

LM LIN 4400 1120x20 HV B LED Module

Dimension (L x B x H):

- **LIN LED Module 840 - 1120x20mm:**
1120 mm x 20 mm x 7.5mm



Features:

- Module efficacy: up to 183 lm/W (by nominal conditions)
- CCT: 4000K
- Color rendering index Ra > 80
- Excellent Color Consistency: ≤ 3 SDCM
- Average lifetime (L70B10): > 70.000 h (up to temperature at $T_p = 50^\circ\text{C}$)
- Available in High Voltage (HV) and Low Voltage (LV)
- Office Lighting
- Retail, corridor and shelf lighting
- T5 / T8 replacement as built-in module
- 5 years warranty
- Customized versions with LEDs of different light colors, CRI, intensities and different types of connectors are available on request



YTL SMART SYSTEM

Typical technical data¹⁾

Product name	Operation Mode	Flux (lm)	CCT ³⁾ (K)	CRI	SDCM	Uf (V)	If ²⁾ (mA)	P (W)	Efficacy (lm/W)
LM LIN 4400 1120x20 B HV	HE	4370	4000	> 80	3	97.0	250	24.3	183
	NM	5120				97.6	300	29.5	175
	HO	6100				98.7	350	34.6	172

¹⁾ Tolerance for optical and electrical data: +/-10%

²⁾ I_f(max) = 500mA

³⁾ tolerance for CRI +/-1

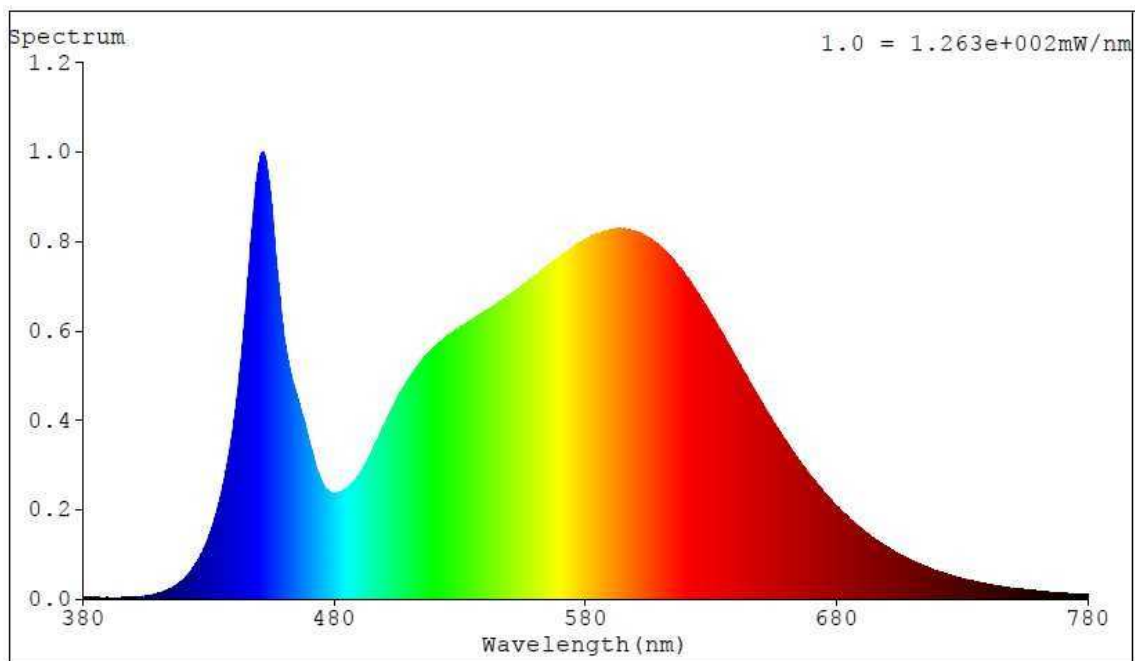
Typical values valid for T_p = 50°C

Energy Efficiency Class according 2012/874/EC: A++

Due to the special conditions of the manufacturing processes of LED the typical data of technical parameters can only reflect statistical figures and do not necessarily correspond to the actual parameters of each single product which could differ from the typical data.

Spectrum

Color Temperature: 840



Energy efficiency class: C

Temperature ratings






Tp (performance temperature)	50°C
Tc max (maximum temperature)	80°C
Ta (ambient temperature range)	-20°C < Ta < +70°C
Tstg (storage temperature range)	-30°C < Ta < +85°C



Cable

For connecting the module recommend according to the wire table.

Specification Item	Value	Unit	Condition
Input wire cross – section	0.25 ... 0.75	mm ²	Solid Wire
	18 ... 24	AWG	Solid Wire
Input wire strip length	7.5 ... 8.5	mm	
Input wire cross – section	0.33 ... 0.50	mm ²	Stranded Wire
	20 ... 22	AWG	Stranded Wire
Input wire strip length	7.5 ... 8.5	mm	

LED-ONLINE					
		8.0 + 1	0.20-0.75	0.20-0.50	0.20-0.75
		mm	mm ²	mm ²	mm ²
			AWG	AWG	AWG
			24-18	24-20	24-18

Connector Type

The standard LED modules will be delivered with back side connectors. The top side connectors are available on request.

Mounting instructions

Please apply force only to the dedicated mounting positions. Strong mechanical stress can lead to irreversible damage of the LED module.

To fix the LED module to the fixture, you can use M4 screws.

