Light is OSRAM

OSRAM

Product data sheet: OPTOTRONIC® OT Wi 25/220-240/700 NFC CA LP I

Wireless compact constant current LED driver
Integrated Casambi enabled radio module
Wide operating area, 1…100% dimmable

Compact SELV Casambi wireless driver

Benefits
Super compact SELV wireless LED driver 25W
Fast programming / current set via NFC*
Suitable for emergency lighting units
Amplitude dimming 1…100%
For independent installation

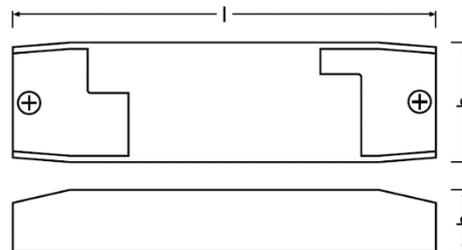**Applications**
Spots and downlights
Office – Shop - Hospitality

Approbations & Certifications
CE, UKCA, ENEC, RCM, EL, CCC, EAC, BIS
In preparation, if not already printed on the label

*For more information please refer to Tuner4TRONIC

Housing material: plastic, white.

L	150 mm
L1	108 mm
B	43 mm
H	22 mm

Product Features

— Output current range 180-700mA

— NFC Interface

— Amplitude dimming 1-100%

— Low stand-by consumption ≤0.15 W

— Suitable for emergency lighting

— Works with Casambi

— Low LF-ripple < 3%

— 100'000 h lifetime at tc = 75°C

— tc max = 85°C

— 5 years guarantee

Preliminary

Electrical Specifications

	Item	Value	Unit	Remarks
INPUT	Nominal voltage	220 – 240	V	
	Nominal frequency	0 / 50 / 60	Hz	
	AC voltage range	198 – 264	V	
	DC voltage range	176 – 276	V	DC or RAC
	Maximum voltage	320	Vac	2 h maximum, unit will not operate in this abnormal condition
	Nominal current	0.15	A	
	Total Harmonic Distortion (THD)	< 10	%	Full load, 220 – 240 V, 50 Hz / see graphs
	Power factor	≥ 0.95		Full load, 220 – 240 V, 50 Hz / see graphs
	Efficiency (declared value)	88	%	Full load, 220 – 240 V, 50 Hz / see graphs
	Networked stand-by power (declared value)	≤ 0.15	W	
	Protection class	II		Suitable for fixtures with protection class I or II
	Inrush current	20	A pk	th = 25 µs
	Max. units per circuit breaker	B16: 80 B10: 50		
OUTPUT	Nominal voltage range	10 – 54	V	
	Maximum voltage	< 60	Vdc	w/ Open Circuit
	Nominal current range	180 – 700	mA	Default current 500mA
	Current accuracy	+/- 3	%	
	Current ripple 100Hz	< 3	%	
	$P_{ST}LM$	< 1		
	SVM	< 0.4		
	Nominal power range	3.6 – 27	W	
	Maximum power	27	W	
	Galvanic isolation	SELV		Mains to LED output
Dimming	Dimming control	Casambi		
	Dimming method	Analog dimming		
	Dimming range	1…100	%	
	Radio Frequency	2.4	GHz	
	Max TX power	+8	dBm	
	Wireless protocol			Casambi
	Wireless range	10	m	Line of sight
FEATURES	Operating current	Yes		
	CLO	Yes		
	Tuning factor	Yes		
	Driver Guard	Yes		
	Soft switch-off	Yes		
	Dim to dark	Yes		
	Emergency	Yes		
	Configuration lock	Yes		
	DALI settings	No		
	DALI part 251	No		Luminaire info
	DALI parts 252/253	No		Monitoring data
ENVIRONMENT	Ambient temperature range t_a	-20 …+50	°C	
	Maximum case temperature t_c	85	°C	Measured on t_c point indicated of the product label
	Max. case temp. in fault condition	110	°C	
	Storage temperature range	-25 …+85	°C	
	Relative humidity	5 ... 85	%	Not condensing
	Surge transient protection	1 | 2	kV	L/N | LN/PE acc to. EN 61547 Clause 5.7
	Environmental rating	Indoor		
	IP rating	IP 20		
	Mains switching cycles	> 150'000		
	Expected lifetime	50'000 100'000	h	t_c = 85°C, 0.2% / 1'000 h failure rate, 24h ON t_c = 75°C, 0.1% / 1'000 h failure rate, 24h ON

