

Light is OSRAM

OSRAM

## OTi BLE 80/220-240/24 1-4CH

24 V CASAMBI Bluetooth Constant Voltage LED driver

Dimming range 0,4% - 100%

### Benefits

Slim form factor for mounting on the cove or into linear luminaires

Very low dimming: 0,4%

Wirelessly controlled via APP\*

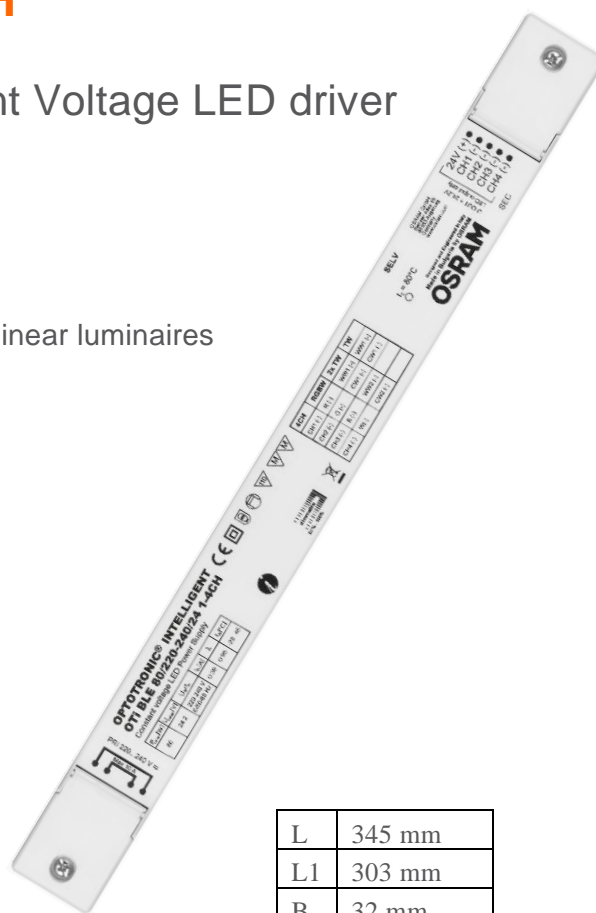
### Applications

Cove lighting, wall washer corridor, handrail and hospitality luminaires

### Approvals



In preparation, if not already printed on product label



L	345 mm
L1	303 mm
B	32 mm
H	22 mm

Housing materials: plastic, white

## Product Features

- CASAMBI Low Energy Bluetooth
- Minimum dimming level 0,4%
- Smart Power Supply
- Wide  $t_a$  range -20 ... +45 °C
- Mains voltage: 220 – 240 V<sub>AC</sub>  
176 – 276 V<sub>DC</sub>
- SELV, U<sub>out</sub>: 24,2 V
- Overload protection
- Over temperature protection
- $t_c$  max = 80 °C
- up to 70'000 h lifetime at  $t_c$  of 70°C
- 5 years guarantee

\*: 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>  
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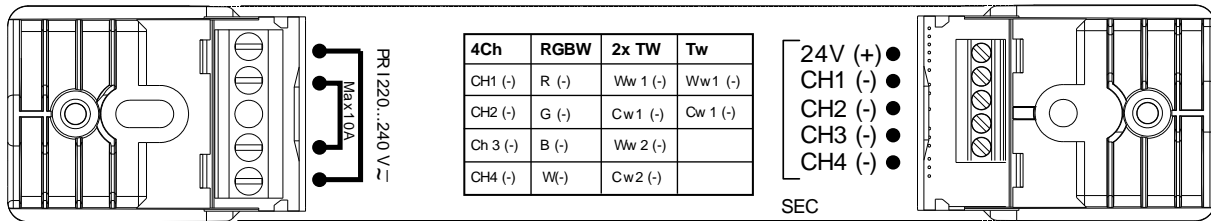
\*\* : guarantee conditions available <https://www.osram.com/cb/services/guarantees/multilevel-guarantees/index.jsp>

