



H2 LINE / Top Light



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Vertical bendable LED strip IP65-68 rated for indoor or outdoor use with wide dimension. 720 LEDs meters, available with different color temperatures. White PVC outcase, frost resin with protection against UV rays and to the corrosive action of salt. Manufactured in automated production line. Maximum length 6.56', input voltage 24VDC.



OUTDOOR



IMMERSION



RESIDENTIAL



WORKPLACE



FACADE



HOSPITALITY



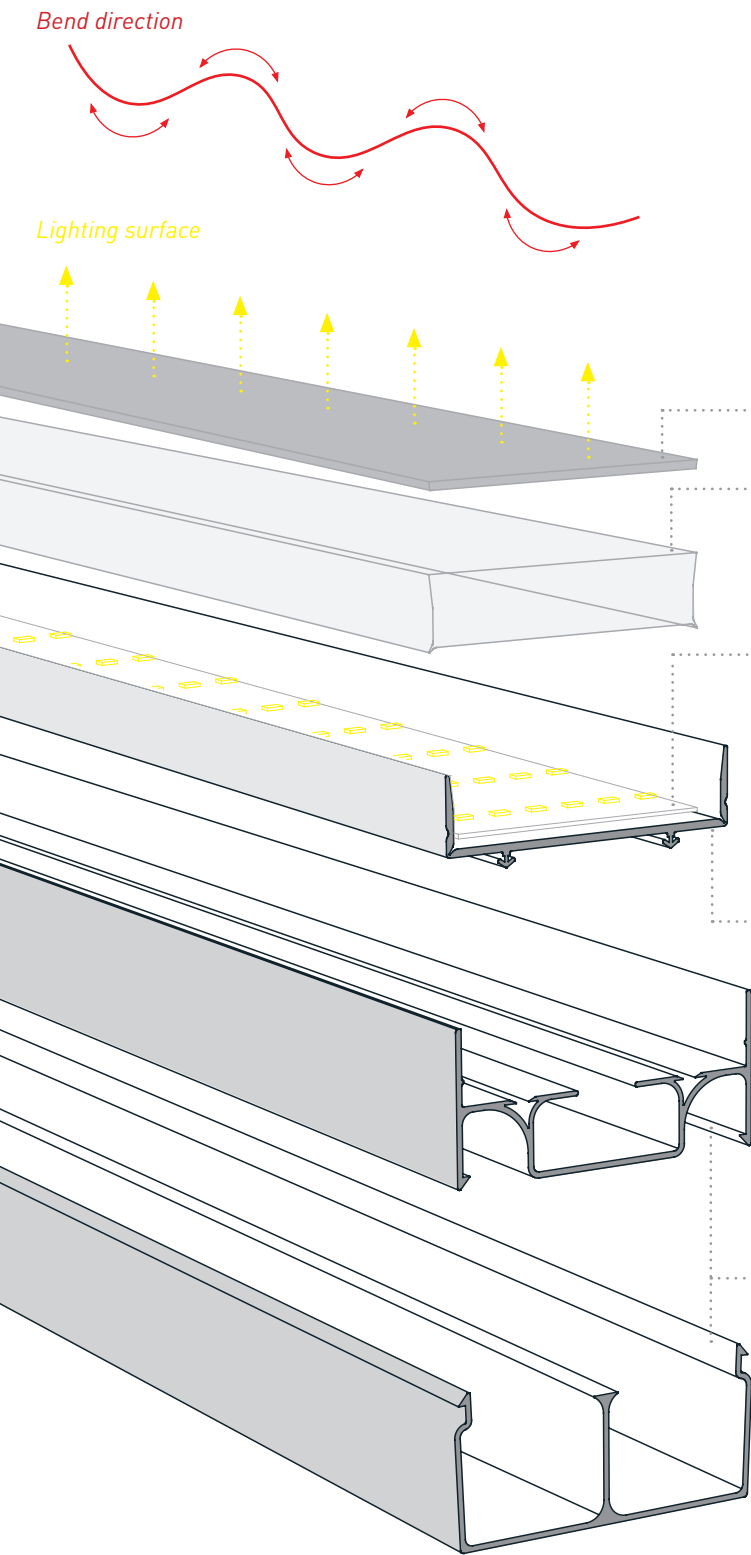
INDOOR SHOP



INDUSTRIAL



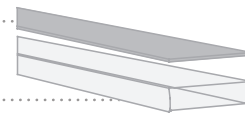
URBAN USE



Polyurethane resin UV treatment

PETERS® bi-components polyurethane resin, chemical components with variable mixing and high degree of transparency. Protective component with UV filter and anti-yellowing. Automated processing for controlled stratification.

RESIN COLOR



Frost + Transparent

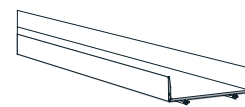
LED Strip - LL 720

The PCB is developed by LED ITALY and manufactured at their own factories in Italy. The PCB is inserted into the outer case and through stratification processing reaches the required IP rating.

PVC outer case

Outercase with degree of flexibility and level of shore that guarantees a good resistance to tension and bending. The outercase has a recovery of the initial shape thanks to the right composition of the PVC, which offers a good elasticity. The outercase are 100% made in Italy products.

PVC OUTER CASE COLOR

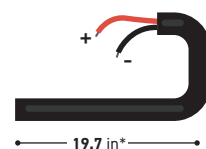
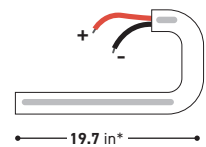


White

Aluminum rigid outercase

