

PRODUCT DATASHEET

LS P 1000 RGBW 940 5

LED STRIP PERFORMANCE 1000 RGBW GEN 2 | High performance RGBW LED strips with 1000 lm/m for high requirements



Areas of application

- General illumination
- Architecture lighting
- Dynamic light as an architectural effect in public zones
- Intensive color effects for special moods
- Cove lighting
- Hotels and Offices
- Residential interiors

Product benefits

- Very good white light quality thanks to color rendering index Ra > 90 and dedicated white LEDs
- Great scope of design options due to long and flexible RGBW LED strips
- Easy mounting thanks to self-adhesive tape
- Simple connection thanks to integrated cables on both sides
- Maximum flexibility due to large range of accessories
- Easy installation, no tools required for connection

Product features

- Flexible and cuttable LED strip with white Chip and Multichip RGB LEDs
- Smallest cuttable unit: 83,30 mm
- Lifetime (L70/B50): up to 50,000 h at Ta: 55°C
- Dimmable by pulse width modulation (PWM)

TECHNICAL DATA

Electrical data

Nominal wattage	106.00 W ¹⁾
Construction wattage	106.00 W
Nominal wattage per meter	21 W ²⁾
Nominal voltage	24 V
Input voltage range	23...25 V
Input voltage DC	24 V
Type of current	DC
Nominal current	4440.000 mA
Inrush current	0.03 A

1) 42 W for White, 21.5 W for Red, 21.5W for Green, 21.5 W for Blue, 65.0 W for Red Green Blue

2) 4.3 W per meter for Red, 4.3 W per meter for Green, 4.3 W per meter for Blue, 8.3 W per meter for White. 12.8 W per meter for Red Green Blue

Photometrical data

Luminous efficacy	125 lm/W
Luminous flux	8450 lm ¹⁾
Luminous flux per meter	1775 lm
Luminous flux per module chain	8450 lm
Luminous flux per meter - Red	155 lm/m
Luminous flux per meter - Green	510 lm/m
Luminous flux per meter - Blue	110 lm/m
Luminous flux per meter - RGB	750 lm/m
Color temperature	4000 K
Color rendering index Ra	> 90
Light color LED	RGB, white
Light color (designation)	RGBW / Daylight
Standard deviation of color matching	< 4 sdcm

1) 4830 lm for 2700 K, 4995 lm for 3000 K, 5250 lm for 4000 K, 5250 lm for 6500 K, 750 lm for Red, 2515 lm for Green, 535 lm for Blue, 3640 lm for Red Green Blue

Light technical data

Beam angle	120 °
Rated beam angle (half peak value)	120.00 °

LED MODULE INFORMATION

Number of LEDs per meter	168
Number of LEDs per module	840
Number of LEDs per smallest unit	14

Dimensions & Weight



Length	5000.00 mm
Length – smallest unit	83,33 mm
Cable length	500.000
Width	12.00 mm
Height	2.10 mm
Prewired	Yes
Wire preparation length, input side	5.00 mm
Wire preparation length, output side	5.00 mm
Conductor cross section	0.5 mm²
LED pitch	11.90 mm
Product weight	150.00 g

Colors & materials

Product color	White
Body material	Polycarbonate (PC)

Temperatures & operating conditions

Ambient temperature range	-20...+55 °C ¹⁾
Maximum temperature at tc test point	85 °C ²⁾
Temperature range in operation	-20...+55 °C
Permitted rel. humidity during operation	0...55 %

1) Providing that temperature at Tc point is below max value during operation
2) Exceeding the maximum specified ratings can reduce expected life time or destroy the LED strip

Lifespan

Nominal lamp life time	50000 h
------------------------	---------

Additional product data

Product remark	Available from December 2024
Mounting location	Ceiling / Wall / Floor / Pole

Capabilities

Dimmable	Yes ¹⁾
----------	-------------------

Overheating protection	No
Lowest bending radius	30,0 mm
Self-adhesive	Yes

1) Dimmable with suitable drivers, see also www.ledvance.com/dim





Certificates & Standards

Approval marks – approval	TUV / CE / UKCA / EAC
Standards	Acc. to IEC 62471 / Acc. to IEC 60598-1 / Acc. to EN 60529 / Acc. to EN 62031 / Acc. to EN 55015 / Acc. to EN 61547
Protection class	III
Type of protection	IP20
Energy class of contained light source	E
Salt mist resistance acc. IEC 60068-2-52	Yes
UV resistance acc. IEC 60068-2-5	Yes

