

OPTOTRONIC Intelligent Industry – DALI (non-isolated)

Linear constant current LED driver – Dimmable



Areas of application

- Linear lighting solutions for industry, storage areas and retail applications
- Installation in emergency lighting systems according to IEC 61347-2-13, appendix J
- Suitable for installation in emergency lighting systems according to EN 60598-2-22
- Suitable for luminaires of protection class I

Product family benefits

- Fully programmable via T4T software (NFC, DALI Interface)
- Lifetime: up to 100,000 h (temperature at $T_C = 75\text{ °C}$, max. 10 % failure rate)
- High light quality: 1...100% amplitude dimming and <1% output ripple current
- Wide operating temperature range: -40...+65 °C
- High surge protection: up to 4 kV (L-N) / 4 kV (L/N-PE)
- Integrated inrush current limiter
- Very high efficiency (up to 96%)
- Fulfill safety requirement due to overload, overtemperature, Hot Plug protection



Product family datasheet

Versatile scope of application due to OSRAM DALI Technology:

- Easy to use in corridors and restrooms because of three-level Corridor function
- Touch DIM application: easy to control via pushbutton or sensor
- Energy efficient Touch DIM operation due to automatic switch-off at sufficient residual light
- Suitable for emergency Installations (acc. to EN 60598-2-22 and IEC 61347-2-13, appendix J) thanks to DC detection (0 Hz, pulsating DC), on/off switchable
- Feedback of power consumption and operating hours (Fit for SMART GRID)
- Suitable for buildings according to EPBD/BREEAM/LEED due to automatic Constant Lumen Output setting
- Luminaire information for easy maintenance
- Advanced luminaire/driver data (power, energy, operating hours...) for analytics

Product family features

- Line frequency: 0 Hz | 50 Hz | 60 Hz
- Versatile scope of application thanks to an output power range of up to 300 W
- Supply voltage: 220...240 V
- Available with output current range: up to 1,000 mA
- Constant Lumen Output (CLO)
- Integrated customizable thermal management (Driver Guard)
- Non-isolated drivers
- DALI-2 certified (Part -101,-102 and -207)

Product family datasheet

Technical data

Electrical data

Product description	Nominal input voltage	Mains frequency	Input voltage AC	Input voltage DC	Current set
OTi DALI 75/220...240/550 D NFC IND L	220...240 V	0/50/60 Hz	198...264 V	176...276 V	DALI / NFC / LEDset / Programmable
OTi DALI 100/220...240/700 D NFC IND L	220...240 V	0/50/60 Hz	198...264 V	176...276 V	DALI / NFC / LEDset / Programmable
OTi DALI 150/220...240/1A0 D NFC IND L	220...240 V	0/50/60 Hz	198...264 V	176...276 V	DALI / NFC / LEDset / Programmable
OTi DALI 300/220...240/1A6 D NFC IND L	220...240 V	0/50/60 Hz	198...264 V	176...276 V	DALI / NFC / LEDset / Programmable

Product description	Total harmonic distortion	Power factor λ	Efficiency in full-load	Device power loss
OTi DALI 75/220...240/550 D NFC IND L	< 10 %	> 0.95	94 % ¹⁾	7.0 W
OTi DALI 100/220...240/700 D NFC IND L	< 8 %	> 0.98	94 % ¹⁾	9.0 W
OTi DALI 150/220...240/1A0 D NFC IND L	< 8 %	> 0.98	95 % ¹⁾	11.0 W
OTi DALI 300/220...240/1A6 D NFC IND L	9 %	> 0.99	96 % ¹⁾	17 W

Product description	Networked standby power	Inrush current	Max. ECG no. on circuit breaker 10 A (B)	Max. ECG no. on circuit breaker 10 A (C)	Max. ECG no. on circuit breaker 16 A (C)
OTi DALI 75/220...240/550 D NFC IND L	≤ 0.22 W ¹⁾	≤ 5 A	21	-	-
OTi DALI 100/220...240/700 D NFC IND L	≤ 0.22 W ¹⁾	5 A	23	-	-
OTi DALI 150/220...240/1A0 D NFC IND L	≤ 0.22 W ¹⁾	5 A	20	-	-
OTi DALI 300/220...240/1A6 D NFC IND L	< 0.20 W ¹⁾	≤ 6 A	7	-	-

