OPTOTRONIC® ECO driver (OTe 25/220-240/700 PC)

Housing (A)



Product features

- Dimmable via trailing- or leading-edge phase control (10–100 %, depending on dimmer)
- Overtemperature, overload and short-circuit protection
- Compact housing for installation in tight spaces
- Lifetime of up to 50 000 hours¹⁾ and high ambient temperature
- Suitable for class I and class II luminaires (OTe 35 only for class II)
- Compatible with common trailing- or leading-edge phase dimmers²⁾

Technical data

Product reference	I _{out} (mA)	U _{out} (V)	P _{out} (W)	Eff. max. (%)	T _a (°C)	T _c (°C)	Lifetime (h)	I _{out} accur. (%)	Isolation	Ripple at 100 Hz (%)
OTe 10/220-240/700 PC	700	7-14	5-10	≥ 79	-20...55	80/70	35 k ^{3)/} 50 k ¹⁾	10	SELV	35
OTe 13/220-240/350 PC	350	18-38	6.5-13.5	≥ 82	-20...55	85/75	35 k ^{3)/} 50 k ¹⁾	10	SELV	25
OTe 18/220-240/350 PC	350	27-54	9.5-19	≥ 84	-20...55	75/65	35 k ^{3)/} 50 k ¹⁾	10	SELV	< 30
OTe 18/220-240/500 PC	500	18-36	9-18	≥ 84	-20...55	75/65	35 k ^{3)/} 50 k ¹⁾	10	SELV	< 30
OTe 25/220-240/700 PC	700	18-36	12.5-25	≥ 85	-20...50	75/65	35 k ^{3)/} 50 k ¹⁾	10	SELV	< 30
OTe 35/220-240/700 PC	700	27-50	19-35	≥ 85	-20...45	80/70	35 k ^{3)/} 50 k ¹⁾	5	SELV	< 25

Product reference	Product number	LxWxH (mm)	Cable clamp	Product number	Packaging	PrevaLED®
				Cable clamp	(pcs)	match
OTe 10/220-240/700 PC	4052899 105300	95x53x25 (A/B)	OT CABLE CLAMP E-STYLE	4052899 167896	20	■
OTe 13/220-240/350 PC	4052899 105324	95x53x25 (A/B)	OT CABLE CLAMP E-STYLE	4052899 167896	20	■
OTe 18/220-240/350 PC	4052899 105348	95x53x30 (A/B)	OT CABLE CLAMP E-STYLE	4052899 167896	20	■
OTe 18/220-240/500 PC	4052899 105362	95x53x30 (A/B)	OT CABLE CLAMP E-STYLE	4052899 167896	20	■
OTe 25/220-240/700 PC	4052899 105386	95x53x30 (A/B)	OT CABLE CLAMP E-STYLE	4052899 167896	20	■
OTe 35/220-240/700 PC	4008321 825520	153x54x36 (C)			20	■

OT cable clamp



E-Style

Thanks to the additional cable clamp, most of the OTe drivers can be used for built-in as well as independent installation.



OPTOTRONIC® ECO driver
(OTe 25/220-240/700 PC)
Housing (B)



OPTOTRONIC® ECO driver
(OTe 35/220-240/700 PC)
Housing (C)

* For details on our guarantee requirements, go to www.osram.com/guarantee

1) Operation at max. T_c -10 K, maximum failure rate of 10 %

2) A list of tested dimmers can be found at www.osram.com/oem-download (see "Control gears OPTOTRONIC")

3) At max. T_c temperature, maximum failure rate of 10 %

System solutions with OSRAM OPTOTRONIC® drivers and LED modules

OSRAM always offers you the perfect match of light source and driver



PrevaLED® Coin



PrevaLED® Core



PrevaLED® Cube



PrevaLED® Bar Value



DRAGONpuck®

Optimum lighting does not only depend on the performance of the single components but also on the clever combination of these components to create a unique system solution. By combining OPTOTRONIC® Compact drivers with PrevaLED® or other modules (CC) from OSRAM, you can rest assured that you have found the perfect match for your lighting solution.

OSRAM OPTOTRONIC® drivers in combination with OSRAM LED modules offer you unique added value:

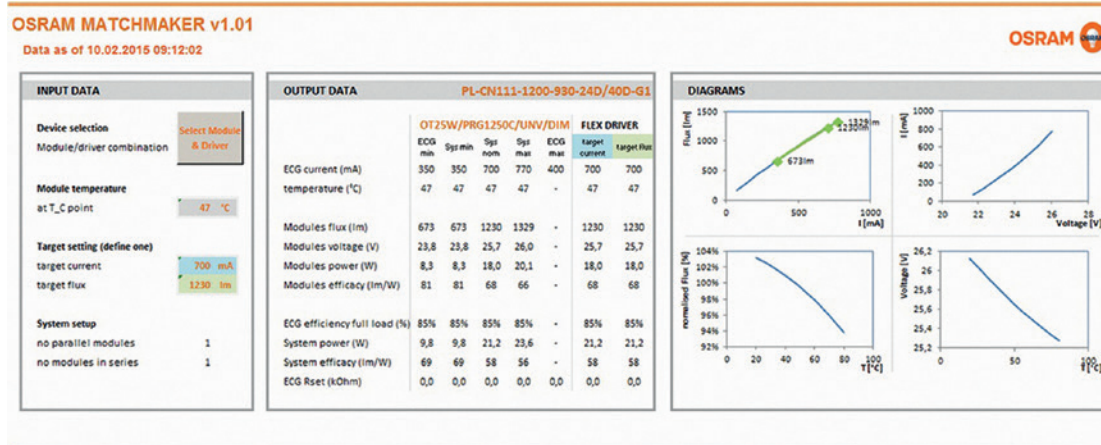
- Perfect system match, tested by OSRAM
- Just one provider for your lighting system
- LEDset2 functionality with PrevaLED® Core and PrevaLED® Cube (see page 11)

