

PRODUCT DATASHEET

LS SUP -2000/960/3.5/IP67

LED STRIP SUPERIOR-2000 PROTECTED | IP67 protected LED strips with 2000 lm/m for professional applications with very good color rendering and lifetime



Areas of application

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

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
- Suitable for use in damp conditions thanks to high type of protection
- 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°C
- Luminous flux: 2000 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
- Type of protection: IP67
- Dimmable with suitable drivers, see also www.ledvance.com/dim
- UV resistance (acc. IEC 60068-2-5)
- Salt mist resistance (acc. IEC 60068-2-52)

TECHNICAL DATA

Electrical data

Nominal wattage	72.00 W
Construction wattage	72.00 W
Nominal wattage per meter	20.6 W
Nominal voltage	24 V ¹⁾
Input voltage range	23...25 V ¹⁾
Reverse Voltage	25 V ¹⁾
Type of current	DC
Nominal current	3570.000 mA

¹⁾ V_{DC}

Photometrical data

Luminous efficacy	96 lm/W
Luminous flux	7000 lm
Luminous flux per meter	2000 lm
Luminous flux per module chain	7000 lm
Color temperature	6000 K
Color rendering index Ra	> 90
Light color LED	Daylight
Light color (designation)	Cool Daylight
Standard deviation of color matching	≤3 sdc _m

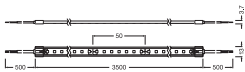
Light technical data

Beam angle	120 °
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LED MODULE INFORMATION

Number of LEDs per meter	140
Number of LEDs per module	490
Number of LEDs per smallest unit	7

Dimensions & Weight



Length	3500.00 mm
Length – smallest unit	50,0 mm
Cable length	500.000
Width	13.00 mm
Height	3.70 mm
Prewired	Yes
Conductor cross section	0.5 mm ²
LED pitch	7.14 mm
Short pitch	Yes
Product weight	190.00 g

Colors & materials

Cover material	Silicone
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Temperatures & operating conditions

Ambient temperature range	-20...+50 °C ¹⁾
Maximum temperature at tc test point	70 °C ²⁾
Temperature range in operation	-20...+70 °C ³⁾
Performance temp. acc. to IEC 62717	45 °C

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

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

3) At the T_c point

Lifespan

Nominal lamp life time	60000 h
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Capabilities

Dimmable	Yes ¹⁾
Lowest bending radius	50 mm
Self-adhesive	Yes
Reverse polarity protection	Up to maximum 25 V _{DC}

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

Certificates & Standards


Approval marks – approval	ENEC 25 / TUV / RoHS / CE / REACH
Standards	Acc. to IEC 62031 / Acc. to IEC 62493 / Acc. to IEC TR 62778 / Acc. to EN 50581 / Acc. to EN 62031
Type of protection	IP67
Energy consumption	79.20 kWh/1000h
Energy efficiency class	A+
Salt mist resistance acc. IEC 60068-2-52	Yes
UV resistance acc. IEC 60068-2-5	Yes

LOGISTICAL DATA










Temperature range at storage	-35...+85 °C
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Accessories Mandatory

Product image	Product name	EAN
	DR DIM-PFM -100/220-240/24/P	4058075240070
	DR-VAL -150/220-240/24	4058075240179
	DR-VAL -120/220-240/24	4058075240131
	DR-PFM -250/220-240/24/P	4058075240032
	DR-PFM -100/220-240/24/P	4058075239937
	DR DIM-PFM -250/220-240/24/P	4058075240155
	DR-PFM -150/220-240/24/P	4058075239975

Product image	Product name	EAN
	DR DIM-PFM -150/220-240/24/P	4058075240117

Accessories Optional



Product image	Product name	EAN
	LS AY SUP -SE/P + SILICONE SEAL	4058075304659
	LS AY -PW03/U/26X26/14/1	4058075278165
	LS AY -PW02/UW/39X26/14/2	4058075401471
	LS AY -PW01/U/26X8/14/1	4058075278103
	LS AY -PW03/U/26X26/14/2	4058075401501
	LS AY SUP -SEF	4058075304680
	LS AY SUP -PFS01/16X10/13/0,015	4058075304710
	LS AY -PW02/UW/39X26/14/1	4058075278134
	LS AY -PW01/U/26X8/14/2	4058075401440


Product image	Product name	EAN
	LS AY SUP -PF01/U/16X10/13/1	4058075304741

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

Documents and certificates	Document name
 PDF	User instruction / safety instructions
	LED STRIP SUPERIOR IP67
 PDF	Declarations of conformity
	EU Declaration of Conformity 3956203 LS SUP

Photometric and lighting design files		Document name
	LDT file (Eulumdat)	LS SUP-2000-960-3.5-IP67

LOGISTICAL DATA

Product code	Packaging unit (Pieces/Unit)	Dimensions (length x width x height)	Gross weight	Volume
4058075237209	Folding box 1	336 mm x 30 mm x 334 mm	271.00 g	3.37 dm ³
4058075237216	Shipping box 10	343 mm x 333 mm x 345 mm	3033.00 g	39.41 dm ³
4058075258945	Shipping box 20	700 mm x 347 mm x 363 mm	7335.00 g	88.17 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.