The rigid aluminum outercases designed and manufactured by LED ITALY, allow to install the product in a suitable way and to hide inside power supplies, connectors and wiring.

Power cable type



Power cable type

Code	Description
CA-65-2-1	Outdoor PVC power cable. White. IP65. 2x0.50mm ² (0.02"). External Ø 0.17" (4.2mm).

Code	Description
CA-68-2-1	Water immersion and outdoor R/S FEP power cable. Black. IP68. 2x0.50mm ² (0.02") + n. 2 Kevlar wires (maximum tensile stress 3.3 lbs - CEI EN 50565-1 : 2015-02). External Ø0.21" (5.3mm)

*Standard cable length 19.7 in (50cm). Longer cable lengths can be ordered, considering extra cable not included in the price.

Determination Max. Cable

Definition of max. cable length between PSU/control unit and LED strip

L. Module [ft]	Power [W]	L. Cable max [ft]
24VDC		
3.28 (1m)	30	42.65 (13m)
6.56 (2m)	60	21.33 (6.5m)

Calculation based on a max. voltage drop of 0.85V

TECHNICAL DRAWING



GENERAL FEATURES

<i>Product type</i>	Flexible not-sectional strip
<i>Bending</i>	Only vertical bendable, one axis
<i>IP rating</i>	IP65 - IP68
<i>IK rating</i>	IK08
<i>Working Temperature</i>	-30° / +55°
<i>Lifetime</i>	50.000 h
<i>Outercase</i>	PCV, white
<i>Resin</i>	Polyurethane, frost
<i>Min. bend Radius</i>	78.74"
<i>Power supply</i>	24 VDC remote (not included)
<i>Warranty</i>	5 years
<i>Max strip length 24VDC</i>	6.56' (2 m)

ELECTRICAL FEATURES

<i>LED number</i>	720 mt
<i>LED type</i>	SMD 3014 SHINEON
<i>Power consumption</i>	30 W/m (3.28 ft)
<i>Voltage</i>	24 VDC
<i>CCT: Color Temperature</i>	2750K - 3100K - 4500K - 5500K
<i>CRI: Chroma Rendering Index</i>	CRI90
<i>Optic</i>	120°
<i>Cut internal strip</i>	Every 0.98" (25mm)
<i>Dimmable</i>	Yes
<i>PCB</i>	Kapton™, high conductivity

