

OT Wi 50/220-240/24 1CH NLC

Optotronic Wireless Intelligent - 24 V NLC



Product family features

- 50, 80, 160 W / 24 V LED drivers, single channel output
- Lighting wireless Bluetooth Mesh network
- Simple and quick commissioning

Product family benefits

- Multiple outputs for synchronized operation
- Through-Loop input screw terminals
- Driver with integrated Networked Lighting Control system
- Slim form factor for installation in light boxes
- No stroboscopic effect thanks to patented high PWM frequency management (> 2 kHz)

Areas of application

- Suitable for indoor installations
- Shops and hospitality: retail, hotels, restaurants
- Museums, residential buildings

Technical data

Electrical data

Nominal input voltage	220...240 V
Mains frequency	50/60 Hz
Input voltage AC	198...264 V
Input voltage DC	176...276 V
Nominal input current at 230 V	0.24 A
Total harmonic distortion	< 5 %
Power factor λ	0.82...0.99
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	24.2 V
U-OUT (working voltage)	24.2 V
Output ripple current (100 Hz)	< 1 %
Output PSTLM	<1 ¹⁾
Output SVM	<0.4 ¹⁾
Nominal output power	0...50 W
Maximum output power	50 W
Galvanic isolation	SELV
Wireless protocol	NLC
Radio frequency	2.402-2.483 GHz

1) For every dimming condition (n.a. < 1%) / Extended SVM metrics (10 kHz)

Dimensions & weight

Length	346.0 mm
Width	32.0 mm
Height	22.0 mm
Mounting hole spacing, length	300.6 mm
Cable cross-section, input side	0.75...2.5 mm ²
Cable cross-section, output side	0.2...1.5 mm ²
Wire preparation length, input side	5...6 mm
Wire preparation length, output side	5...6 mm
Product weight	191.00 g

Colors & materials

Casing material	Plastic
Product color	White

Temperatures & operating conditions

Ambient temperature range	-20...+45 °C
Maximum temperature at tc test point	70 °C
Max.housing temperature in case of fault	115 °C
Temperature range at storage	-40...+85 °C
Permitted rel. humidity during operation	5...85 %

Lifespan

ECG lifetime	50000 h ¹⁾
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1) @ ta = 45 °C, tc MAX and 10 % failure rate, 14 h ON and 10 h stand-by per day

Capabilities

Dimmable	Yes
Dimming interface	Bluetooth Low Energie / Qualified Bluetooth mesh
Dimming range	0.1...100 %
Dimming method	Pulse Width Modulation
Max. cable length to lamp/LED module	50 m
Suitable for fixtures with prot. class	I / II
Type of connection, input side	Screw terminal
Type of connection, output side	Screw terminal
Suitable for through-wiring	Yes
Number of channels	1
Overheating protection	Yes, Auto-Recovery
Overload protection	Yes, auto recovery + Smart Power
Short-circuit protection	Yes, auto recovery
Intended for no-load operation	No
No-load proof	Yes

Certificates & standards

Approval marks – approval	CE / VDE-ENEC / MM / RCM
Standards	CISPR 15 / EN/IEC 61547 / EN/IEC 62384 / EN/IEC 61347-2-13 / EN/IEC 61000-3-3 / EN 61000-3-2/IEC 61000-3-2 / IEC/EN 61347-1
Type of protection	IP20

Environmental information

Information according Art. 33 of EU Regulation (EC) 1907/2006 (REACH)	
Date of Declaration	10-02-2026
Primary Article Identifier	6937186131874
Declaration No. in SCIP database	In work
SCIP_ID	

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	▶OT Wi 50 80 220 240 24 1CH NLC TDS 6937186131874 6937186131898 310326
User instruction	PDF	▶OT WI 50 80 1CH NLC UI G15131441 091025

Logistical Data

Product code	Product description	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Volume	Gross weight
6937186131874 INVENTRONICS	OT Wi 50/220-240/24 1CH NLC	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