## Electrical specification

	Item	Value	Unit	Remarks
INPUT	Nominal voltage	220 – 240	V	
	Mains frequency	0 / 50 / 60	Hz	
	Input voltage AC	198 – 264	V	
	Input voltage DC	176 – 276	V	
	Nominal current	0,39	A	At 230 Vac
	Total Harmonic Distortion (THD)	< 5	%	Full load, 230 Vac, 50 Hz / 60 Hz, see graphs
	Power factor $\lambda$	0,98		Typical, Full load, 230 Vac, 50 Hz / 60 Hz, see graphs
	ECG Efficiency	93	%	Typical, Full load, 230Vac, 50Hz, see graphs
	Power loss in stand-by mode	< 500	mW	230 Vac, 50 Hz typical 360 mW
	Protection class	II		
	Suitable for fixtures with prot. Class	II		
	Inrush current	48 Apk / 220 us		
	Max. units per circuit breaker	B16= 10 / B10= 6		
OUTPUT	Nominal output voltage	24,2	V	
	Voltage accuracy	+/- 3	%	
	Voltage ripple	< 5	%	Ripple / average @ 100 Hz; Full load
	Power range	0 – 80	W	Power Factor, Harmonics and EMI verified between 30-80 W
	Maximum power	80	W	Maximum total LED output (sum of all channels)
	Galvanic isolation	SELV		
DIMMING	Dimming interface	Bluetooth CASAMBI		
	Dimming range	0,4 – 100	%	
	Dimming method	PWM		
	PWM frequency	2	kHz	
ENVIRONMENTAL	Ambient temperature range	-20 ÷ +45	°C	
	Max. temperature at tc test point	80	°C	Measured on tc point of the product label, ta not exceeded
	Max. case temp. in fault condition	115	°C	
	Storage temperature range	-25 ...+85	°C	
	Permitted rel. humidity during operation	5 – 85	%	Not condensing
	Surge capability (L/N)	1	kV	L/N acc to. EN 61547
	Environmental rating	Indoor		
	IP protection class	IP 20		
	Mains switching cycles	> 200'000		
	Expected ECG lifetime	70'000 50'000	h	tc = 70°C - 0,1% / 1'000 h failure rate tc = 80°C - 0,2% / 1'000 h failure rate
	No-load proof	Yes		
	Overheating protection	Yes		Automatically restart
	Overload protection	Yes		Automatically restart
	Short-circuit protection	Yes		Automatically restart
	Type of connection, output side	Terminal		0,2 – 1,5 mm <sup>2</sup>
DIMENSIONS MATERIAL	Height	32	mm	
	Length	345	mm	
	Product weight	192	g	
	Width	22	mm	
	Casing material	Plastic		
	Wire prep. length, input side	5	mm	
	Wire prep. length, output side	5	mm	
	Mounting hole spacing, length	303	mm	

## Protection

Over temperature, Overload, Short-circuit, Input overvoltage, Output overvoltage. Reversible.