NFC compatible with MD SIG standard

Protections

Overtemperature, Overload, No load, Short-circuit, Input overvoltage, Output overvoltage, Output undervoltage

Typical Operating window

Typical Efficiency vs Load (230V/ 50Hz,)

Typical Powerfactor vs Load


Typical THD vs Load
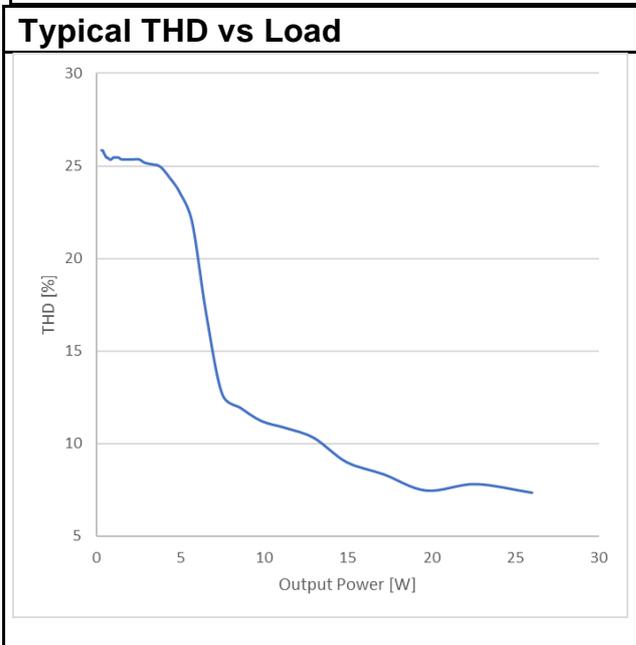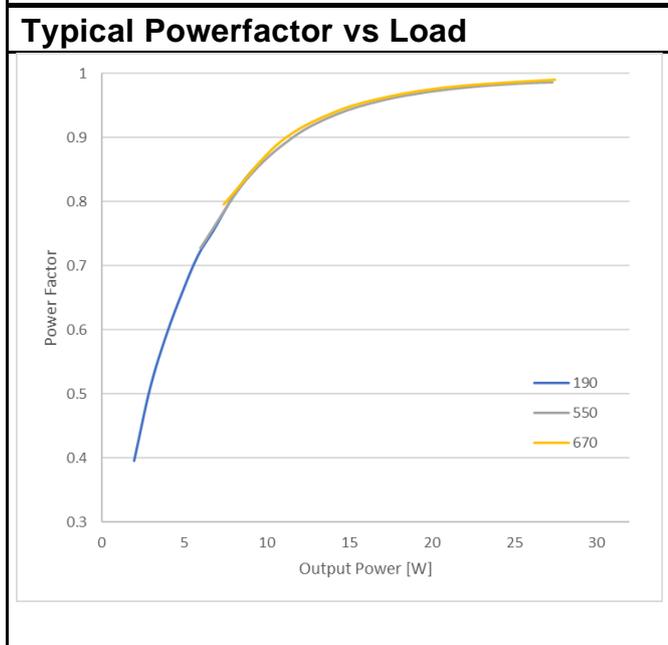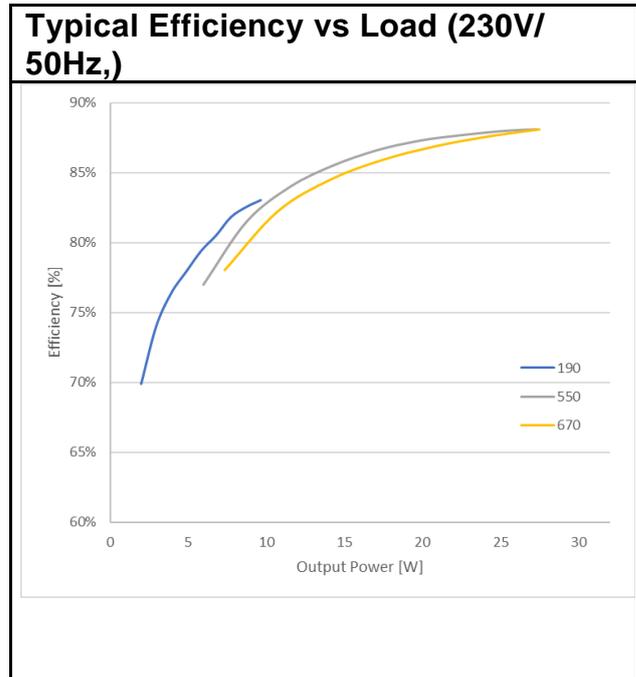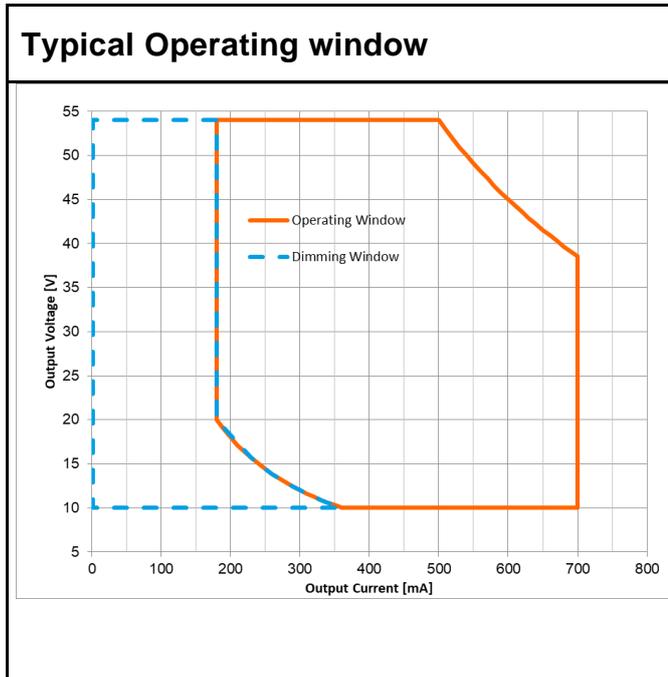
Reset

