





#### 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 unformity
Internal constant current regulator
Excellent lumen/Watt ratio
Single piece reel-to-reel technology
Made in Europe

### Colour

Colour

Green

Description

liniLED® PCB High Power Green

























# **Technical specifications**

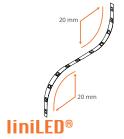
Product Code         12501           Power @ 24V DC         7.4 W/m           Power @ 25V DC         7.7 W/m           CCT¹         Green           Luminous flux¹         537 lum/m           Luminous efficiency¹         72.5 lum/W           Spool length         10000 mm           Section length         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	liniLED® PCB High	Power Green
Power @ 25V DC         7.7 W/m           CCT¹         Green           Luminous flux¹         537 lum/m           Luminous efficiency¹         72.5 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	12501	
CCT¹         Green           Luminous flux¹         537 lum/m           Luminous efficiency¹         72.5 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	7.4 W/m	
Luminous flux¹         537 lum/m           Luminous efficiency¹         72.5 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	7.7 W/m	
Luminous efficiency¹       72.5 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	Green	
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	537 lum/m	
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	72.5 lum/W	
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	10000 mm	
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	50 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	120	
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	gth 10000 mm	
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	ge 23V DC	
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	age 25V DC	
Dimmable     PWM dimmable       Expected lifetime     L80/B10 > 60,000 hrs @ Tc = 60°C       Ingress protection     IP00	120°	
Expected lifetime  L80/B10 > 60,000 hrs @ Tc = 60°C  Ingress protection  IP00	8 x 1.4 mm	
Ingress protection IP00	PWM dimmable	
	L80/B10 > 60,000 h	rs @ Tc = 60°C
Storage temperature -40 100°C	IP00	
	-40 100°C	
Operating temperature <sup>2</sup> -30 55°C	ure <sup>2</sup> -30 55°C	
Minimum bending radius 20 mm	adius 20 mm	

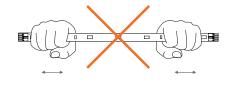
# **Technical drawings**

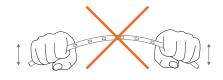


# **Bending radius**

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



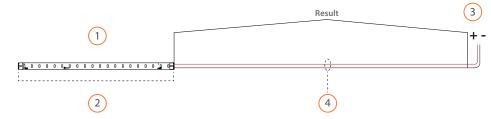




## Maximum cable length

- 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.

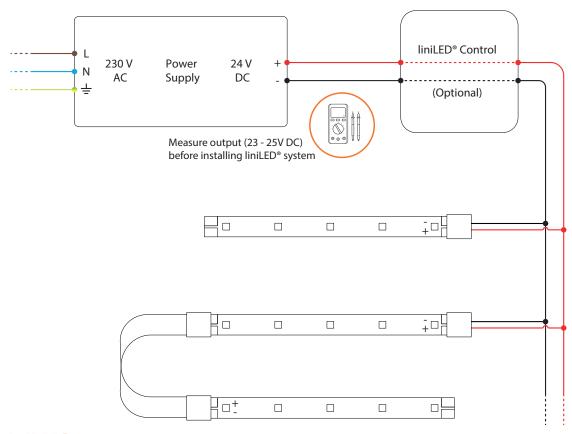


### 1. Colour temperature

2. LED strip length		1 m		2 m		5 m		10 m	
3. Voltage		24 V DC	25 V DC						
4. Cable cross section	0.50 mm <sup>2</sup> - 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 mm² - 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 mm² - 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 <sup>2</sup> - 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 <sup>2</sup> - 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).

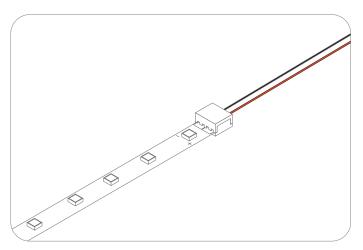
## Power and connection diagram



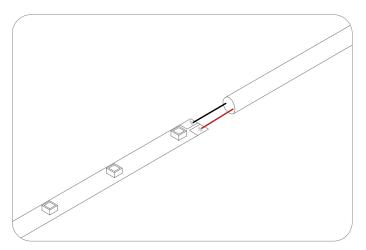


## Area advice

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) | IiniLED® 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  $\geq$  20 millimetres in the specified direction.



Electrical appliance class III: this product is designed to be supplied from an extra-low voltage ( $\le 60.0 \text{ V}$  DC or  $\le 42.4 \text{ V}$  AC).



System guarantee of 5 years when the complete system consist of liniLED $^{\circ}$  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

The published information is checked to be as accurate as possible, however Triolight B.V. or any reseller of liniLED® cannot be held liable for any damages resulting from misprints, errors, modifications or outdated information. No legal rights can be derived from this document. Triolight B.V. reserves the right to modify the information without informing the customers. Please check for the latest version on www.liniLED.com. This product should not be used in applications, devices or systems where incorrect operation of the product may result in personal injury (includes emergency lighting) without written permission from the board of Triolight B.V. If nevertheless used in such applications, devices or systems, Triolight B.V. cannot be held liable for any resulting injury. liniLED® is a registered trademark of Triolight B.V.