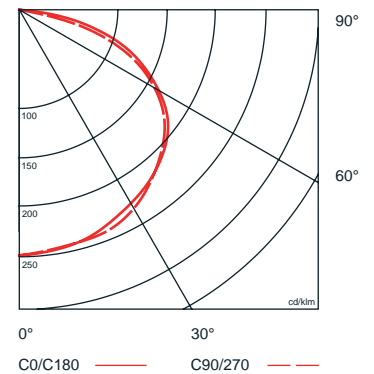
Lighting performances

Code	Color Temperature (K)*	Luminous Flux (lm/3.3ft (1m))**	Voltage	IP
LL720- V .24.65/68.H2	2750	1890	24 VDC	65 / 68
LL720- W .24.65/68.H2	3100	1900		
LL720- N .24.65/68.H2	4500	2050		
LL720- C .24.65/68.H2	5500	2070		

* On request also available Extra Warm White **V8** - 2200K, **V2** - 2600K and **V5** - 2900K.

** The give data are typical values. Due to tolerance of the production process and the electrical components, values for light output and electrical power can vary up to 5%. Binning: 3 MacAdam.

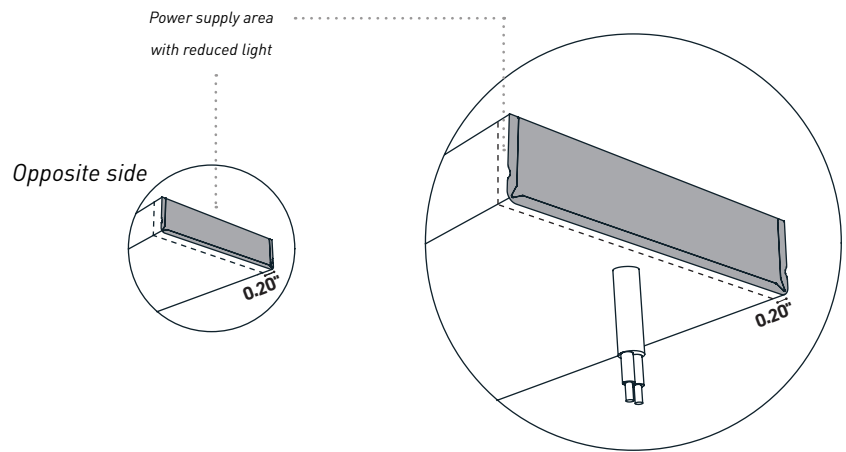
IES files available on the site or on demand.



Product codes, related versions

Linea Luce	Color temperature	Voltage	IP	Family
LL720	V - 2750K	24 -24VDC	65 - IP65	H2 - H2 Line
	W - 3100K			
	N - 4500K		68 - IP68	
	C - 5500K			

Power cable exit

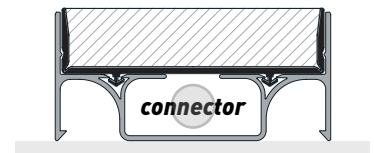
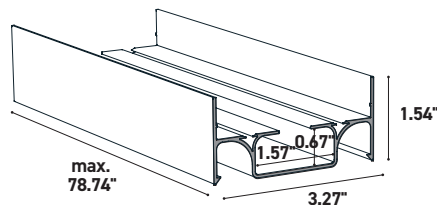


Z. Back feed

Mounting accessories

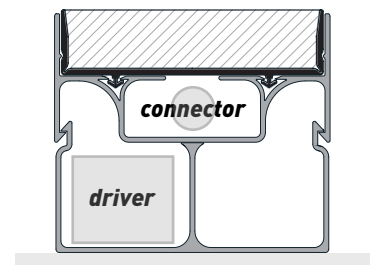
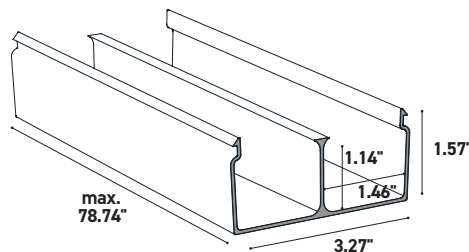
PRO1-AL-80X20-AL