The maximum allowed screw head diameter is 5.5mm. With larger screw heads, the minimum distance between screw and other conductive parts on the LED module can be below the limit for the creepage distances.

The maximum torque that should be applied on the screws depends on factors such as the screw type and luminaire material. It is also influenced by the usage of washers. In most cases, a torque between 0.4 – 0.8Nm is enough to fix the LED module in the luminaire housing and will not damage the module.

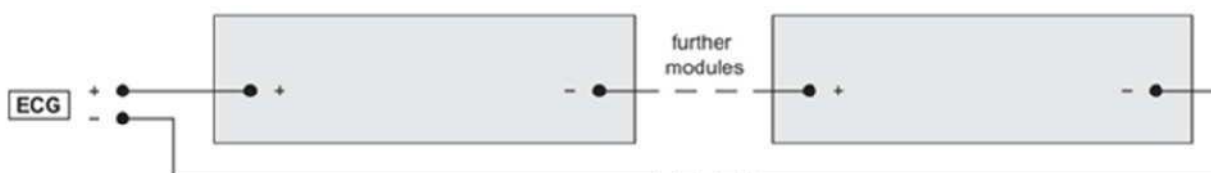
Possible screws

<u>Cylinder head, Torx drive</u>	<u>M3 screw (ISO 4762)</u>
Diameter	3.0mm
Head diameter	5.5mm
Head height	3.0mm

To achieve optimal fixation of the LED module and also optimal thermal management, it is recommended to use all mounting holes in the LED module. Nevertheless, it is possible to reduce the number of screws, but in that case thermal behavior and mechanical strength has to be verified.

In any case, it is strongly recommended to perform mechanical and thermal testing of the LED modules in the luminaire

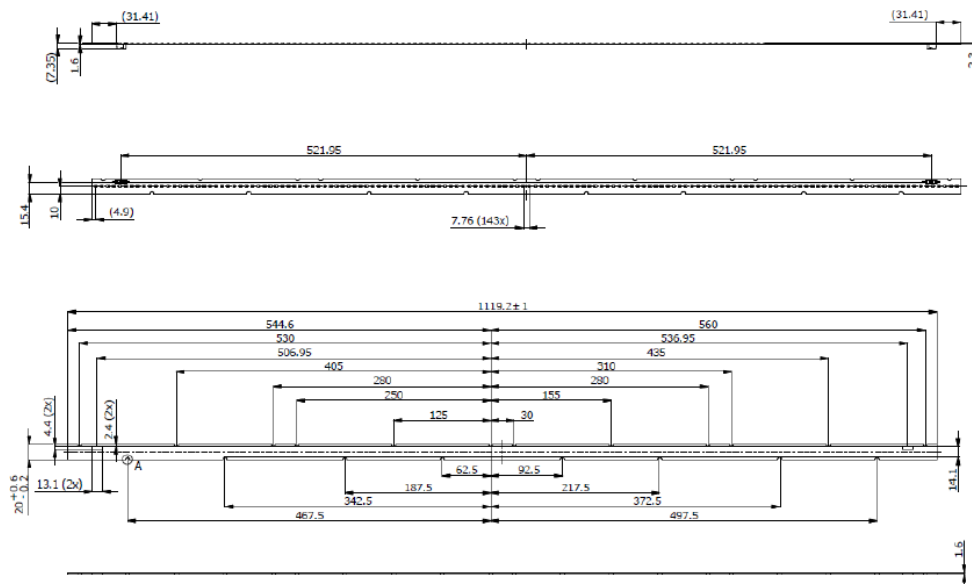
Wiring Diagram



Lifetime Data

		LxBy					
	x	70	70	80	80	90	90
	y	10	50	10	50	10	50
tp [°C] = 50°C	250 mA	> 70.000	> 70.000	57.000	67.000	28.000	33.000
	350 mA	> 70.000	> 70.000	55.000	65.000	27.000	32.000
tp [°C] = 65°C	250 mA	> 70.000	> 70.000	49.000	58.000	24.000	30.000
	350 mA	> 70.000	> 70.000	46.000	56.000	23.000	28.000
tp [°C] = 75°C	250 mA	69.000	> 70.000	44.000	52.000	22.000	25.000
	350 mA	68.000	> 70.000	42.000	50.000	21.000	24.000

Dimensioned Drawing



Product weight: 75 g
 Height: 7.5 mm
 Length: 1120 mm
 Width: 20 mm

Application Information

Certifications and Standards

CE
 UKCA

Environmental
 RoHS / Reach

Application
 Dimming

Ordering Codes

Product name	Order Code	Box Quantity
LM LIN 4400 1120x20 HV B	LM4400840112020BG2	120

Safety Information

- The LED module itself and all its components must not be mechanically stressed.

The modules are intended for operation only with matching LED Drivers.

To also ease the luminaire/installation approval, electronic control gear for LED or LED modules should carry the CE mark and be .
in Europe the declarations of conformity must include the following standards:

CE: EN 62031

Also check for the mark of an independent authorized certification institute.

Please see the relevant brochure for more detailed information (see "Related and Further Information")

- Installation of LED modules (with power supplies) needs to be made regarding all applicable electrical and safety standards. Only qualified personnel should be allowed to perform installations.
- Pay attention to standard ESD precautions when installing the module.
- Photobiological safety according to IEC 62471, risk group RG1
- Max. Voltage U-OUT = 330 V for operation on non-isolated.

Sales and Technical Support

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