

OSLON® Square Uniform OSLONeYE LED Module

ILI-OU01-xx90-SC221.

Product Overview

The OSLONeYE is a Compact High-Flux LED mini spot light. At the heart of each OSLONeYE is an OSLON® Square Uniform. The OSLON® Square Uniform has an improved radiation pattern and superior colour-over-angle performance. A low thermal resistance of 2K/W ensures cool running and a highly efficient product. Integrated heat-sinking keeps the OSLONeYE compact, and an integral lens offers a 12 degree spot style output. 160mm wires are attached as standard, and an integrated threaded end makes installations simple.



Applications

- Cabinet Lighting
- Shelf Lighting
- Accent Lighting
- Spot Light
- Decorative Lighting
- Retail Lighting
- Wall-washing
- Architectural lighting

Technical Features

- Module ready to use, just apply power
- Heatsink and lens integrated
- Up to 100,000 Hour lifetime to 70% of original brightness
- Mounting using integrated M12 threaded end
- Size: Length 40mm x Diameter 30mm
- With 160mm connecting wires
- OSLONeYE can be linked together to produce longer chains
- Current range 200mA to 700mA

*This datasheet should be read in conjunction with the relevant OSRAM Opto Semiconductors data on the LED used

Important Information and Precautions

- The OSLONeYE LEDs, when powered up are very bright. Thus it is advised that you do not look directly at it. Turn the OSLONeYE away from you and do not shine into the eyes of others.
- Do not operate OSLONeYE's with a Power Supply with unlimited current. Connection to constant voltage Power Supplies that are not current limited may cause the OSLONeYE to consume current above the specified maximum and cause failure or irreparable damage.
- OSLONeYE's, when operated, can reach high temperatures thus there is risk of injury if they are touched.
- DO NOT HOT PLUG ON LED SIDE OF POWER SUPPLY.
- DO NOT TOUCH or PUSH on the LED as this can cause irreparable damage

Product Options

ILS PART NUMBER	Colour*	Colour Temp	Typical Wattage		Forward Voltage	Flux † at 700mA	Radiance Angle	Relevant OSRAM LED Data
			@ 350mA	@700mA				
ILI-OU01-HW90-SC221.	Hot White	2700K	0.98Watts	1.96Watts	2.7 to 3.2V	<190 lm	12° (±6°)	GWCSRMU. CM
ILI-OU01-WM90-SC221.	Warm White	3000K	0.98Watts	1.96Watts	2.7 to 3.2V	<200 lm	12° (±6°)	GWCSRMU. CM
ILI-OU01-QW90-SC221.	Quartz White	3500K	0.98Watts	1.96Watts	2.7 to 3.2V	<210 lm	12° (±6°)	GWCSRMU. CM
ILI-OU01-NU90-SC221.	Neutral White	4000K	0.98Watts	1.96Watts	2.7 to 3.2V	<220 lm	12° (±6°)	GWCSRMU. CM

* Due to the special conditions of the manufacturing processes of LEDs, 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%

