

The trusted value of OSRAM Digital Systems continues with Inventronics Global – where experience meets innovation.

OTi DALI 50/220-240/48 1CH (NEW)

Optotronic Intelligent - 48 V DALI



Product family features

- Dimmable via Touch DIM
- 50 m load cable with EMI validated
- Dimming range: 0.1...100 %
- Line frequency: 0 Hz | 50 Hz | 60 Hz

Product family benefits

- Intelligent power matching thanks to Smart power supply
- Form factor for mounting on the cove or in luminaires
- No stroboscopic effect thanks to patented high PWM frequency management (> 2 kHz)
- Suitable for installation in emergency lighting systems according to EN 60598-2-22
- DALI message detection "LED Module failure"
- DALI part 251-252-253
- IP rating: IP20

Areas of application

- Cove lighting, wall washer, corridor, handrail, luminous ceilings
- Suitable for use in luminaires of protection class I and II

Technical data

Electrical data

Nominal input voltage	220...240 V
Mains frequency	50/60 Hz
Input voltage AC	195...264 V
Input voltage DC	176...276 V
Total harmonic distortion	< 5 %
Power factor λ	> 0.98
Efficiency in full-load	92 %
Device power loss	4.0 W
Inrush current	41 A
Max. ECG no. on circuit breaker 10 A (B)	13
Max. ECG no. on circuit breaker 16 A (B)	21
Surge capability (L/N-Ground)	2 kV
Surge capability (L-N)	1 kV
Nominal output voltage	48.2 V
U-OUT (working voltage)	48.2 V
Output PSTLM	<1
Output SVM	<0.4
Nominal output power	0...50 W
Maximum output power	50 W
Galvanic isolation	SELV
Galvanic isolation DALI/mains	Basic
Galvanic isolation DALI/output	Double
Networked standby power	<0.30 W

Dimensions & weight



Length	346.0 mm
Width	32.0 mm
Height	22.0 mm
Mounting hole spacing, length	303.0 mm
Cable cross-section, input side	0.5...2.5 mm ²
Cable cross-section, output side	0.5...1.5 mm ²
Wire preparation length, input side	6.0 mm
Wire preparation length, output side	5.0 mm
Product weight	191.00 g

Colors & materials

Casing material	Plastic
Product color	White

Temperatures & operating conditions

Ambient temperature range	-20...+50 °C
Maximum temperature at tc test point	80 °C
Max.housing temperature in case of fault	110 °C
Temperature range at storage	-40...85 °C
Permitted rel. humidity during operation	5...85 %

Lifespan

ECG lifetime	50000 h
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Additional product data

Encapsulated	No
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Capabilities

Programming interface	DALI - 2
Dimmable	Yes
Dimming interface	DALI-2
Dimming range	0.1...100 %
Dimming method	Pulse Width Modulation
DALI-2 Diagnostic Data	Yes
DALI-2 Energy Data	Yes
Max. cable length to lamp/LED module	50 m
Suitable for fixtures with prot. class	I / III
Suitable for emergency lighting	Yes
EL DC detection selectable	Yes
EL EOFi – default value	0.15
Type of connection, input side	Screw terminal
Type of connection, output side	Screw connection
Suitable for through-wiring	No
Number of channels	1
Overheating protection	Yes
Overload protection	Yes
Short-circuit protection	Yes
Intended for no-load operation	No
No-load proof	Yes

Programming

Tuner4TRONIC	Yes
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Programmable features

DALI Settings	Yes
DALI-2 Luminaire Data	Yes
TouchDIM + Sensor	Yes
Corridor Functionality	Yes

Certificates & standards

Approval marks – approval	CE / ENEC 10 / VDE-ENEC / CCC / BIS / EL / MM / RCM
Type of protection	IP20

Environmental information

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)	
Date of Declaration	16-05-2025
Primary Article Identifier	6977770432451
Candidate List Substance 1	Lead
CAS No. of substance 1	7439-92-1
Safe Use Instruction	The identification of the Candidate List substance is sufficient to allow safe use of the article.
Declaration No. in SCIP database	43928058-59e8-4219-ad04-94fb098207e6
SCIP_ID	

Equipment / Accessories

- Suitable for 48 V LED modules

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.

Download Data

File		
Product Datasheet	PDF	▶ OTi DALI 50 80 48 1CH TDS 020425
Certificates	PDF	▶ OT VDE ENEC 40050684 290125
Mandatory Publications	PDF	▶ OTi DALI 48V CE 4540294 040225
User instruction	PDF	▶ G15130368 UI_OTi DALI 50_80 48 1CH_4p_MiCh_INV v2

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
6977770432451 INVENTRONICS	OTi DALI 50/220-240/48 1CH	Shipping carton box 20 Pieces	371 x 171 x 105 mm	6.66 dm ³	199.44 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