

Dragon6 Strip Colours

ILS-GD06-XXXX-SD101 Series

Product Overview

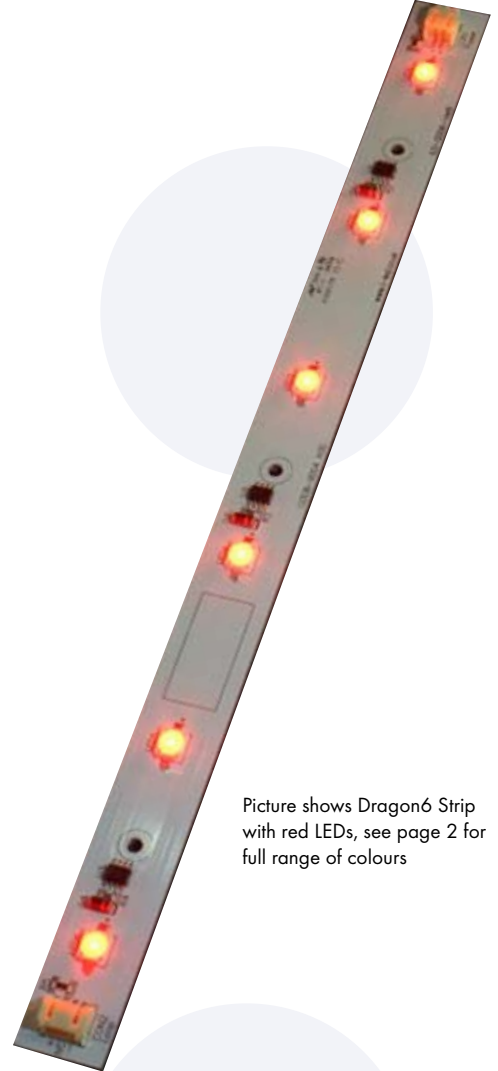
- Compact and powerful LED light source
- Available in many different colour options
- Simple Plug and Play with industry standard connectors
- Low profile
- Aluminium PCB for optimal thermal management

Applications

- Effect Lighting
- Decorative Lighting
- Architectural lighting
- Outdood Lighting
- Retail and Entertainment lighting

Technical Features:

- Each board contains of 6 Golden Dragon+ LEDs
- Up to 70,000 hour lifetime to 70% of original brightness
- Mounting holes (3mm diameter) allows easy installation with screws
- Size of printed circuit board (L x W x H) : 300mm x 20mm x 1.6mm
- Many secondary lens options available
- Brightness adjustable by external dimming gear
- Single input voltage, each board has own regulation built-in
- Operation with Osram Optotronic® power supplies or other 24VDC power supply
- Up to 5 Dragon6 Strips can be linked together to form longer chains.



Picture shows Dragon6 Strip with red LEDs, see page 2 for full range of colours

Important Information and Precautions

- The Dragon6 strip, when powered up, is very bright thus it is advised that you do NOT look directly at it. Turn the strip away from you and do not shine into the eyes of others.
- Strips will overheat in operation if not attached to a suitable heat-sink. Over heating can cause failure or irreparable damage.
- Strips, when operated, can reach high temperatures thus there is risk of injury if they are touched.

Product Options

ILS PART NUMBER	Colour	Dominant Wavelength	Typical Wattage §	Voltage	Flux at 350mA *	Radiance Angle	Relevant Osram Data
ILS-GD06-DEBL-SD101.	Deep Blue	455 nm	8.4 watts	24 volts	< 4260 mW	170' degrees	LD W5AM
ILS-GD06-BLUE-SD101.	Blue	470 nm	8.4 watts	24 volts	< 234 lms	170' degrees	LB W5AM
ILS-GD06-VEGR-SD101.	VerdeGreen	505 nm	8.4 watts	24 volts	< 582 lms	170' degrees	LV W5AM
ILS-GD06-TRGR-SD101.	True Green	528 nm	8.4 watts	24 volts	< 672 lms	170' degrees	LT W5AM
ILS-GD06-YELL-SD101.	Yellow	590 nm	8.4 watts	24 volts	< 426 lms	170' degrees	LY W5AM
ILS-GD06-RDOR-SD101.	Red-Orange	617 nm	8.4 watts	24 volts	< 582 lms	170' degrees	LA W5AM
ILS-GD06-RED1-SD101.	Red	624 nm	8.4 watts	24 volts	< 426 lms	170' degrees	LR W5AM
ILS-GD06-HYRE-SD101.	Hyper-Red	654 nm	8.4 watts	24 volts	< 2400 mW	170' degrees	LH W5AM

Data is related to the entire Dragon6 Strip

* 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.