Product description	Max. ECG no. on circuit breaker 16 A (B)	Max. ECG no. on circuit breaker 25 A (B)	Surge capability (L/N-Ground)	Surge capability (L-N)
OTi DALI 75/220...240/550 D NFC IND L	36	-	4 kV	4 kV
OTi DALI 100/220...240/700 D NFC IND L	36	-	4 kV	4 kV
OTi DALI 150/220...240/1A0 D NFC IND L	32	-	4 kV	4 kV
OTi DALI 300/220...240/1A6 D NFC IND L	11	-	4 kV	4 kV

Product family datasheet

Product description	Nominal output voltage	U-OUT (working voltage)	Nominal output current	Output current LEDset open
OTi DALI 75/220...240/550 D NFC IND L	64...300 V	< 310 V	125...550 mA	65 mA
OTi DALI 100/220...240/700 D NFC IND L	64...300 V	< 310 V	200...700 mA	100 mA
OTi DALI 150/220...240/1A0 D NFC IND L	64...300 V	< 310 V	250...1000 mA	125 mA
OTi DALI 300/220...240/1A6 D NFC IND L	60...300 V	< 310 V	250...1550 mA	125 mA

Product description	Output current LEDset shorted	Default output current	Output current tolerance
OTi DALI 75/220...240/550 D NFC IND L	125 mA	125 mA	±3 %
OTi DALI 100/220...240/700 D NFC IND L	200 mA	100 mA ²⁾	±3 % ³⁾
OTi DALI 150/220...240/1A0 D NFC IND L	250 mA	125 mA ²⁾	±3 % ³⁾
OTi DALI 300/220...240/1A6 D NFC IND L	250 mA	125 mA	±3 %

Product description	Output ripple current (100 Hz)	Output PSTLM	Output SVM	Nominal output power
OTi DALI 75/220...240/550 D NFC IND L	< 1 %	≤1	≤0.4	8.0...75 W
OTi DALI 100/220...240/700 D NFC IND L	< 1 %	≤1	≤0.4	28...100 W
OTi DALI 150/220...240/1A0 D NFC IND L	< 1 %	≤1	≤0.4	43...150 W
OTi DALI 300/220...240/1A6 D NFC IND L	< 1 %	≤1	≤0.4	80...300 W

Product description	Maximum output power	Galvanic isolation
OTi DALI 75/220...240/550 D NFC IND L	75 W	Non isolated
OTi DALI 100/220...240/700 D NFC IND L	100 W	Non isolated
OTi DALI 150/220...240/1A0 D NFC IND L	150 W	Non isolated
OTi DALI 300/220...240/1A6 D NFC IND L	300 W	Non isolated