## Wiring

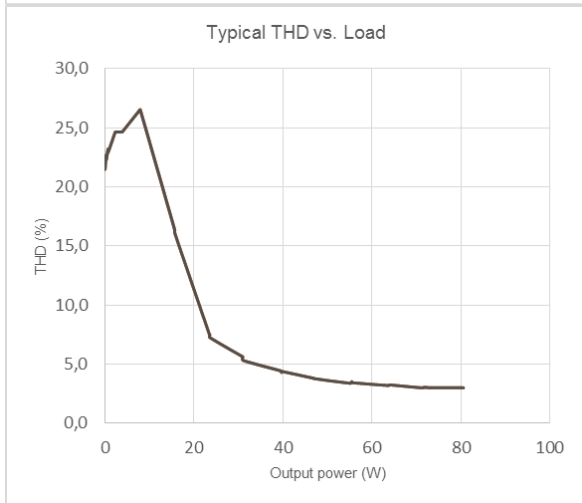
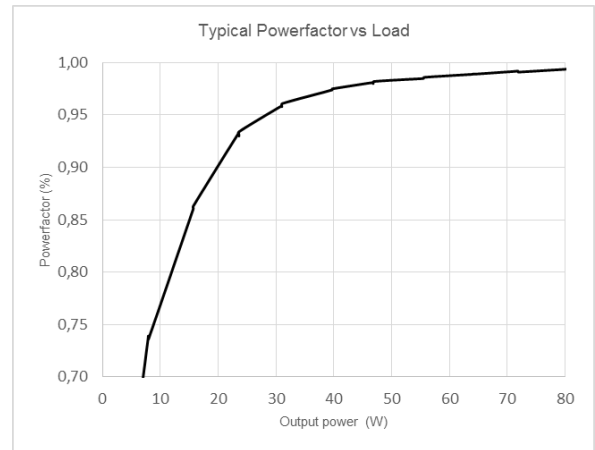
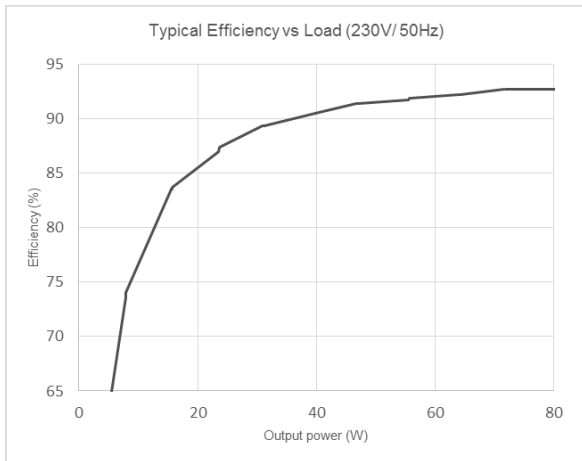
- Input Wires cross section 0,75 – 2,5 mm<sup>2</sup>
- Output wire cross section 0,2 – 1,5 mm<sup>2</sup>
- Wire peeling length: 5 mm

The wire length from the ECG to the LED module at full load can reach 50 m.

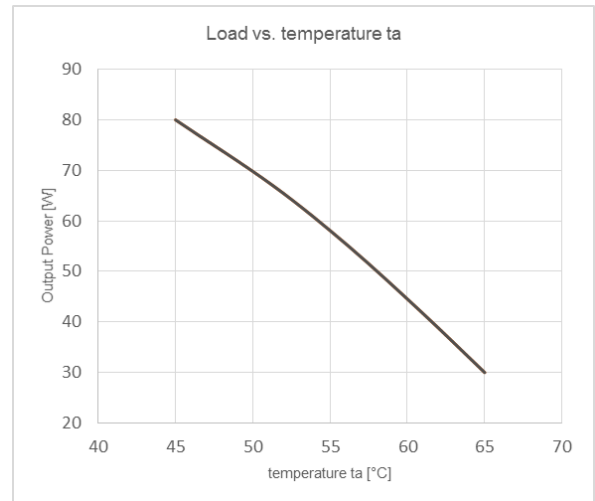
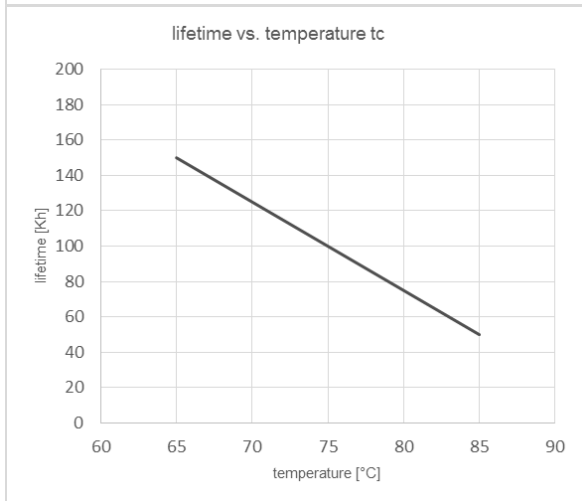
Some combinations of cable length / section don't allow full power output. See below table for reference.

Choose a proper wire section to ensure that the LED module input voltage is at least 23 V.