Typology: Rigid outercase
Material: Aluminum
Finish: Aluminum
Length: 7.87"
Description: Suitable for recessed installation for both indoor and outdoor spaces, the aluminum profile allows to hide wiring and connectors inside. It can be cut into 7.87" pieces to make clips in case of curved installation. It must be screwed onto the installation surface with a countersunk screw.



PRO2-AL-80X20-AL

Typology: Rigid outercase
Material: Aluminum
Finish: Aluminum
Length: 7.87"
Description: Suitable for ceiling or wall installation for both indoor and outdoor spaces, the aluminum profile allows to hide power supplies inside and, combined with the PRO2-AL-80X20-AL, also wiring and connectors. It must be screwed onto the installation surface with a countersunk screw.



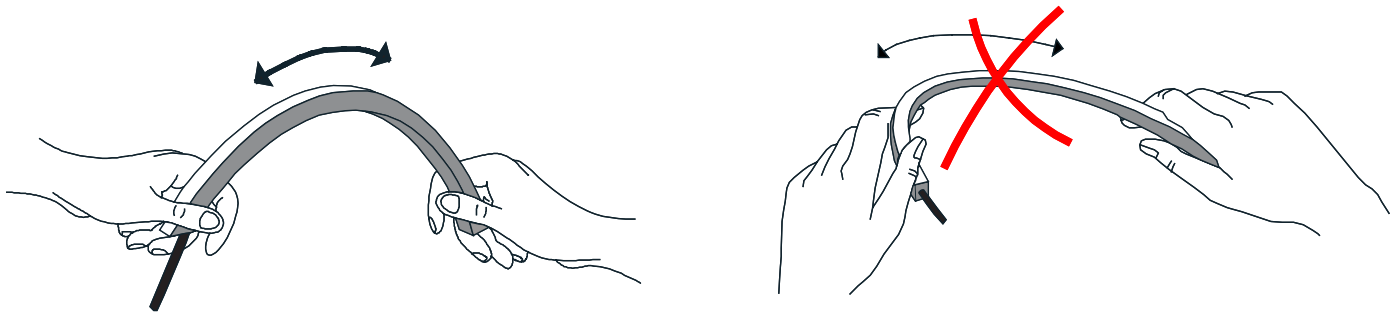
Connection accessories



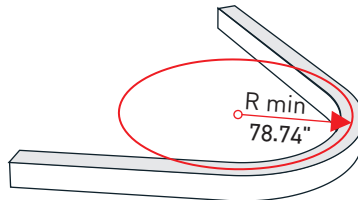
THB.381.A2A.R

Type and Number of poles: Micro plug and socket connector IP68 2 PIN
Corrente e Tensione max.: 10A - 400V AC/DC
Min/max wire diameter: 0.16" - 0.31"
Min/max wire cross-section: 0.01" / 0.06"
External dimensions: Ø0.55" x 2.36"

Installation notes



Note. The strip is vertical bendable. Curve the profile only in the indicated axis. In case of non-observance of the given indication, the electrical functionality of the product will be compromised, with consequent luminous interruption of the LED strip. Do not twist it.



Note. Do not bend the profile with radius less than 78.74". In case of curvature less than the indicated value, the electrical functionality of the product will be compromised, with consequent luminous interruption of the LED strip.

Certifications

100% MADE IN ITALY

H2 LINE / Top Light is entirely manufactured in Italy, factory is located in Carmagnola (TO) Italy. Both PCB manufacture, LEDS soldering, resin processing are made with automated lines under our internal specifications. The product is compliant to EUR1 rules.

LED ITALY is certified ISO 9001-2015 (certificate n° IT305456 - 1).

