

Index

TECHNICAL SPECIFICATIONS	2
BENDING RADIUS	2
PHOTOMETRIC INFORMATION	3
POWER CONSUMPTION	3
MAXIMUM CABLE LENGTH	4
POWER AND CONNECTION DIAGRAM	4
AREA ADVICE	5
SYMBOLS	6

PCB High Power Colour

The liniLED® PCB High Power LED strip (IP00) is a high quality, flexible LED strip equipped with 3M adhesive tape. Thanks to its small dimensions the PCB LED strip is ideal for usage in small (indoor) spaces.

In order to power liniLED® products safely, it is necessary to operate them with an electronically stabilized power supply protected against short circuits, overload and overheating.


To ease the luminaire/installation approval, electronic control gear for liniLED® products should carry the CE mark. Preferably a controller from the liniLED® Control range. In Europe, the declarations of conformity must include the following standards: CE: EN 55015, IEC 61547 and IEC 61000-3-2.

For the latest version of this datasheet, visit our website: www.triolight.com

USPs

- Long lifetime – 60,000 h (L80/B10)
- 120 leds/m for good visual uniformity
- Internal constant current regulator
- Excellent lumen/Watt ratio
- Single piece reel-to-reel technology
- Made in Europe

Colour

Colour	Description
 Red	liniLED® PCB High Power Red



Technical specifications

liniLED® PCB High Power Red

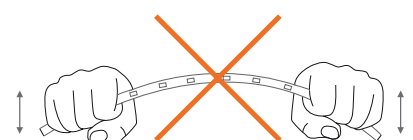
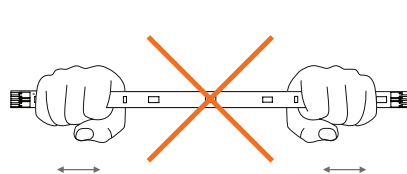
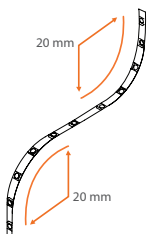
Product Code	12500
Power @ 24V DC	7.4 W/m
Power @ 25V DC	7.7 W/m
CCT ¹	Red
Luminous flux ¹	240 lum/m
Luminous efficiency ¹	32.4 lum/W
Spool length	10000 mm
Section length	50 mm
Number of LEDs/m	120
Max. connection length	10000 mm
Min. operating voltage	23V DC
Max. operating voltage	25V DC
Beam angle [°]	120°
Dimensions (W x H)	8 x 1.4 mm
Dimmable	PWM dimmable
Expected lifetime	L80/B10 > 60,000 hrs @ Tc = 60°C
Ingress protection	IP00
Storage temperature	-40 ... 100°C
Operating temperature ²	-30 ... 55°C
Minimum bending radius	20 mm

Technical drawings



Bending radius

Maximum bending radius is 20 mm. Solely bend up or downward. Do not compress, stretch or bend the LED strip sideways.



Maximum cable length

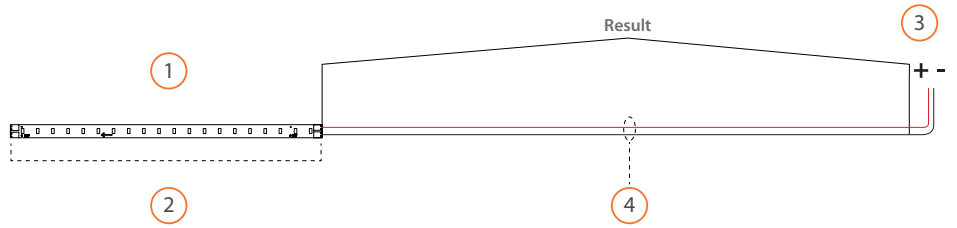
1 = Select colour temperature.

2 = Select LED strip length.

3 = Select output voltage.

4 = Select cable cross section.

Result = Maximum cable length based on the cable thickness and power supply voltage.