† Measured with 20mS 700mA pulse at 85 °c

Minimum and Maximum Ratings

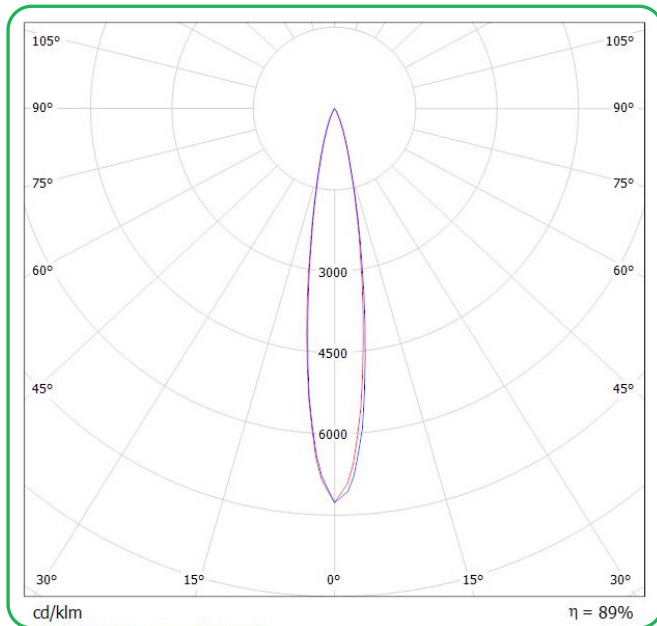
ILS PART NUMBER	Operating Temperature at Tc-Point [°C]*	Storage Temperature [°C]*	Forward Current per chip [mA]*	Reverse Voltage [Vdc]*
ILI-OU01-HW90-SC221.	70 °C max	- 40 to 110 °C	700mA max	not designed for reverse voltage
ILI-OU01-WM90-SC221.	70 °C max	- 40 to 110 °C	700mA max	not designed for reverse voltage
ILI-OU01-QW90-SC221.	70 °C max	- 40 to 110 °C	700mA max	not designed for reverse voltage
ILI-OU01-NU90-SC221.	70 °C max	- 40 to 110 °C	700mA max	not designed for reverse voltage

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

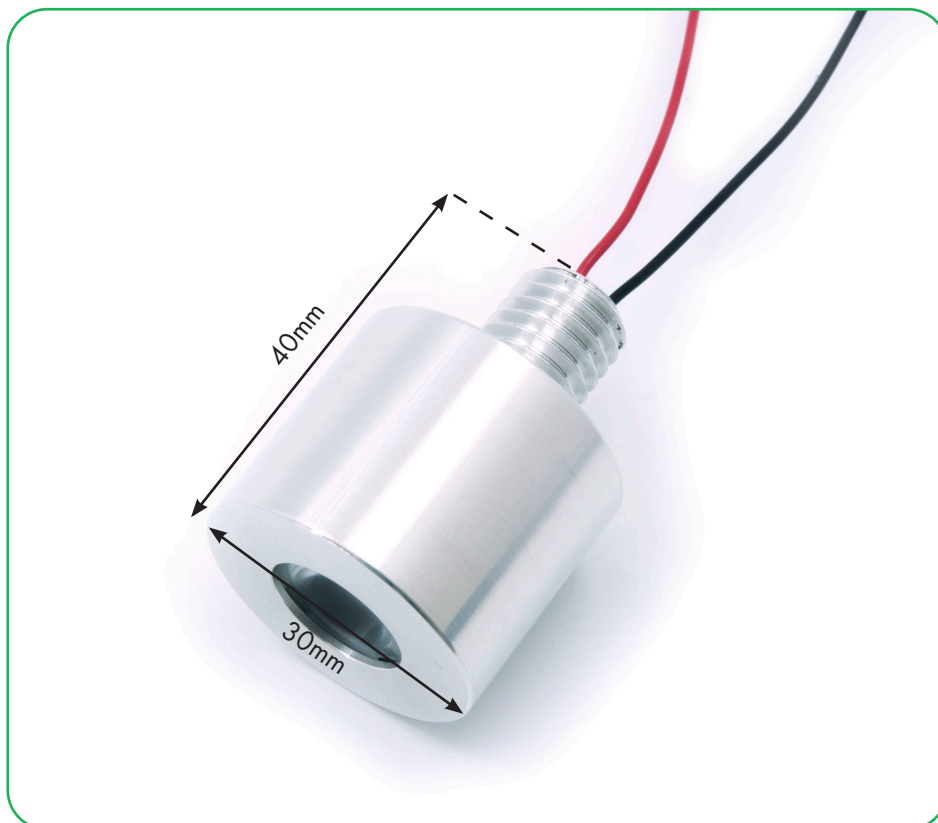
Exceeding maximum ratings for operating voltage will cause hazardous overload and is likely to destroy the LED module.