§ Tolerance +/- 10%

Minimum and Maximum Ratings

ILS PART NUMBER	Operating Temperature at Tc-Point [°C] *	Storage Temperature [°C] *	Voltage Range [Vdc] *	Reverse Voltage [Vdc] *
ILS-GD06-DEBL-SD101.	-20...75	-30...85	23...25	Not Allowed
ILS-GD06-BLUE-SD101.	-20...75	-30...85	23...25	Not Allowed
ILS-GD06-VEGR-SD101.	-20...75	-30...85	23...25	Not Allowed
ILS-GD06-TRGR-SD101.	-20...75	-30...85	23...25	Not Allowed
ILS-GD06-YELL-SD101.	-20...75	-30...85	23...25	Not Allowed
ILS-GD06-RDOR-SD101.	-20...75	-30...85	23...25	Not Allowed
ILS-GD06-RED1-SD101.	-20...75	-30...85	23...25	Not Allowed
ILS-GD06-HYRE-SD101.	-20...75	-30...85	23...25	Not Allowed

* Exceeding maximum ratings for operating and storage temperature will reduce expected life time or destroy the Dragon6 Strip.

Exceeding maximum ratings for operating voltage will cause hazardous overload and will likely destroy the Dragon6 Strip.

The temperature of the Dragon6 Strip must be measured at the Tc-Point (located at the centre of the board between the 3rd and 4th LEDs) according to EN60598-1 in a thermally constant status with a temperature sensor or a temperature sensitive label.

Pin Out

Input Connector

Pin Number	Description
1	24 VDC
2	Ground

Input cable available: CAB-ILS-GD06-Input

Loop Through Connector

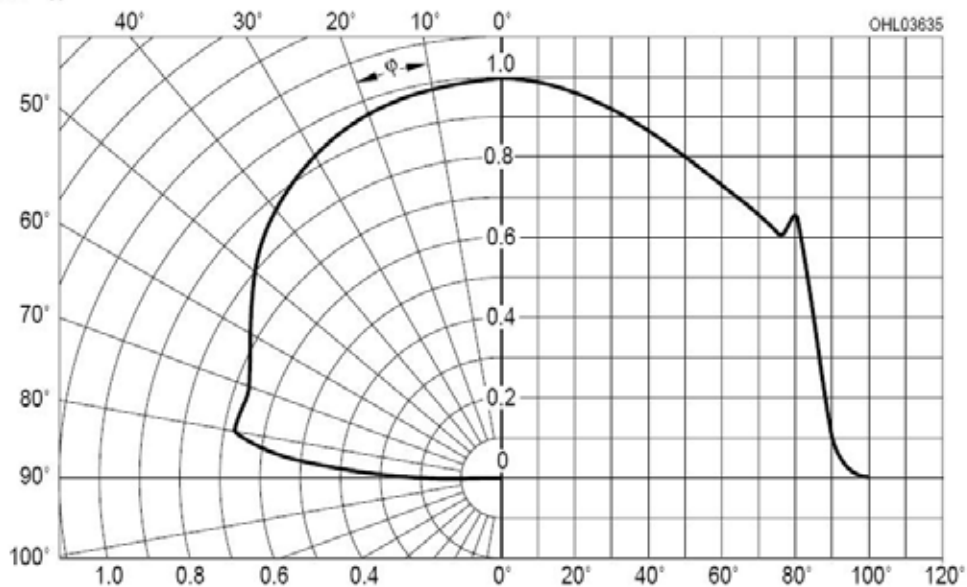
Pin Number	Description
1	24 VDC
2	No connector
3	Ground