1. Colour temperature

2. LED strip length

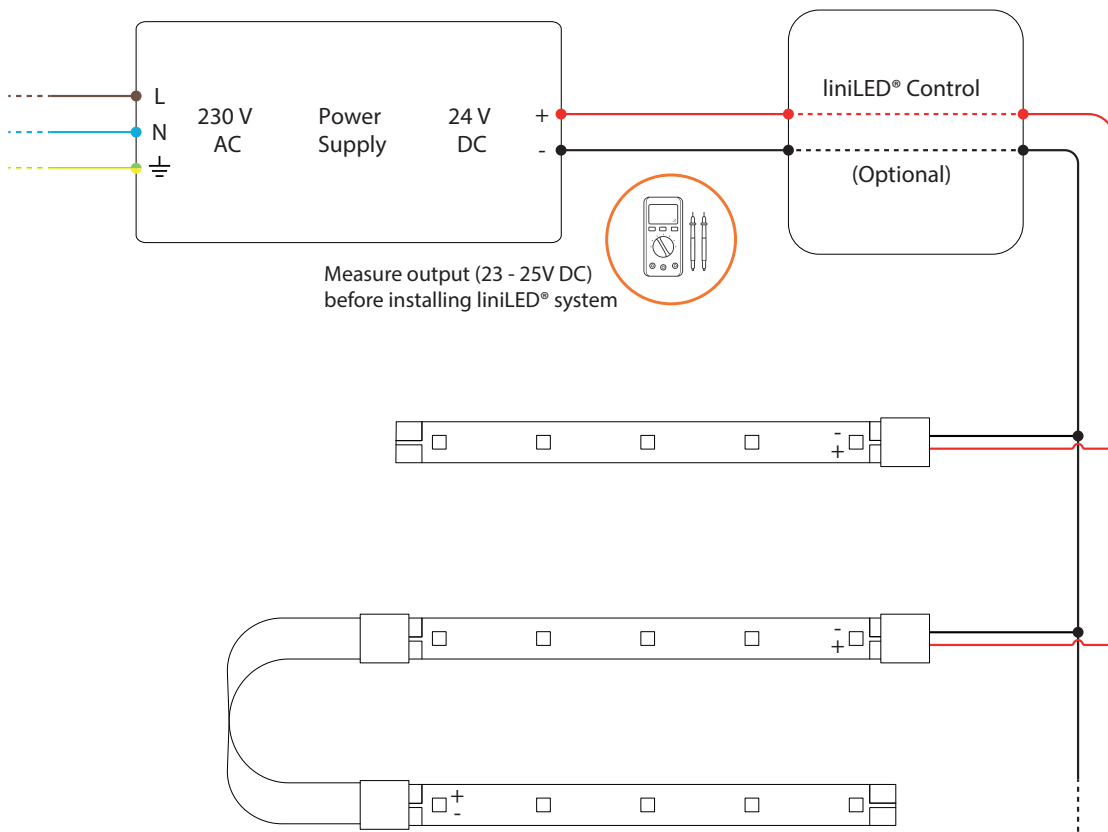
3. Voltage

4. Cable cross section

		1 m		2 m		5 m		10 m	
		24 VDC	25 VDC	24 VDC	25 VDC	24 VDC	25 VDC	24 VDC	25 VDC
4. Cable cross section	0.50 mm ² - 0.035 Ω/m	40.6 m	79.1 m	19.7 m	38.9 m	7.1 m	14.8 m	2.9 m	6.8 m
	0.75 mm ² - 0.023 Ω/m	61.1 m	119.0 m	29.6 m	58.5 m	10.7 m	22.3 m	4.4 m	10.2 m
	1.00 mm ² - 0.018 Ω/m	81.2 m	158.3 m	39.3 m	77.8 m	14.2 m	29.6 m	5.8 m	13.5 m
	1.50 mm ² - 0.012 Ω/m	122.1 m	238.1 m	59.1 m	117.1 m	21.3 m	44.5 m	8.7 m	20.3 m
	2.50 mm ² - 0.007 Ω/m	203.3 m	396.2 m	98.4 m	194.9 m	35.5 m	74.1 m	14.5 m	33.8 m