LOGISTICAL DATA

Temperature range at storage	-20...+80 °C
------------------------------	--------------

Accessories Mandatory

Product image	Product name	EAN
	LS AY P 14 SMB	4099854358937
	LS AY P CSD P5	4099854359101
	LS AY P CSW P5 50	4099854359057
	LS AY P CP P5 500	4099854358968













ADDITIONAL PRODUCT INFORMATION


- All the technical parameters apply to the entire LED module. In view of the complex manufacturing process for light emitting diodes, the typical values given above for the technical LED parameters are merely statistical values that do not necessarily correspond to the actual technical parameters of an individual product; individual products may vary from the typical values.
- All LED strips have a self-adhesive tape on the reverse side. LED strips can be attached to suitable materials, e.g. aluminum profiles. The surface of the material must be free of grease, oil, silicone and dirt particles. The adhesive tape can be used only one time, if the LED strip will be removed from the mounting surface, there could be a damage of the LED strips and the mounting material. The surface temperature of the mounting

material should be in the temperature range of 18°C...35°C. Complete adhesion takes up to 72 h.

- LED strips are designed for static installation. Vibrations, respective torsion and elongation/compression must be considered.
- Galvanic Insulation between LED strip and mounting surface must be ensured. This Insulation is needed especially in the area of connections or cut ends.
- In a wide temperature range operation field (e.g. outdoor installation) and a LED strip length with more than 2m suitable mounting surface is required. To avoid stress due to mismatch in expansion of the different materials, there should be an extra thicker adhesive tape between LED strip and mounting surface. Additionally, the LED strip should have enough space for thermal expansion at higher temperatures.
- Compensation due to chemical corrosion is excluded. A suitable protection against corrosive agents such as moisture, condensation etc. must be provided. Hydrogen sulfide (H₂S) will cause an accelerated corrosion which leads to shortened lifetime or premature failure.
- Installation of the LED strip has to be done by a qualified electrician.
- Handle with care to avoid mechanical product damage
- If the maximum operating and storage temperature ratings will be exceeded, the expected lifetime will be reduced or even the LED strip will be destroyed. It is not allowed to operate the LED strip over the specified T_c temperature (acc. EN 60598-1 under steady state conditions)
- It is not allowed to exceed the maximum operation voltage. This could cause a hazardous overload and will destroy the LED strip.
- The applicable electrical and safety standards have to be maintained for a LED strip installations
- In installations of LED strips ESD safety must be taken in account. Adequate precautions during installation and operation for the products are required.
- To avoid a damage of the LED strip, the unmounted LED strip should be handled and stored only in the original LEDVANCE packaging (wheel / ESD bag). Repacking is not allowed. Cutted IP 6x LED strips can be stored only with mounted endcaps.

DOWNLOAD DATA

Documents and certificates		Document name
	User instruction / safety instructions	LS P-1000/RGBW
	Legal information	Informationstext 18 Abs 4 ElektroG
	Legal information	LS P-1000/RGBW
	Legal information	Safety Insert G11205012
	Declarations of conformity	CE declaration - LS module
	Declarations of conformity UKCA	UKCA declaration - LS module
Photometric and lighting design files		Document name
	IES file (IES)	LS P 1000 RGBW 940 5 LEDV
	LDT file (Eulumdat)	LS P 1000 RGBW 940 5 LEDV
	ROLF file (RELUX)	LS P-1000-RGBW-940-5
	UGR file (UGR table)	LS P 1000 RGBW 940 5 LEDV
	Light distribution curve type cone	LS P 1000 RGBW 940 5 LEDV
	Light distribution curve type polar	LS P 1000 RGBW 940 5 LEDV

Tender texts		Document name
	Tender documents	LED STRIP PERFORMANCE 1000 RGBW GEN 2 1000 RGBW 940 5-en

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4099854358296	Folding box 1	24 mm x 204 mm x 214 mm	252.00 g	1.05 dm ³
4099854358302	Shipping box 30	440 mm x 420 mm x 220 mm	8430.00 g	40.66 dm ³

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.

DISCLAIMER

Subject to change without notice. Errors and omission excepted. Always make sure to use the most recent release.