

LED MODULE white 1SLNoptic-B



since
2003

custom
made

made in
Slovakia

NICHIA
LEDs

high
efficiency
lm/W



parameter	value
supply voltage	24 V
supply current	150 mA
input	to 1,2 W
luminous flux	125-160 lm
colour temperature	3000-6500 K
beam angle	10° na 70°
protection	IP65
ambient temperature	-30 to +50°C
cable lenght between modules	140-300 mm
dimensions (1 module)	12 x 20 x 40 mm
weight (1 module)	13 g

* the modules are connected in 3 pieces in one series

LED module 1SLNoptic-B includes not only good manufacturing qualities, but also good lighting effect thanks to good LEDs and lenses.

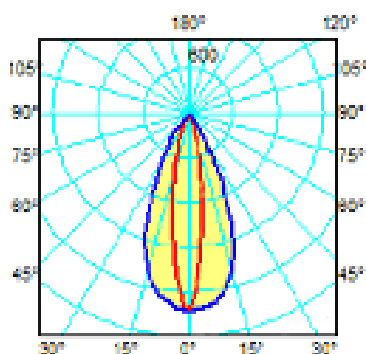
LED module 1SLNoptic-B is normally made from PCB with LED and lens, without heat-sink. The modules are designed to cool themselves without any additional heatsinks. However, it is ideal to place the LED modules on a heat-conducting substrate.

The required lighting effect can be reached by using lens with special optics:

Lens type: lens with beam angle 10 x 70°

Lens and holder material: polycarbonate-thermoplastic polymer, thermal glass transition: 150°, UV stable with good optic characteristics.

The beam angle of the LED with lens is approx. 10 x 70° (see picture).



The colour shade of the white light is determined by two parameters: CRI and temperature of the white color (Kelvins). The LEDs in 1SLNoptic-B modules have **CRI values from 70 to 95** and **colour temperature from 3000 to 6500K**.

The high-quality NICHIA LEDs are assembled with the latest technology on a PCB with 2mm thickness. Its material meets the EN 61249-2-5 standards.

The PCB surface is protected by a coating material, which not only meets the aesthetic but also protective function (against weather conditions, etc.). The LED modules are protected against external influences thanks to silicone coating material from the company DOWSIL. This coating varnish is intended for surface treatment of PCB or other electronic devices or semiconductors.

The installation of 1SLNoptic-B modules

The installation can be done by using screws, rivets or a double-sided tape (ideally heat-conducting tape).

The LED modules 1SLNoptic-B can be used for the illumination of advertising lightboxes from edges by depth higher than 50mm and width ideally up to 1200mm. It is however possible to use them in lightboxes with width up to 3m (the length of the lightbox is unlimited). For the illumination of bigger lightboxes, we recommend our more powerful version 1SL3Woptic-B.

THE UNIQUENESS OF THE LED MODULE LIES IN THE SIMPLICITY OF ITS CONSTRUCTION IN COMBINATION WITH THE BEST COMPONENTS



High-quality clear lens with wide beam angle more than **165°** for an outstanding light effect.



Adhesive with high temperature resistance from **-50 to +100°C** and long lifetime.



The heart of our LED modules are top-quality diodes from japanese company **Nichia**, supplied by optimal current to maintain their long lifetime and high efficiency

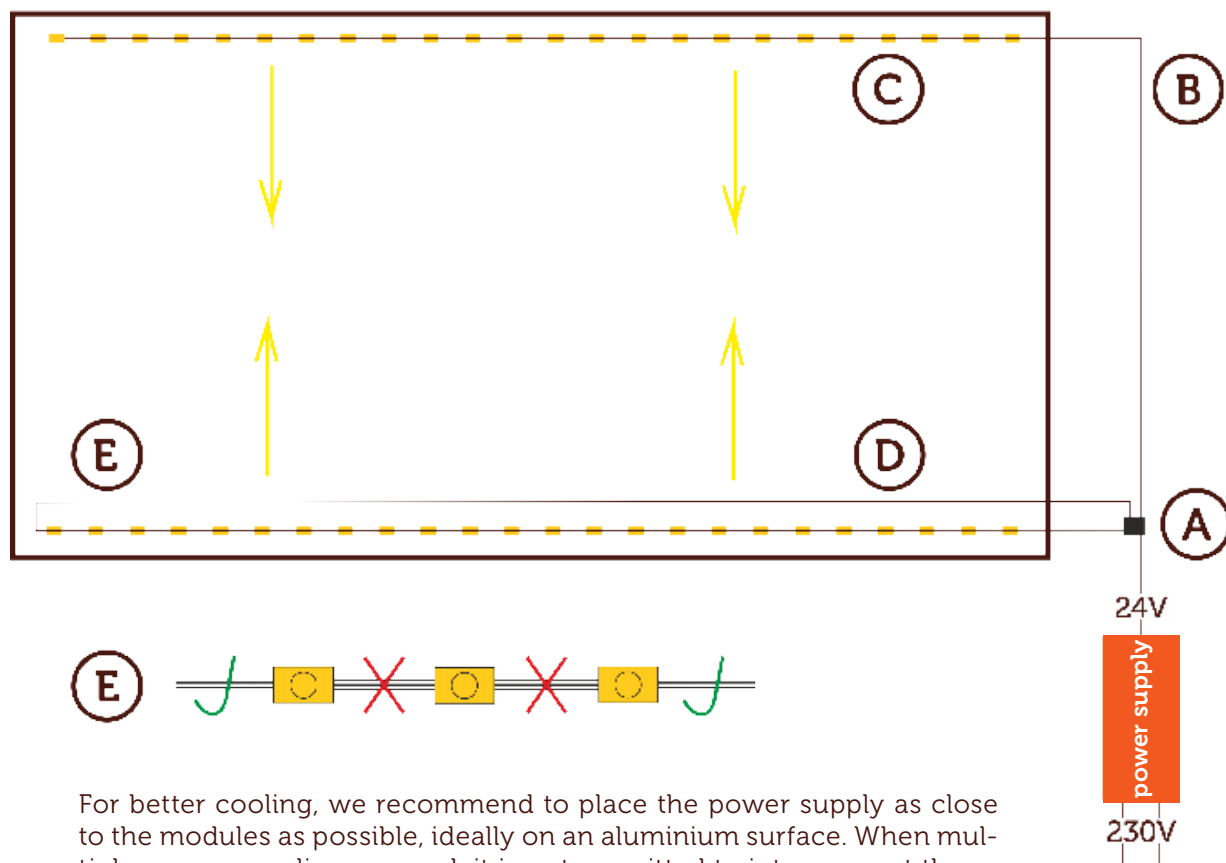


Almost invisible, but 100% reliable quality protector of our LED modules is special UV stable silicone coating from **Dowsil**.



Our PCBs meet the highest quality requirements for long service life of our LED modules in all conditions, even outdoors.

INSTALLATION OF THE LED MODULES



- (A) For better cooling, we recommend to place the power supply as close to the modules as possible, ideally on an aluminium surface. When multiple power supplies are used, it is not permitted to interconnect them.
- (B) The cable cross-section has to correspond to the electrical current. By current 4A it must be min. 1mm², by 8A min. 2mm². By power supplies with bigger power it is appropriate to connect the LED modules in several parallel lines.
- (C) While connecting the LED modules only from one side, this line can contain up to 24pcs of LED modules.
- (D) While connecting the LED modules from both sides, this line can contain up to 60pcs of LED modules.
- (E) The 1SLNoptic-B modules are made in 3pcs in a series (marked as "A", "B" and "C"). It means that the modules can only be separated or connected in 3-module sets.

Thank you for your interest in our LED modules.