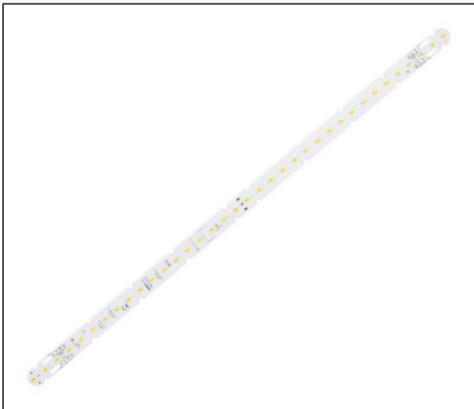


Light is OSRAM

PrevaLED Linear Tunable White

Dimension (l x w x h)

- 62 mm x 20 mm x 5 mm
- 280 mm x 20 mm x 5 mm
- 560 mm x 20 mm x 5 mm



Application

- Office
- Industry
- Healthcare
- Education

Features

- Module efficacy: up to 152 lm/W on 2700 K
- Module efficacy: up to 162 lm/W on 6500 K
- CCT: 2700 K – 6500 K
- Luminous flux
 - 62 mm: 245 lm
 - 280 mm: 1100 lm
 - 560 mm: 2200 lm
- Color rendering index CRI: > 80
- Initial color consistency: ≤ 3 SDCM
- Average lifetime (L80B10): 50,000 h at $T_c = 55^\circ\text{C}$
- Geometry according to Zhaga Book 7 L28W2, L56W2
- CE approval

Benefits

- Tunable White / HCL by adjustable color temperature from 2700 K to 6500 K
- Non-isolated LED Module with perfect match on 2-channel Optotronic TW driver
- Slim module for design of narrow luminaires
- High homogeneity thanks to small LED pitch
- Cut out area for shadow-free wiring
- Isolated connector with release function

Typical technical data*

Product name	Flux (lm)	CCT (K)	CRI	SDCM	Uf (V)	If (mA)	P (W)	Efficacy (lm/W)
PL-LIN-Z1 245-TW 62X20	241	2700	> 80	3	5.75	275	1.6	154
	249	6500	> 80	3	5.75	275	1.6	160
PL-LIN-Z1 1100-TW 280X20	1075	2700	> 80	3	25.7	275	7.1	152
	1140	6500	> 80	3	25.7	275	7.1	162
PL-LIN-Z1 2200-TW 560X20	2152	2700	> 80	3	51.5	275	14.2	152
	2287	6500	> 80	3	51.5	275	14.2	162

Electrical parameter for nominal flux

Product name	Flux (lm)	CCT (K)	CRI	SDCM	Uf (V)	If (mA)	P (W)	Efficacy (lm/W)
PL-LIN-Z1 245-TW 62X20	245	2700	> 80	3	5.8	280.0	1.6	154.4
	245	6500	> 80	3	5.7	271.0	1.5	160.4
PL-LIN-Z1 1100-TW 280X20	1100	2700	> 80	3	25.8	281.4	7.3	151.6
	1100	6500	> 80	3	25.6	263.9	6.8	162.5
PL-LIN-Z1 2200-TW 560X20	2200	2700	> 80	3	51.6	281.4	14.5	151.6
	2200	6500	> 80	3	51.3	263.9	13.5	162.5

Technical data at maximum current*

Product name	Flux (lm)	CCT (K)	CRI	SDCM	Uf (V)	If (mA)	P (W)	Efficacy (lm/W)
PL-LIN-Z1 245-TW 62X20	342	2700	> 80	3	5.75	400	2.35	145
	353	6500	> 80	3	5.75	400	2.35	150
PL-LIN-Z1 1100-TW 280X20	1520	2700	> 80	3	26.7	400	10.7	142
	1620	6500	> 80	3	26.7	400	10.7	152
PL-LIN-Z1 2200-TW 560X20	3050	2700	> 80	3	53.4	400	21.4	142
	3240	6500	> 80	3	53.4	400	21.4	152

Typical values valid for $T_p = 55^\circ\text{C}$
Energy Efficiency Class according 2012/874/EC: A++

Due to the special conditions of the manufacturing processes of LED the typical data of technical parameters can only reflect statistical figures and do not necessarily correspond to the actual parameters of each single product which could differ from the typical data.

Sum of current [mA] in WW channel and sum of current [mA] in CW channel should not exceed max current of 400mA

* Tolerance for optical and electrical data: +/-10

Optical parameter

Product name	No. of LED	Pitch in mm
PL-LIN-Z1 245-TW 62X20	8 (4 x 2700 K +4 x 6500 K)	15.6
PL-LIN-Z1 1100-TW 280X20	36 (18 x 2700 K +18 x 6500 K)	15.6
PL-LIN-Z1 2200-TW 560X20	72 (36 x 2700 K +36 x 6500 K)	15.6

Temperature ratings

T _p (performance temperature)	55°C
T _c max (maximum temperature)	75°C
T _a (ambient temperature range)	-20°C < T _a < +75°C
T _{stg} (storage temperature range)	-30°C < T _a < +85°C

Lifetime Data

	x	LxBy					
		70		80		90	
		y	10	50	10	50	10
[mA]	Lifetime [h]						
tp [°C] = 45	I rated	> 50.000	> 50.000	> 50.000	> 50.000	37.000	48.000
tp [°C] = 55	I rated	> 50.000	> 50.000	> 50.000	> 50.000	34.000	44.000
tp [°C] = 65	I rated	> 50.000	> 50.000	> 50.000	> 50.000	31.000	40.000
tp [°C] = 75	I rated	> 50.000	> 50.000	> 50.000	> 50.000	29.000	37.000

Modularity Non-isolated

OTi DALI TW driver – Non-isolated

PrevaLED Linear TW is designed to be operated by OTi DALI drivers in serial connection. Current setting of OTi DALI via Tuner4Tronic software.