¹⁾ at 230 V, 50 Hz

²⁾ LEDset deactivated

³⁾ When use DALI

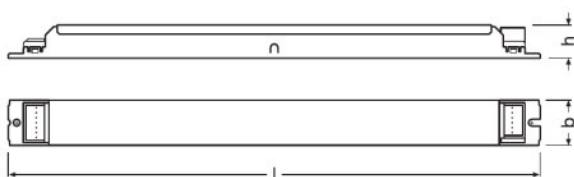
Product family datasheet

Dimensions & weight

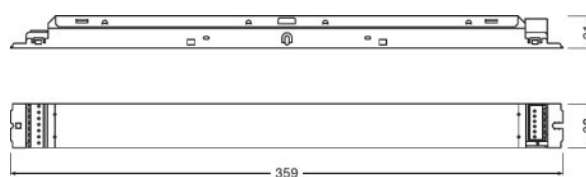
Product description	Mounting hole spacing, length	Product weight	Cable cross-section, input side	Cable cross-section, output side	Wire preparation length, input side
OTi DALI 75/220...240/550 D NFC IND L	350.0 mm	270.00 g	0.5...1.5 mm ²	0.5...1.5 mm ²	8.0...9.0 mm
OTi DALI 100/220...240/700 D NFC IND L	350.0 mm	260.00 g	0.5...1.5 mm ²	0.5...1.5 mm ²	8.0...9.0 mm
OTi DALI 150/220...240/1A0 D NFC IND L	415.0 mm	306.00 g	0.5...1.5 mm ²	0.5...1.5 mm ²	8.0...9.0 mm
OTi DALI 300/220...240/1A6 D NFC IND L	350.0 mm	430.00 g	0.5...1.5 mm ²	0.5...1.5 mm ²	8.0...9.0 mm

Product description	Wire preparation length, output side	Length	Height	Width
OTi DALI 75/220...240/550 D NFC IND L	8.0...9.0 mm	360.0 mm	21.0 mm	30.0 mm
OTi DALI 100/220...240/700 D NFC IND L	8.0...9.0 mm	360.0 mm	21.0 mm	30.0 mm
OTi DALI 150/220...240/1A0 D NFC IND L	8.0...9.0 mm	425.0 mm	21.0 mm	30.0 mm
OTi DALI 300/220...240/1A6 D NFC IND L	8.0...9.0 mm	360.0 mm	28.0 mm	45.0 mm

Product line drawing

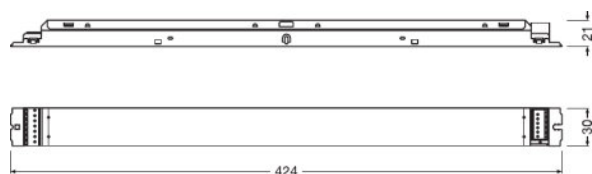


OTi DALI 75/220...240/550 D NFC IND L

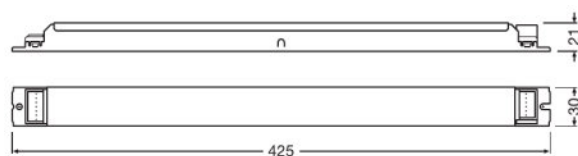


OTi DALI 100/220...240/700 D NFC IND L

Product family datasheet



OTi DALI 150/220...240/1A0 D NFC IND L



OTi DALI 300/220...240/1A6 D NFC IND L

Colors & materials

Product description	Casing material
OTi DALI 75/220...240/550 D NFC IND L	Metal
OTi DALI 100/220...240/700 D NFC IND L	Metal
OTi DALI 150/220...240/1A0 D NFC IND L	Metal
OTi DALI 300/220...240/1A6 D NFC IND L	Metal

Temperatures & operating conditions

Product description	Ambient temperature range	Maximum temperature at tc test point	Max.housing temperature in case of fault	Temperature range at storage
OTi DALI 75/220...240/550 D NFC IND L	-40...+70 °C	85 °C	110 °C	-40...+85 °C
OTi DALI 100/220...240/700 D NFC IND L	-40...+65 °C	85 °C	110 °C	-40...+85 °C
OTi DALI 150/220...240/1A0 D NFC IND L	-40...+65 °C	85 °C	110 °C	-40...+85 °C
OTi DALI 300/220...240/1A6 D NFC IND L	-40...+65 °C	85 °C	110 °C	-40...+85 °C

Product family datasheet

Product description	Permitted rel. humidity during operation
OTi DALI 75/220...240/550 D NFC IND L	5...85 % ¹⁾
OTi DALI 100/220...240/700 D NFC IND L	5...85 % ¹⁾
OTi DALI 150/220...240/1A0 D NFC IND L	5...85 % ¹⁾
OTi DALI 300/220...240/1A6 D NFC IND L	5...85 % ¹⁾

¹⁾ Maximum 56 days/year at 85 %

Lifespan

Product description	ECG lifetime
OTi DALI 75/220...240/550 D NFC IND L	100000 / 50000 h
OTi DALI 100/220...240/700 D NFC IND L	50000 / 100000 h ¹⁾
OTi DALI 150/220...240/1A0 D NFC IND L	50000 / 100000 h ¹⁾
OTi DALI 300/220...240/1A6 D NFC IND L	50000 / 100000 h

