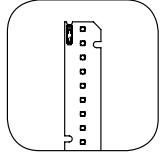


MERAKI LED MODULES

600 - 300 - 70 / 20 24 V LINEAR LED MODULE 24VCC 24V
 (70-600X20MM) (70-600X20MM)



Within MERAKI LED MODULES family, we find MERAKI 600-300-70 / 20 24 V linear modules, ideal for small size fixtures that require high performance and connection flexibility. These modules are very simple to connect and to assembly to any surface, i.e. aluminum, wood or metal. Specially indicated for use in shelves, window display, and similar in combination with our DOKO profile.

The modules have two different functioning: medium flux that require no additional heatsinks, and high flux that does require additional heatsinks. Modules are available on diverse CCT (CRI80 and CRI90) and in SELV voltage.



In compliance with:

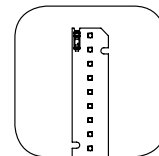
IEC 62031 / IEC 62471 / IEC 62717

APPLICATION



PRODUCT DESCRIPTION

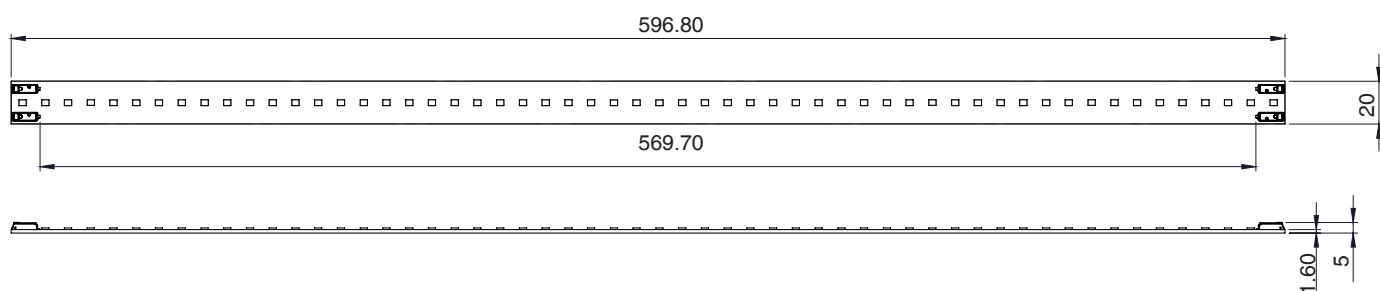
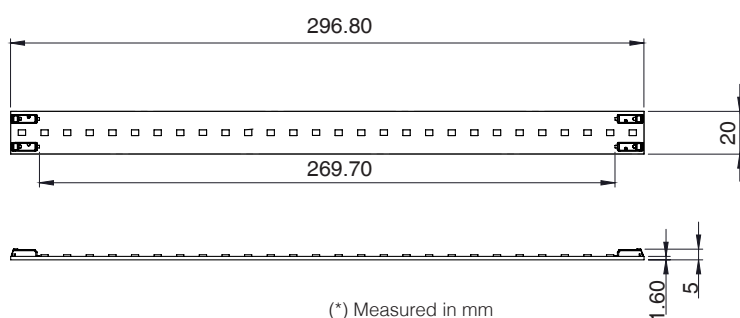
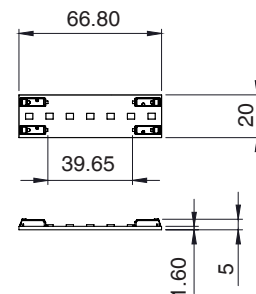
- Available in 2700K-3000K-4000K-5000K
- CRI>80 (CRI 90 available under request)
- Efficiency > 125lm/W
- Colour tolerance 3 SDCM
- Space-saving design
- Easy to install
- Life-time exceeds 50.000 hrs.
- Voltage 24Vcc
- 5 years guarantee
- High Im/\$ relation
- Available in 3 lengths 600 mm - 300 mm -70 mm

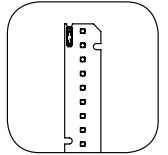


TECHNICAL DATA

- SELV voltage
- Available in 2700-3000-4000-5000K.
- Typical CRI80, CRI90 available under request.
- Operating temperature between -30°C and 45°C
- EN 61471:2008 group 1
- Standard Tc 65°C
- LED viewing angle 120°
- 600-20 - Weight 24 g
MOQ 60 pieces packaging box weight 1500 g
- 300-20 - Weight 12 g
MOQ 120 pieces packaging box weight 1100 g
- 70-20 - Weight 8 g
MOQ 120 pieces packaging box weight 960 g
- Possibility to integrate LOGO Custom