There are two places in the app where you can unpair a Casambi enabled device from a network.

1. Go to the 'Luminaires' tab and tap 'edit'. Unpair a luminaire by tapping the ("X") that will appear in the corner of the relevant luminaire icon.

You can also double-tap a luminaire icon to open the "luminaire properties" screen, and then scroll down and tap 'Unpair device'.

2. Go to the "Nearby devices" screen found under the 'More' tab. Tap on the device you wish to unpair and select 'Unpair device'.

This will unpair the luminaire if you have modification (administrator) rights to the network.
If you don't have the modification rights to the network that the device is paired to then you need to have access to the devices power switch to be able to unpair. Tap on the device you wish to unpair and select 'Unpair device' and the app will open the 'Unpair' screen. Tap on the 'Start' button and an orange "Time bar" will appear and start to move across the screen. During the time it takes the bar to move across the screen, flick the power switch off and back on again. This should unpair the device. If unpairing succeeds then there is a message that luminaire has been unpaired. If it does not succeed then try again but switch the power off and on again more slowly (This may be needed for devices that use an additional power supply; such as a CBU-PWM4). If unpairing continues to be unsuccessful then it is probably the case that the power switch is not correct for the device you are trying to unpair. Reset completed.

Wiring Diagram
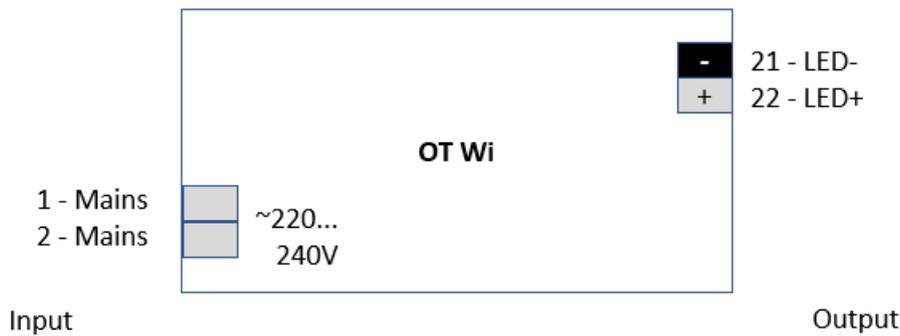
Input wires	**Load wires length: 2m max.**
Wire cross-section: 0.75-1.5 mm²	Wire cross-section: 0.5-1.5 mm²
Wire peeling length: 7-8 mm	Wire peeling length: 7-8 mm

Product type	EAN10
OT Wi 25/220-240/700 NFC CA LP I	4062172228053

Remarks

– **Input over voltage protection: mains up to 320 Vac,** for 2 hours maximum, will not destroy both the unit and the load; shut down of load will occur, if line voltage exceeds typically 285V.
– The output wires to the LED module shall be in parallel and close together
– **Output short circuit protection:** short circuit operation indicated if output voltage is typically below 7V. No shut down occur. This operation mode is safe for the unit but is not recommended.
– **Output overload protection**: the unit automatically reduces the output current to keep the output power below the max limit.
– **Output over voltage protection**: the unit tries to stabilize the output voltage below 54V by reducing the current as necessary down to 50%; if output voltage still exceeds 54V shutdown will occur; the unit tries to automatically switch on the load again every 4-5 sec for 0.1 sec delivering the selected nominal output current.
– **No load operation:** the unit tries to automatically switch on the load again every 4-5 sec for 0.1 sec delivering the selected nominal output current; this operation mode is safe for the unit but is not recommended. Do not put a switch between load and unit.
– **Glow-effects** (LED glowing very weak when switched off via Bluetooth) can occur in rare cases, when the LED module has a high capacitive coupling to PE. To avoid such effects the neutral conductor (N from mains voltage) must be connected to the power terminal number 2.
– **Over temperature protection**: the unit is protected against temporary overheating by automatic reduction of the output current (up to a complete power off) when tc > tc max. The protection is self-restoring.
– **Touch current**: lower than 0.7 mA, according to EN 60598-1 ann. G and EN 61347-1 annex A
– **Emergency lighting**: this LED power supply is suitable for emergency lighting fixtures acc. to EN 60598-2-22., with emergency output factor EOF_I=0.45 (default value, can be programmed up to EOF_I=1) and related duration time of 1h at least. Function in emergency is ensured up to t_a=80°C.
– Download Casambi app from App store or Google play. For the correct functioning of the Casambi app refer to the Casambi website: http://www.casambi.com
– The Casambi App is provided to you by Casambi. OSRAM shall have no liability for the Casambi app and does not make any representations, express or implied, about the availability and/or performance of the Casambi app.
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Standards

IEC 61347-1; IEC 61347-2-13; IEC 62384; IEC 62386; IEC 61000-3-2; IEC 61000-3-3; IEC 61547; CISPR 15; ETSI EN 300 328; ETSI EN 300 330; ETSI EN 301 489-3 (NFC); ETSI EN 301 489-1; ETSI EN 301 489-17: EN 62479

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