¹⁾ At maximum $T_c = 85^\circ\text{C}$ / 10% failure rate / At $T_{\text{case}} = 75^\circ\text{C}$ at T_c point / 10% failure rate

Capabilities

Product description	Programming interface	Dimmable	Dimming interface	Dimming range
OTi DALI 75/220...240/550 D NFC IND L	DALI, NFC, LEDset	Yes	DALI-2 / Touch DIM / Touch DIM Sensor	1...100 %
OTi DALI 100/220...240/700 D NFC IND L	DALI, NFC, LEDset	Yes	DALI-2 / Touch DIM / Touch DIM Sensor	1...100 %
OTi DALI 150/220...240/1A0 D NFC IND L	DALI, NFC, LEDset	Yes	DALI-2 / Touch DIM / Touch DIM Sensor	1...100 %
OTi DALI 300/220...240/1A6 D NFC IND L	DALI, NFC, LEDset	Yes	DALI / Touch DIM	1...100 %

Product description	Dimming method	Constant lumen function	Overheating protection
OTi DALI 75/220...240/550 D NFC IND L	Full analogue dimming	Programmable	Automatic reversible
OTi DALI 100/220...240/700 D NFC IND L	Full analogue dimming	Programmable	Automatic reversible
OTi DALI 150/220...240/1A0 D NFC IND L	Full analogue dimming	Programmable	Automatic reversible
OTi DALI 300/220...240/1A6 D NFC IND L	Full analogue dimming	Programmable	Automatic reversible

Product family datasheet

Product description	Overload protection	Short-circuit protection	No-load proof	Intended for no-load operation
OTi DALI 75/220...240/550 D NFC IND L	Automatic reversible	Automatic reversible	Yes	No
OTi DALI 100/220...240/700 D NFC IND L	Non-reversible	Automatic reversible	Yes	No
OTi DALI 150/220...240/1A0 D NFC IND L	Non-reversible	Automatic reversible	Yes	No
OTi DALI 300/220...240/1A6 D NFC IND L	Non-reversible	Automatic reversible	Yes	No

Product description	Max. cable length to lamp/LED module	Suitable for fixtures with prot. class	Suitable for emergency lighting	Type of connection, input side
OTi DALI 75/220...240/550 D NFC IND L	5.0 m	I	Yes	Push terminal
OTi DALI 100/220...240/700 D NFC IND L	5.0 m	I	Yes	Push terminal
OTi DALI 150/220...240/1A0 D NFC IND L	5.0 m	I	Yes	Push terminal
OTi DALI 300/220...240/1A6 D NFC IND L	<3.0 m	I	Yes	Push terminal

Product description	Type of connection, output side	Number of channels	Control interface
OTi DALI 75/220...240/550 D NFC IND L	Push terminal	1	DALI
OTi DALI 100/220...240/700 D NFC IND L	Push terminal	1	DALI
OTi DALI 150/220...240/1A0 D NFC IND L	Push terminal	1	DALI
OTi DALI 300/220...240/1A6 D NFC IND L	Push terminal	1	DALI

Product description	DALI-2 Energy Data	DALI-2 Diagnostic Data
OTi DALI 75/220...240/550 D NFC IND L	Yes	Yes
OTi DALI 100/220...240/700 D NFC IND L	Yes	Yes
OTi DALI 150/220...240/1A0 D NFC IND L	Yes	Yes
OTi DALI 300/220...240/1A6 D NFC IND L	Yes	Yes

Product family datasheet

Programming

Product description	Programming device	Tuner4TRONIC	Tuner4TRONIC Field App
OTi DALI 75/220...240/550 D NFC IND L	DALI magic / NFC Scanner	Yes	Yes
OTi DALI 100/220...240/700 D NFC IND L	DALI magic / NFC Scanner	Yes	Yes
OTi DALI 150/220...240/1A0 D NFC IND L	DALI magic / NFC Scanner	Yes	Yes
OTi DALI 300/220...240/1A6 D NFC IND L	DALI magic / NFC Scanner	Yes	Yes