DIMENSIONS





SPECIFIC TECHNICAL DATA

SPECIFIC TECHNICAL DATA

CODE	CCT	RATED CURRENT mA	VOLTAGE Min (V)	VOLTAGE Typ(V)	VOLTAGE Max(V)	NOMINAL POWER (W)	LUMINOUS EFFICACY (lm/W)	TOTAL FLUX (lm)	PHOTO METRIC CODE
70-20 24 VCC									
31.13.70.20.24.2	2700K	70	20	24	26	1,68	91,45	153,7	827.348
31.13.7020.24.3	3000K	70	20	24	26	1,68	103,33	173,6	830.348
31.13.7020.24.4	4000K	70	20	24	26	1,68	112,92	189,7	840.348
31.13.7020.24.5	5000K	70	20	24	26	1,68	124,95	209,9	850.348
300-20 24 VCC									
31.13.30020.24.2	2700K	280	20	24	26	6,48	94,84	614,6	827.348
31.13.30020.24.3	3000K	280	20	24	26	6,48	107,16	694,4	830.348
31.13.30020.24.4	4000K	280	20	24	26	6,48	114,72	743,4	840.348
31.13.30020.24.5	5000K	280	20	24	26	6,48	129,58	839,7	850.348
600-20 24 VCC									
31.13.60020.24.2	2700K	560	20	24	26	12,96	94,84	1229,2	827.348
31.13.60020.24.3	3000K	560	20	24	26	12,96	107,16	1388,8	830.348
31.13.60020.24.4	4000K	560	20	24	26	12,96	114,72	1486,8	840.348
31.13.60020.24.5	5000K	560	20	24	26	12,96	129,58	1679,4	850.348

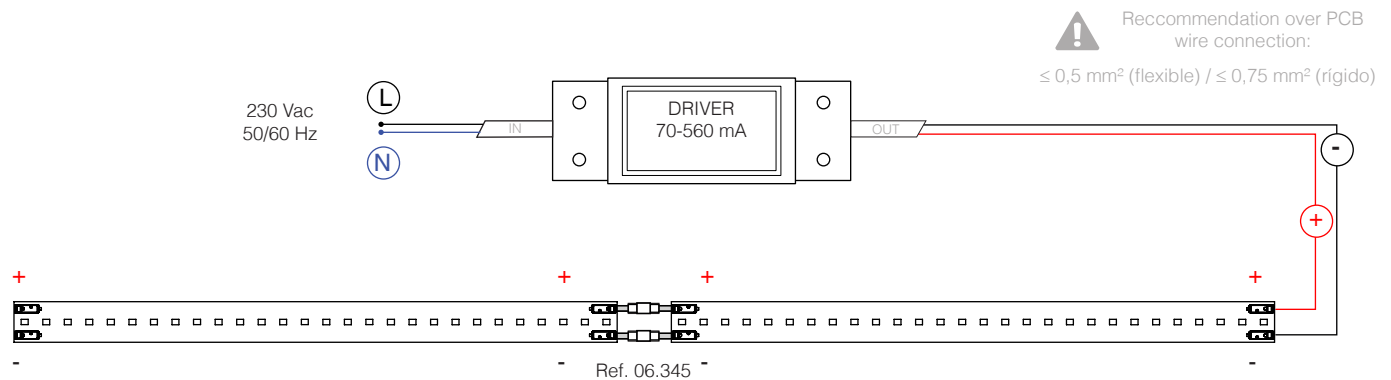
Note: It is required to keep Tc < 65°C.

Tolerance range for flux measurements of 8%.

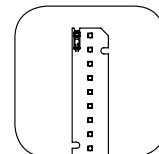
For PCB supply including high adhesion thermal tape, please add the letter "C" behind the product code. Example: 31.13.60020.24.5C.

