

PRODUCT DATASHEET

LS SUP -500/965/5

LED STRIP SUPERIOR-500 | LED strips with 500 lm/m for professional applications with very good color rendering and lifetime



AREAS OF APPLICATION

- General indoor illumination
- Industry
- Offices, retail outlets and conference rooms
- Architecture lighting
- Decorative illumination

PRODUCT BENEFITS

- Great scope of design options due to long and flexible LED strips
- Easy installation, no tools required for connection
- Easy mounting on many smooth surfaces thanks to self-adhesive tape
- Maximum flexibility due to large range of accessories
- Simple connection thanks to integrated cables on both sides

PRODUCT FEATURES

- Flexible and cuttable LED strip
- Smallest cuttable unit: 50 mm
- Lifetime (L80/B10): up to 60,000 h at $T_p: 45^\circ\text{C}$
- Luminous flux: 500 lm/m
- Very good color rendering index $R_a: > 90$
- Initial color consistency: ≤ 3 SDCM
- Large range of color temperatures: from warm white to cool daylight



- IESNA LM 79, LM80 compliant
- Dimmable with suitable drivers, see also www.ledvance.com/dim

TECHNICAL DATA

Electrical data

Rated wattage	26.50 W
Nominal wattage	26.50 W
Nominal wattage per meter	5.3 W
Reverse Voltage	25 V ¹⁾
Nominal voltage	24 V ¹⁾
Input voltage range	23...25 V ¹⁾

¹⁾V_{DC}

Photometrical data

Color temperature	6500 K
Standard deviation of color matching	≤3 sdcn
Color rendering index Ra	>90
Light color LED	Daylight
Luminous flux per meter	575 lm
Luminous flux	2875 lm
Luminous efficacy	108.0 lm/W

Light technical data

Beam angle	120 °
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LED module information

Number of LEDs per meter	140
Number of LEDs per module	700
Number of LEDs per smallest unit	7

Dimensions & weight



LED pitch	7.14 mm
Length	5000 mm
Length – smallest unit	50.0 mm
Width	8.00 mm
Height	1.50 mm
Prewired	Yes
Cable length	500 mm
Conductor cross section	0.5 mm ²
Product weight	58.00 g
Short pitch	Yes

Temperatures & operating conditions

Ambient temperature range	-20...+50 °C ¹⁾
Temperature range in operation	-20...+90 °C ²⁾
Maximum temperature at tc test point	90 °C ³⁾

¹⁾ Providing that temperature at Tc point is below max value during operation

²⁾ At the T_c point

³⁾ Exceeding the maximum specified ratings can reduce expected life time or destroy the LED strip

Lifespan

Lifespan	60000 h ¹⁾
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¹⁾ L80/B10 at T_p 45°C

Capabilities

Lowest bending radius	20 mm
Self-adhesive	Yes
Dimmable	Yes ¹⁾
Reverse polarity protection	Yes ²⁾

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

²⁾ Up to maximum 25 V_{DC}

Certificates & standards

Salt mist resistance acc. IEC 60068-2-52	No
UV resistance acc. IEC 60068-2-5	No
Energy consumption	30 kWh/1000h
Energy efficiency class	A+ ¹⁾
Type of protection	IP00
Standards	Acc. to IEC 62031/Acc. to IEC 62493/Acc. to IEC TR 62778/Acc. to EN 50581/Acc. to EN 62031

¹⁾ Applicable on entire product

Logistical data

Temperature range at storage	-35...+85 °C
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EQUIPMENT / ACCESSORIES


- Connectors, profiles and covers for several mounting options available

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.
- According IPC 6013C – Use A the LED strips are designed for static installation. Vibrations, respective torsion and elongation/compression must be considered.
- 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.
- IP00 LED strips have not surface coating. Consequently, they have no protection against contact and corrosion.
- 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
- Pay attention on correct polarity. Incorrect polarity or wrong wiring can cause unpredictable permanent damage or even failure of the product.

- 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 installations of LED strips ESD safety must be taken in account. Adequate precautions during installation and operation for the products are required.
- LED strip can be operated only by a SELV LED driver, which comply with the applicable lighting standards and fits to LED strips rating. A safety operation of the LED strips require a SELV LED driver with an electronically stabilized power supply protection against short circuits, overload and overheating.
- 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

File
 Declarations of conformity EU Declaration of Conformity 3956203 LS SUP

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075237100	Folding carton box 1	206 mm x 18 mm x 204 mm	124.00 g	0.76 dm ³
4058075237117	Shipping carton box 10	213 mm x 213 mm x 215 mm	1367.00 g	9.75 dm ³
4058075258662	Shipping carton box 40	439 mm x 439 mm x 233 mm	6066.00 g	44.90 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.