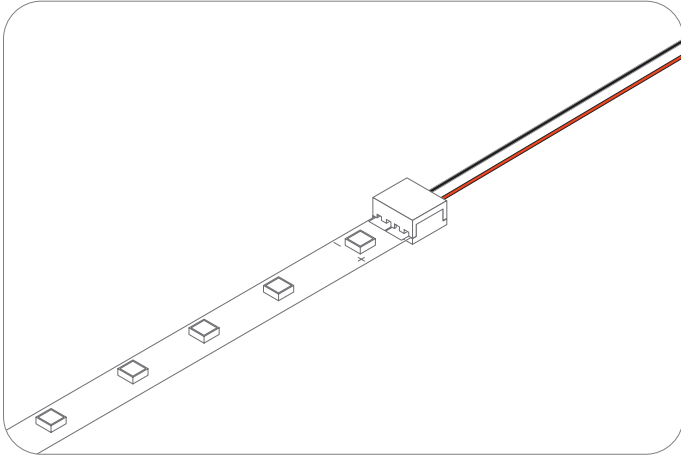
Note: Calculations are based on a standard connector with 1 metre cable (0.5 mm²).

Power and connection diagram

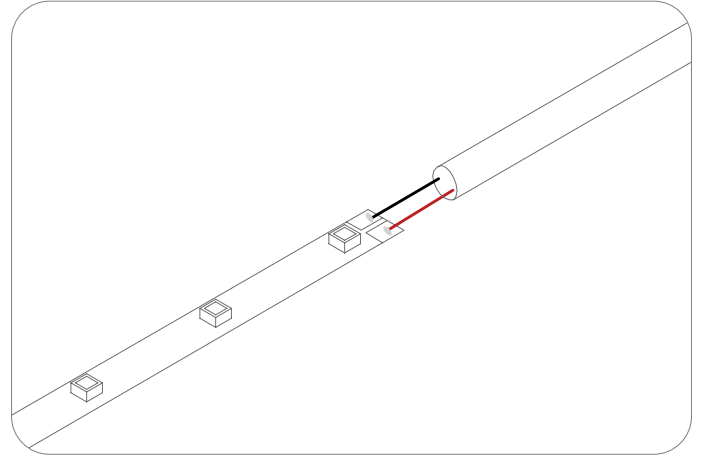


Area advice

Depending on the area where the liniLED® LED strip is installed we offer a range of solutions to cope with external factors. The product portfolio for the liniLED® PCB LED strip includes an IP00 connector.



Indoor environment | (IP00) | liniLED® PCB Connector Set
Product code: 11808



Indoor environment | (IP00)
Solder

Symbols



Electro Static Discharge (ESD) sensitive device, apply standard ESD precautions when handling the product.



Manufacturer's declaration that the product meets the applicable EC directives.



Suitable for mounting on all surfaces and suitable to cover with insulating material.



Restriction of Hazardous Substances (RoHS): product complies with the RoHS directive and each homogeneous material does not exceed the limits for the materials mentioned under the RoHS directive (Pb, Hg, Cd, Cr6+, PBB and PBDE).



Not protected against ingress of solid foreign objects. Not-protected against ingress of water.



Bending of the LED strip is possible with a radius of ≥ 20 millimetres in the specified direction.



Electrical appliance class III: this product is designed to be supplied from an extra-low voltage (≤ 60.0 V DC or ≤ 42.4 V AC).



System guarantee of 5 years when the complete system consist of liniLED® products with the 5 years system warranty logo. Terms & conditions apply.



Operating voltage of 24 V DC.



White colour consistency up to 2 SDCM ellipse over an entire single strip length. LEDs used are single BIN 3 SDCM ellipse, but their careful combination in a LED strip during the production process, results in a mixed light through a diffusive material which is within a 2 SDCM ellipse (probability >90%). Due to variability this is not legally binding. The guaranteed colour consistency can be found in the technical specifications.

Disclaimer

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