CRI >80

DRIVER + MODULE CONNECTION EXAMPLE

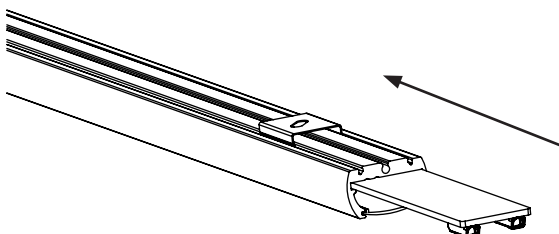


Board to board connector Ref. 06.345		26 mm	Max.6A
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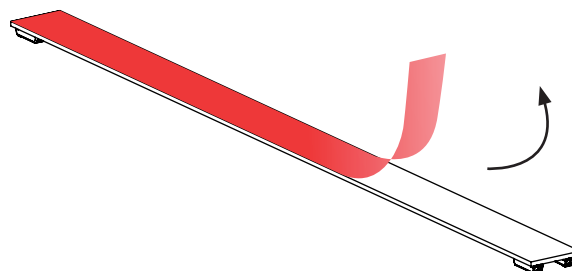
INSTALLATION AND CONNECTION EXAMPLE

1 OVER PROFILE TRAIL



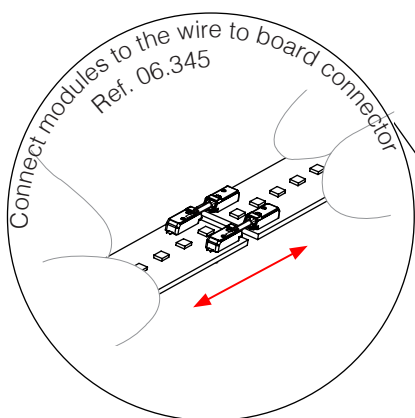
Introduce and slide the PCB inside the fixture profile by it trail.

2 WITH DOUBLE SIDED TAPE

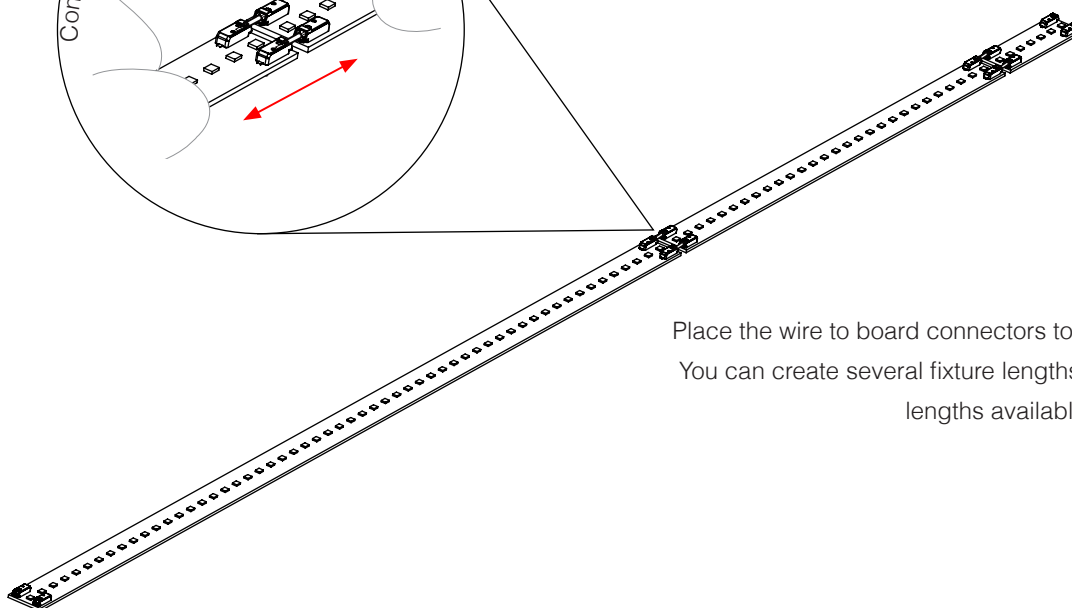


In other case, use a specific double sided tape, and stick it on the back side of the PCB. Remove top film as indicated in the above image and attach the fixture to the designated surface.