	Current	OTi DALI 35/220-240/400 D NFC TW L	OTi DALI 75/220-240/700 D NFC TW L
		75-400 mA	125-700 mA
PL-LIN-Z1 1100-TW 280X20	275	2 - 4	4 - 8
	400	2	4 - 6
PL-LIN-Z1 2200-TW 560X20	275	1 - 2	2 - 4
	400	1	2 - 3
Serial connection			

Melanopic values

PrevaLED Linear Tunable White LED modules are ideal light sources for achieving Human Centric Light (HCL) effects.

HCL is using different rating factors, so called melanopic values, other than the well-known photopic values for the visual system.

In light planning, these melanopic values can be used for proper HCL design.

Melanopic values at rated current

PL-LIN-Z1 1100-TW 280X20

	Cool White	Warm White	Cool white + Warm White
CCT [K]	6500	2700	4100
Current [A]	275 mA	275 mA	2 x 137.5 mA
Nominal Luminous Flux [lumen]	1140	1075	1136
Melanopic factor a mel [V] (m V mel [V])	0,81	0,383	0,605
Melanopic Luminous Flux Φ_v mel [lm] (MEL-LF)	810	383	605
Melanopic equivalent daylight (D65) luminous flux [lm]	894	423	668
Melanopic equivalent daylight (D65) luminous flux [lm] at drive current	1019	454	758

Melanopic values at max. current

PL-LIN-Z1 1100-TW 280X20

	Cool White	Warm White	Cool white + Warm White
CCT [K]	6500	2700	4100
Current [A]	400 mA	400 mA	2 x 200 mA
Nominal Luminous Flux [lumen]	1620	1520	1589
Melanopic factor a mel [V] (m V mel [V])	0,813	0,388	0,606
Melanopic Luminous Flux Φ_v mel [lm] (MEL-LF)	813	388	606
Melanopic equivalent daylight (D65) luminous flux [lm]	897	428	669
Melanopic equivalent daylight (D65) luminous flux [lm] at drive current	1454	651	1063

Melanopic values at rated current

PL-LIN-Z1 2200-TW 560X20

	Cool White	Warm White	Cool white + Warm White
CCT [K]	6500	2700	4100
Current [A]	275 mA	275 mA	2 x 137.5 mA
Nominal Luminous Flux [lumen]	2287 lm	2152 lm	2271 lm
Melanopic factor a mel [V] (m V mel [V])	0,81	0,383	0,605
Melanopic Luminous Flux Φ_v mel [lm] (MEL-LF)	810	383	605
Melanopic equivalent daylight (D65) luminous flux [lm]	894	423	668
Melanopic equivalent daylight (D65) luminous flux [lm] at drive current	2045	910	1517

Melanopic values at max. current

PL-LIN-Z1 2200-TW 560X20

	Cool White	Warm White	Cool white + Warm White
CCT [K]	6500	2700	4100
Current [A]	400 mA	400 mA	2 x 200 mA
Nominal Luminous Flux [lumen]	3240 lm	3050 lm	3178 lm
Melanopic factor a mel [V] (m V mel [V])	0,813	0,388	0,606
Melanopic Luminous Flux Φ_v mel [lm] (MEL-LF)	813	388	606
Melanopic equivalent daylight (D65) luminous flux [lm]	897	428	669
Melanopic equivalent daylight (D65) luminous flux [lm] at drive current	2907	1306	2126

Ordering Codes

Product name	EAN (single product)	Order type	Shipping Unit
PL-LIN-Z1 245-TW 245X20	4052899605589	Make to MTO	120 x 1
PL-LIN-Z1 1100-TW 280X20	4052899999541	Make to stock	60 x 1
PL-LIN-Z1 2200-TW 560X20	4052899989351	Make to stock	60 x 1

Safety Information

- The LED module itself and all its components must not be mechanically stressed.

The modules are intended for operation only with matching OPTOTRONIC®.

To also ease the luminaire/installation approval, electronic control gear for LED or LED modules should carry the CE mark and be ENEC certified. In Europe the declarations of conformity must include the following standards:
CE: EC 61347-2-13, EN 55015, IEC 61547 and IEC 61000-3-2 - ENEC: 61347-2-13 and IEC/EN 62384.

Also check for the mark of an independent authorized certification institute.

Please see the relevant brochure for more detailed information (see "Related and Further Information")

- Installation of LED modules (with power supplies) needs to be made with regard to all applicable electrical and safety standards. Only qualified personnel should be allowed to perform installations.
- Pay attention to standard ESD precautions when installing the module.
- Photobiological safety according to IEC 62471, risk group RG1
- Max. Voltage U-OUT = 250V for operation on non-isolated LED controlgear.

Disclaimer

Subject to change without notice. Errors and omission accepted. Always make sure to use the most recent release. The latest release of the datasheet is available under the following link www.osram.com

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