The temperature of the LED module must be measured at the Tc-Point according to EN60598-1 in a thermally constant status with a temperature sensor or a temperature sensitive label.

Radiation of OSLONeve



Technical Drawing with cables (mm)



3D drawing files are available on request from ILS. Please call or email

OSLONeye Lens and Reflector Options

LEDiL precision-engineered Lenses and Reflectors allow for rapid deployment of all types of light fixtures, including street lights, wall-wash, high-bay, sconces, emergency beacons, parking garage/low-bay, MR and AR downlights, and dock lights. Precision-engineered for maximum efficiency and durability, LEDiL Lenses and Reflectors are released alongside the latest product releases from our LED suppliers. You select the best LED for the application; choose LEDiL and you're selecting the best optical solution as well.



The OSLONeye has an integrated lens, so no other lens options are required.







OSLONeye Heatsink Options




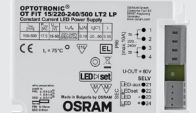




ILS has a series of Aluminium Alloy Heatsinks to be used with our standard range of PowerStars and PowerClusters. These Heatsinks are supplied with fixing screws for the light engine and for fixing to a base plate. They also come with Thermal Interface Material (TIM) attached to the top surface. More versions will be introduced over the coming months and we are also happy to manufacture custom Heatsinks to your request.

The OSLONeye has integrated heatsinking, so no other heatsinking is required.

OSLONeye Power Supply Options

ILS has a comprehensive range of standard Power Supplies. The table below shows the total number of ILS products each Power Supply can drive. Additional Power Supplies are being introduced so please call us or check our website for the latest offering.

ILS Driver Part No.	Rating Watts	Current	LED Driver Forward Voltage	
IZC035-008F-5065C-SA	8W	350mA	3-36V	
IZC035-017F-0067A-SA	17W	350mA	6-48V	
IZC035-018T-9500A-SX	18W	350mA	15-52V	
IZC050-018T-9500A-SX	18W	500mA	9-36V	
IZC070-018T-9500A-SX	18W	700mA	6-26V	
IZC070-035F-0067C-SA	35W	700mA	9-48V	

ILS Driver Part No.	Rating Watts	Current	LED Driver Forward Voltage	
IZC045-040A-9266C-SA	40W	450mA	30-89V	
IZC095-040M-9067C-SAL	40W	950mA	25.2-42V	
IZCVAR-040M-9020C-SAL	40W	350mA, 500mA, 600mA, 700mA, 900mA, 1050mA	350mA 2-100V, 500mA 2-80V, 600mA 2-67V, 700mA 2-57V, 900mA 2-45V, 1050mA 2-40V	
OT-FIT-30/220-240/700-CS-G2	30W	500-700mA	23-42V	
OT-FIT-40/220-240/1A0-LT2-LP	40W	500-1050mA	15-50V	
OTE-10/220-240/700-PC	10W	700mA	7-14V	
OTi-DALI-10/220-240/700-NFC	10W	150-700mA	2.5-45V	
OTi-DALI-50/220...240/1A4-LT2-FAN-NFC	50W	600-1400mA	15-54V	
OT-20/170-240/800-4DIMLT2-G2-CE	20W	200-1050mA	10-38V	

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 OSLONeYE.
- The OSLONeYE, as manufactured, has no conformal coating and therefore offer 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.
- The evaluation of eye safety occurs according to the standard IEC 62471:2006 ("photobiological safety of lamps and lamp systems"). Within the risk grouping system of this CIE standard, the LED specified in this data sheet falls into the class "moderate risk" (exposure time 0.25s). Under real circumstances (for exposure time, eye pupils, observation distance), it is assumed that no endangerment to the eye exists from these devices. As a matter of principle, however, it should be mentioned that intense light sources have a high secondary exposure potential due to their blinding effect. As is also true when viewing other bright light sources (e.g. headlights), temporary reduction in visual acuity and afterimages can occur, leading to irritation, annoyance, visual impairment and even accidents, depending on the situation.

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.