For further details regarding driver and module compatibility, please contact your local OSRAM sales representative.



Matchmaker

Combine and test LED modules and drivers



For general lighting applications, OSRAM offers a quick and convenient way to select the optimum system solution for a specific project and thus simplifies your daily work.

For OSRAM LED systems, the independent selection tool Matchmaker is available online and can be downloaded for offline use with individual requirements.

Matchmaker is based on Microsoft Excel. With the convenient tool, a specific LED module can be combined with a suitable driver. Furthermore, all corresponding parameters (e.g. system efficacy, operating current, luminous flux as well as temperature values) can also be tested in advance and adjusted to match each other. All data in the tool are based on real measurements and have been checked by the OSRAM Quality Department.

Matchmaker is regularly updated. The latest version can be found in the OSRAM Download Center at www.osram.com/oem-download ("Control gears OPTOTRONIC" or "LED light engines Spot- and Downlights").

System solutions with OSRAM OPTOTRONIC® drivers and light management systems (LMS)

For higher levels of efficiency, flexibility and customization

Combining OSRAM OPTOTRONIC® LED drivers and light management systems (LMS) allows you to create unique lighting solutions that offer plenty of benefits to your customers. Your flexibility during projects is increased tremendously as the LMS provide a simple way to address OTi DALI LED drivers for easy dimming and setting of the desired lighting level. And the best thing about it: You also save huge amounts of energy. With LMS from OSRAM, you will always find the ideal solution – for various applications, luminaires and customer demands.



Touch DIM® LS LI and LS/PD LI sensor

OPTOTRONIC® and Touch DIM®

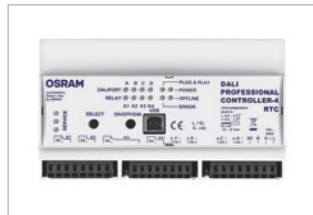
The Touch DIM® functionality, integrated in all OTi DALI LED drivers, is as easy as it gets. Via standard pushbuttons, up to 20 OTi DALI LED drivers can be manually dimmed and switched in a convenient way and a scene can be stored – all without the need for a controller. Moreover, with special Touch DIM® light and presence sensors, which can be connected directly to the OTi DALI LED drivers, energy savings of more than 50 % can be achieved.



DALIeco® Control unit and PC configuration software

OPTOTRONIC® and DALIeco® Control – configuration by mouse click

With the DALIeco® Control unit for up to 32 OTi DALI LED drivers, you can increase comfort and energy efficiency of your lighting in no time at all. No matter if used for a single luminaire or luminaire group, in individual or open-plan offices, corridors or production and storage areas – with the multi-functional DALIeco® Control, individual function profiles can be set up by a few mouse clicks and transmitted via remote control at the push of a button. Purely manual control or a time sequence control can be realized just as easy as the convenient automation by presence and light sensors.



DALI PRO CONT-4 RTC controller



DALI PRO Touch Panel



DALI LS/PD LI sensor

DALI HIGHBAY
ADAPTER

OPTOTRONIC® and DALI PROFESSIONAL

The combination of OPTOTRONIC® LED drivers and DALI PROFESSIONAL is the perfect choice for anyone looking for maximum flexibility in the control of a larger number of luminaires, groups or scenes. With just one controller, up to 256 OTi DALI LED drivers can be controlled in 4 x 16 groups via 4 DALI lines. In addition, up to 50 sensors or pushbutton couplers can be connected to the DALI line. Via DALI SWITCH SO switch actuators, non-dimmable OT FIT LED drivers can also be integrated. DALI PROFESSIONAL offers a flexible configuration: Changes can be made quickly and conveniently at all times via a free PC software – without the need for rewiring. Thanks to the wide choice of user interfaces and sensors as well as an integrated real-time clock, DALI PROFESSIONAL is suitable for industrial buildings and warehouses and also for office spaces with single and open-plan offices.

For more information, please go to:

- OPTOTRONIC®: www.osram.com/optotronic
- Light management systems: www.osram.com/lms
- PrevaLED®: www.osram.com/prevaled
- Tuner4TRONIC®: www.osram.com/t4t
- LEDset: www.osram.com/ledset
- News: www.osram.com/oem

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