LED ITALY is certified to 100% Made in Italy (certificate n° IT01.IT/1917.098.V).

WARRANTY

H2 LINE / Top Light is guaranteed for 5 years from the purchasing data. The guarantee covers against all the manufacturing defects. The guarantee is valid only when the product is used under its specifications and without any pilfering, breaking, alterations, modifications and uses according to wrong technical directions or set up in inadequate mechanical parts. LED ITALY has the right to verify technically the product to validate the guarantee.

EUROPEAN COMMUNITY DIRECTIVES

LED ITALY products comply with the following International standards:

- Low voltage directive: 2006/95 / CEE EMC- EN5008-1-1.2004 / 108 / CE, EC 61140, EN 62471, ERP 98 / 1EC, 92 / 75EEC EN55022, EN5008 -2 Directive EMC: 93/68 / CEE 89/336 CEE.

- Annex 2006/95 / CE / 2004/108 / CE: EN 60598-1, EN 60598-2-1 EN 61347-2-12, EN61347-2-13, EN62031, EN632384, EN 55015, EN 61000-3-2, EN 61000-3-3 EN 61547.

Note: All strips are low voltage operating on 12-24Vdc. Without direct connection to the mains supply, products are therefore inherently Ae as they operate from less than 75Vdc as specified in the Low Voltage Directive 72/23/EEC.

ENERGY EFFICIENCY CLASS

The product belongs to A+ class refer to Energy Efficiency Class, referred to 98/1EC rules.

H2 LINE / Top Light it is an energy-saving product and can be used for specific installations.

The materials used on LED ITALY products have been subjected to the following tests:

Type of resins: Transparent (VT 3402 KK NV)
Opal (PU 1305 Opal 0.15%)

Type of support: PVC

DESCRIPTION	NORM	ESECUTION	RESULT
Gloss at 60°	UNI EN ISO 2813	Gloss value at 60°	Compliant
Neutral salt spray	ISO 7253	Exposition 1500 h, purity degree of salt 99.5% NaCl in solution with demineralized water; Electric conductivity < 20 μS/cm, concentration of test solution 50 ± 5 g/l	Checked cracking, blistering or water absorption. Compliant
Humidity chamber	UNI EN ISO 6270	Exposition 1500 h, at 50°C RH>95% in constant saturated atmosphere	No cracks, blistering, softening of the resin layer, no gloss variation or water adsorption. Compliant
Resistance against immersion of the following fluids:			
Swimming pool	N.A.	5 ppm sodium hypochlorite, derived from the hydrolysis of the pool disinfectant (sodium dichloroisocyanurate 56%) approx. pH 7 (obtained with sodium bisulphate hydrolysed in sulfuric acid)	No softening, colour change or deformation of the resin film. Compliant
Water	ISO 2812 - part 1 method 1	Exposition 250 h at 25°C	Resin layer unaffected, no changement or softening. Compliant
Hydrochloric Acid	ISO 2812 - part 1 method 2	Exposition 240 h - sol. 8,5% at 20°C	Resin layer unaffected, no absorption, changement or softening. Compliant
Sodium hydroxide	ISO 2812 - part 1 method 2	Exposition 240 h - sol. 20% at 20°C	Resin layer unaffected, no absorption, changement or softening. Compliant
Isopropyl alcohol	ISO 2812	Exposition 48 h at 20°C	Film slightly modified, no softening, mass alteration (-5-6%)
Stone chipping	ASTM D 3170	Resistance to stone and gravel chipping. ASTM D 3170: ≤7B	Compliant
QUV test	ISO 16474	Exposition 1000h ΔE check	Compliant
Heat Resistance	MS CG-12	Exposition 500 h at 80°C	Resin layer unaffected, no deformation, colour changement or softening. Compliant
Resistance to high temperatures	GM 6073	Exposition 1 h at 93°C	Resin layer unaffected no deformation, color changament or softening. Compliant