Loop Through cable available: CAB-ILS-GD06-Link

Radiation of single LED

Radiation Characteristic

$$I_{rel} = f(\varphi); T_A = 25^\circ\text{C}$$



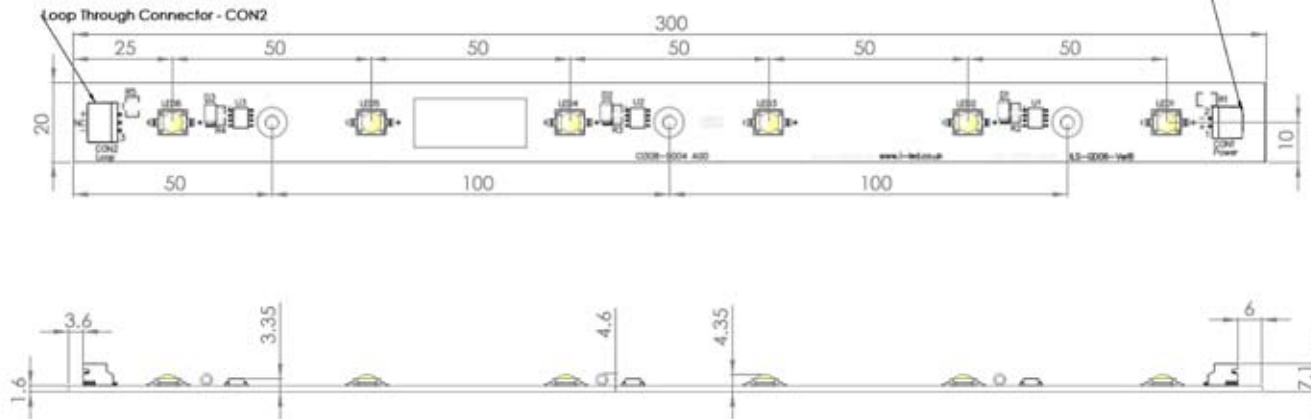
Technical Drawing

JST: S3B-PH-SM4-TB Shrouded Header

(Power Out to Loop to another Dragon 6 Strip)

Loop Through Connector - CON2

Input Connector - CON1 (24VDC)
JST: S2B-PH-SM4-TB Shrouded Header



Dragon6 Strip Lens and Reflector Options

Ordering Code	Description	Attachment Method
FL-90	Mini Lens; +/-7.5 Degrees Lambertain	Clip-On
FL-42	Mini Lens; +/-10 Degrees Lambertain	Clip-On
FL-63S	Mini Lens; +/-15 Degrees Lambertain	Twist-On
FL-66S	Mini Lens; +/-30 Degrees Lambertain	Twist-On
FL-70	Mini Lens; +/-55 Degrees Spot	Twist-On
FL-69S	Mini Lens; +/-70 Degrees Spot	Twist-On
FL-68S	Mini Lens; +/-60 & +/-30 Degrees Oval	Twist-On
FL-68D	Mini Lens; +/-30 & +/-60 Degrees Oval	Twist-On
FL-54	Mini Lens; +/-62.5 Degrees Bat-Wing	Clip-On
FL-82	Mini Lens; 135x70x 30 Total Degrees Asymetric	Twist-On

Assembly Information

- The mounting of the Dragon6 Strip has to be on a metal heat sink.
- In order to optimise the thermal management the metal surface needs to be clean (dirt and oil free) and planar for the best contact with the LED module. A thermal grease or heat transfer material is highly recommended

Safety Information

- The LED module itself and all its components must not be mechanically stressed.
- Assembly must not damage or destroy conducting paths on the circuit board.
- The mounting of the module is carried out by attaching it at the mounting holes. Metal mounting screws must be insulated with synthetic washers to prevent circuit board damage and possible short circuiting.
- To avoid mechanical damage to the connecting cables, the boards should be attached securely to the intended substrate. Heavy vibration should be avoided.
- Observe correct polarity!
- Depending on the product incorrect polarity will lead to emission of red or no light. The module can be destroyed!
- Pay attention to standard ESD precautions when installing the Dragon6 Strip.
- The Dragon6 Strip, as manufactured, has no conformal coating and therefore offers no inherent protection against corrosion.
- Damage by corrosion will not be accepted as a materials defect claim. It is the user's responsibility to provide suitable protection against corrosive agents such as moisture and condensation and other harmful elements.
- For outdoor usage, a housing is definitely required to protect the board against environmental influences. The design of the housing must correspond to the IP standards in the application. It is also the responsibility of the user to ensure any housings or modifications keep the Tc junction temperature to within stated ranges.
- To also ease the luminaire/installation approval, electronic control gear for LED or LED modules should carry the CE mark and be ENEC certified. In Europe the declarations of conformity must include the following standards: CE: EC 61374-2-13, EN 55015, IEC 61547 and IEC 61000-3-2 - ENEC: 61374-2-13 and IEC/EN 62384.

For further information please contact ILS.

The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.