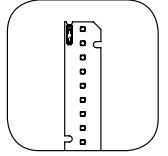
3



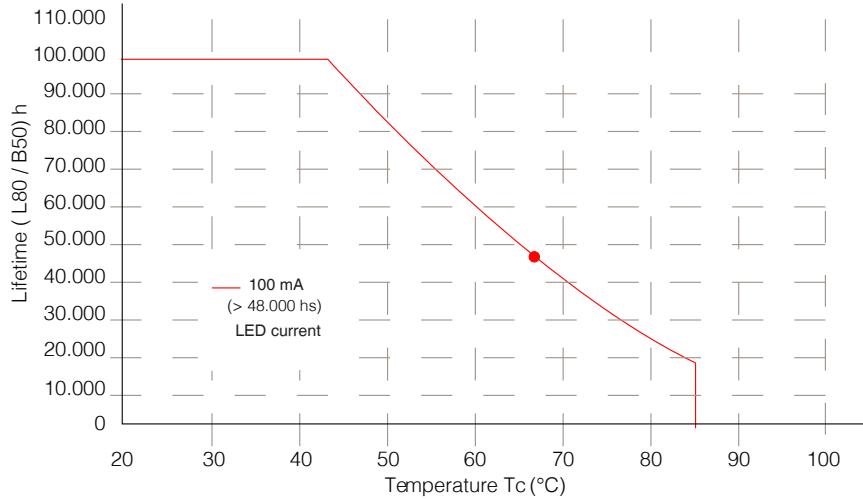
Max. no. of PCBs:
depends on driver type
 $P_n \text{ PCBs} \leq P_n \text{ Driver}$



Place the wire to board connectors to interconnect the PCBs.
You can create several fixture lengths, by using the different lengths available.



Lifetime Derating for MERAKI LINEAL MERAKI 600-300-70/20 ECO



INSTALLATION AND SECURITY INFORMATION



ELECTRICAL POWER

MERAKI 600-20 / 300-20 / 70-20 24V must be feed at constant current; the energy source power must be in accordance with the quantity of connected modules for proper functioning of the module (or group of modules). Family MERAKI LED MODULES have polarity, for this reason rated current, nominal power and polarity must be taken into account. If that is not the case, the module might be irreversibly damaged.

MERAKI 600-20 / 300-20 / 70-20 24V has integrated protection against reverse polarity errors. MERAKI LED MODULES require specific driver protection against short-circuit currents, temperature raise and overloads. Please, verify driver's min. and max. V_n values specified in this data sheet.



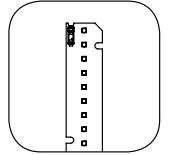
ISOLATION

MERAKI 600-20 / 300-20 / 70-20 24V functions with SELV voltage, does not require active isolation of the component as long as maximum reference SELV voltage of 50V is not exceeded. In other case, it will be mandatory earth connection on all conductive components of the fixture or light engine when the number of modules in the series exceeds SELV voltage. The driver must be in compliance with CE, UL or valid analogous regulation.



ESD – STATIC ELECTRICITY INFORMATION

MERAKI 600-20 / 300-20 / 70-20 24V contains electronic components which are very sensible to static electricity. In this respect is it highly recommendable to always manipulate the items with appropriate ESD protection, and take adequate measures for safety matters. If you need further information please refer to our webpage www.idled.eu.



MOUNTING AND INSTALLATION

I+D LED S.L. is not responsible for the installation of the product. MERAKI 600-20 / 300-20 / 70-20 24V must be perfectly placed (and/or stick) on the lighting device, profile or base for a proper connection between modules and power source. Thermal transference between PCB and luminaire body must be at its highest, in order to ensure that fixture temperature does not exceed T_c in any case.

If any type of chemical substance is used during the assembly of the luminaire or light engine, it must not have any type of curing by means of gas condensation; as these chemical substances may damage the LEDs.

Avoid mechanical stress. Ideal wire for this connection type is unipolar rigid wire of 0,4-1mm², with a strip wire of 6,5-7MM. To remove wire, push orifice on the connector and pull smoothly.



TEMPERATURE

MERAKI 600-20 / 300-20 / 70-20 24V life-time depends to a great extent on operating temperature. Under no circumstance temperature should exceed the maximum permissible ($T_c=65^\circ\text{C}$) limit here indicated. Exposure to higher temperatures might affect its long term proper functioning. Room temperature must be measured under worst-case conditions to ensure life-time and keep product's guarantee. Store modules between -20°C and $+80^\circ\text{C}$, and at a maximum humidity level of 65%.



OPTICAL CHARACTERISTICS + CCT

Measurement of LED discrete points may have variations in regards on the CCT temperature here described, with a variance of 3SDCM for white and $\pm 5\text{nm}$ for coloured LEDs. CCT shifts $\pm 0,001$ at 6.000 hrs. 3 SDCM are declared over the complete module. Modules viewing angle is 120° .