Product description	Box programming
OTi DALI 75/220...240/550 D NFC IND L	Yes
OTi DALI 100/220...240/700 D NFC IND L	Yes
OTi DALI 150/220...240/1A0 D NFC IND L	Yes
OTi DALI 300/220...240/1A6 D NFC IND L	Yes

Programmable features

Product description	Constant Lumen	DALI Settings	DALI-2 Luminaire Data
OTi DALI 75/220...240/550 D NFC IND L	Yes	Yes	Yes
OTi DALI 100/220...240/700 D NFC IND L	Yes	Yes	Yes
OTi DALI 150/220...240/1A0 D NFC IND L	Yes	Yes	Yes
OTi DALI 300/220...240/1A6 D NFC IND L	Yes	Yes	Yes

Product description	TouchDIM + Sensor	Operating Current	Lamp Operating Time
OTi DALI 75/220...240/550 D NFC IND L	Yes		
OTi DALI 100/220...240/700 D NFC IND L	Yes	Yes	Yes
OTi DALI 150/220...240/1A0 D NFC IND L	Yes	Yes	Yes
OTi DALI 300/220...240/1A6 D NFC IND L	Yes	Yes	Yes

Product description	Driver Guard	Emergency Mode	Soft Switch Off
OTi DALI 75/220...240/550 D NFC IND L			
OTi DALI 100/220...240/700 D NFC IND L	Yes	Yes	Yes
OTi DALI 150/220...240/1A0 D NFC IND L	Yes	Yes	Yes

Product family datasheet

Product description	Driver Guard	Emergency Mode	Soft Switch Off
OTi DALI 300/220...240/1A6 D NFC IND L	Yes	Yes	Yes

Product description	Dim to Dark	Corridor Functionality
OTi DALI 75/220...240/550 D NFC IND L		
OTi DALI 100/220...240/700 D NFC IND L	Yes	Yes
OTi DALI 150/220...240/1A0 D NFC IND L	Yes	Yes
OTi DALI 300/220...240/1A6 D NFC IND L	Yes	Yes

Certificates & standards

Product description	Approval marks – approval	Standards	Type of protection
OTi DALI 75/220...240/550 D NFC IND L	CE / EL / VDE-ENEC / EAC / CCC / RCM / BIS	Acc. to IEC 61347-1/Acc. to IEC 61347-2-13/Acc. to IEC 62384/Acc. to IEC 62386/Acc. to IEC 61000-3-2/Acc. to IEC 61000-3-3/Acc. to IEC 61547	IP20
OTi DALI 100/220...240/700 D NFC IND L	CE / EL / VDE-ENEC / EAC / CCC / RCM / BIS	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 62386	IP20
OTi DALI 150/220...240/1A0 D NFC IND L	CE / EL / VDE-ENEC / EAC / CCC / RCM / BIS	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 62386	IP20
OTi DALI 300/220...240/1A6 D NFC IND L	CE / EL / VDE-ENEC / EAC / CCC / RCM / BIS	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 62386	IP20

Product family datasheet

Logistical data

Product description	Commodity code
OTi DALI 75/220...240/550 D NFC IND L	850440829000
OTi DALI 100/220...240/700 D NFC IND L	850440829000
OTi DALI 150/220...240/1A0 D NFC IND L	850440829000
OTi DALI 300/220...240/1A6 D NFC IND L	850440829000

Environmental information

Product description	Date of Declaration	Primary Article Identifier	Candidate List Substance 1
OTi DALI 75/220...240/550 D NFC IND L	23-12-2021	4062172139670	Lead
OTi DALI 100/220...240/700 D NFC IND L	23-12-2021	4052899559516	Lead
OTi DALI 150/220...240/1A0 D NFC IND L	23-12-2021	4052899559530	Lead
OTi DALI 300/220...240/1A6 D NFC IND L	23-12-2021	4062172186155	Lead