		Cable lengths [m] - 24,2V					
		5	10	20	30	40	50
Cable section [mm <sup>2</sup> ]	0,5	80	40	20	13	10	8
	0,75	80	60	30	20	15	12
	1	80	80	40	27	20	16
	1,5	80	80	60	40	30	24
	2,5	80	80	80	68	50	40
	4	80	80	80	80	80	65
	6	80	80	80	80	80	80
	10	80	80	80	80	80	80
	16	80	80	80	80	80	80



— OTI BLE 80/220-240/24



**OSRAM system match:**

When the OTI BLE 24V is used in combination with OSRAM LINEARlight flex or Signage module, the following matching table can be use as proven system match. (cfr TDS of LLF for t<sub>p</sub> definition)  
@t<sub>p</sub> Rated

Casambi Fixture	Led Module	Max length
4 ch White (Linear dimming curve)	LF/LFP500	19m
	LF/LFP1200	6.8 m
	LF/LFP2000	4 m
	LF/LFP3000	2.3 m
	LF4000	2.3 m
	LF/LFP800S-G4	9.3 m
	LF200M	11.85m
	BackLED XL Plus G3	35 modules
TW 2700-6500 K	LF1200TW	8.025 m
	LF2000TW	4.275 m
	LF3000TW	2.550 m
	LF4000TW	2.025 m
	BackLED TW Plus G2	16 modules
TW 2200-3500 K	LF3000TWW 822-835	2.25m
TW 2500 -3500 K	LF3000TWW 825-835	2.4m
2x TW 2700-6500 K	LF1200TW	8.025 m
	LF2000TW	4.275 m
	LF3000TW	2.550 m
	LF4000TW	2.025 m
	BackLED TW Plus G2	16 modules
2x TW 2200-3500 K	LF3000TWW 822-835	2.25m
2x TW 2500 -3500 K	LF3000TWW 825-835	2.4m
DimToWarm	LF1200TW	8.025 m
	LF2000TW	4.275 m
	LF3000TW	2.550 m
	LF4000TW	2.025 m
	LF3000TWW 822-835	2.25 m
	LF3000TWW 825-835	2.4 m
	BackLED TW Plus G2	16 modules
RGB	LF200C RGB	11.85m
RGBW	LF700RGBW	6.9 m
	LF1300RGBW	3.7 m
	BackLED RGBW Plus G2	18 modules
RGB + W	LF700RGBW	6.9 m
	LF1300RGBW	3.7 m
	BackLED RGBW Plus G2	18 modules

## Remarks

- **Product performances below minimal load condition:** the output power is still generated if the load is below the minimum output power, without any safety risk, but performances regarding THD, EMI, etc. are not guaranteed. See typical operation window graph for details.
- **Output short circuit protection:** short circuit current is limited without damaging the unit. Live short circuit may damage the driver. The short circuit protection is self-restoring.
- **Output overload protection:** in case of overload (+100%...+125%), the device automatically dims down the output to keep the power within 80 W and let the LED load to warm-up. When the overload exceeds the 125% of maximum nominal output power, the LED load will blink to manifest a fault condition.
- **No load operation:** do not put a switch between ECG and load.
- **Over temperature protection:** the driver is protected against temporary overheating, so it automatically dims down when  $t_c$  is exceeded. The protection is self-restoring.
- **Touch current:** lower than 0,7 mA, according to EN 60598-1 ann. G and EN 61347-1 ann. A.
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## Standards

EN 62386  
 EN 61347-1  
 EN 61347-1  
 EN 61347-2-13  
 EN 61547  
 EN 61000-3-2  
 EN 62384  
 EN 60598-2-22

## Ordering information

Product name	EAN 10	EAN 40	Pieces / Box
OTi BLE 80/220-240/24	4062172046558	4062172046565	20

## Optional Accessories



**EASYFIT EWSDB by EnOcean**  
4062172082044



**EASYFIT EWSSB by EnOcean**  
4062172082068

### OSRAM GmbH

Head Office:  
 Marcel-Breuer-Strasse 6  
 80807 Munich, Germany  
 Phone +49 89 6213-0  
[www.osram.com](http://www.osram.com)