Product description	CAS No. of substance 1	Safe Use Instruction	Declaration No. in SCIP database
OTi DALI 75/220...240/550 D NFC IND L	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	2e02e1c1-5ecc-437b-a3d4-ce01290afec1
OTi DALI 100/220...240/700 D NFC IND L	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	1a2a2563-fa7e-405d-8d4a-1f291bbf4f04
OTi DALI 150/220...240/1A0 D NFC IND L	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	f4bf83f3-79f5-4c86-9d0a-a93593971e4f
OTi DALI 300/220...240/1A6 D NFC IND L	7439-92-1	The identification of the Candidate List substance is sufficient to allow safe use of the article.	5d6e5d3a-4fc0-4c4e-9ff4-aec9d45ba14f

Application advice

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

Sales and Technical Support










Product family datasheet

Sales and Technical Support www.osram.com

Download Data

File	
	User instruction OPTOTRONIC LED Power Supply
	Certificates OTI DALI D NFC IND L CB DE1 63739 130720
	Certificates OTI DALI 75 D NFC IND L EATON AM35046 150720
	Certificates OTI DALI 75 D NFC IND L INOTEC AM35046 150720
	Certificates OT ENEC 40038085 171221
	Certificates OT EMC 40044675 250621
	Declarations of conformity OTI DALI D NFC IND L CE 3633294 200821
	User instruction OPTOTRONIC LED Power Supply
	Certificates OT EMC 40050085 200220
	Certificates OTI DALI 100 D NFC IND L EATON AM35717 110820
	Certificates OTI DALI 100 D NFC IND L INOTEC AM35717 110820
	Declarations of conformity EATON(CEAG) Conformity declaration AM07661_OTi_DALI_100_220-240_700_D_NFC_IND_L
	Declarations of conformity INOTEC Conformity declaration AM07661_OTi_DALI_100_220-240_700_D_NFC_IND_L
	CAD data OTI DALI 100 D NFC IND L STEP 090120
	CAD Data 2-dim OTI DALI 100 D NFC IND L CAD2PDF 090120
	CAD data 3-dim OTI DALI 100 D NFC IND L CAD3PDF 090120
	Certificates OTI DALI 150 D NFC IND L EATON AM35718 110820
	Certificates OTI DALI 150 D NFC IND L INOTEC AM35718 110820
	Declarations of conformity EATON(CEAG) Conformity declaration AM07662_OTi_DALI_150_220-240_1A0_D_NFC_IND_L

Product family datasheet

	Declarations of conformity INOTEC Conformity declaration AM07662_OTi_DALI_150_220-240_1A0_D_NFC_IND_L
	CAD data CAD data IGS OTI DALI 150D NFC IND L
	CAD data CAD data STEP OTI DALI 150D NFC IND L
	CAD data PDF CAD data PDF OTI DALI 150D NFC IND L
	User instruction OPTOTRONIC LED Power Supply
	CAD data OTI DALI 300 D NFC IND L IGS 301120
	CAD data OTI DALI 300 D NFC IND L STEP 301120
	CAD Data 2-dim OTI DALI 300 D NFC IND L CAD2PDF 301120
	CAD data 3-dim OTI DALI 300 D NFC IND L CAD3PDF 301120

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
4062172139670	OTi DALI 75/220...240/550 D NFC IND L	Shipping carton box 20	385 mm x 160 mm x 100 mm	6.16 dm ³	5574.00 g
4052899559516	OTi DALI 100/220...240/700 D NFC IND L	Shipping carton box 20	385 mm x 160 mm x 100 mm	6.16 dm ³	5546.00 g
4052899559530	OTi DALI 150/220...240/1A0 D NFC IND L	Shipping carton box 20	447 mm x 160 mm x 101 mm	7.22 dm ³	6319.00 g

Product family datasheet

Logistical Data

4062172186155	OTi DALI 300/220...240/1A6 D NFC IND L	Shipping carton box 10	385 mm x 152 mm x 107 mm	6.26 dm ³	4455.00 g
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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.

Data privacy

This OSRAM driver can be configured using the Tuner4TRONIC software. This requires registering on 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.

Disclaimer

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