

4 LED Horticultural PowerStars

IHH-xx04-xxxx-SC2x1-WIR200

Product Overview

IHS PowerStars are our basic building block in horticultural development. Compact Size (L x W x H): 20mm x 20mm x 3.85mm with mounting holes using M3 screws allows easy installation.

Available with 200mm connecting wires, chaining multiple PowerStars together to form complex systems is very quick and simple – excellent for prototyping your design. 4 LED Horticultural PowerStars are also available in parallel versions.

In our portfolio we have 3 types of PowerStars available;

N3535: Industry standard 3535 package with a ceramic substrate for superior reliability at higher temperatures.

UVA technology with offerings at 385, 395, 405 and 415nm.

Current range from 100 to 1000mA

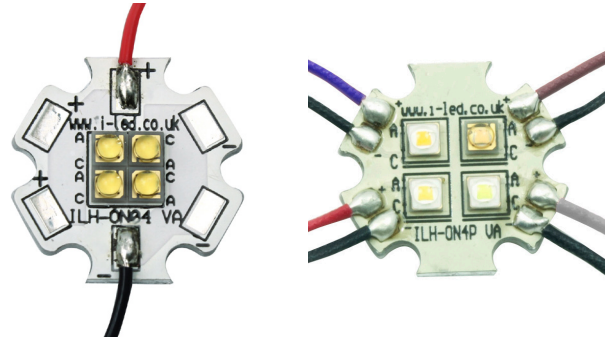
OSRAM OSOLON® SSL: OSOLON® SSL delivers the high efficacy that is necessary for professional indoor and outdoor lighting. The ceramic based package with its superior corrosion robustness addresses perfectly the needs for long lifetime applications.

Current range from 100 to 1000mA

OSOLON Square: OSRAMs most compact 2W high power LED with extremely low thermal resistance, remarkable high efficiency, high reliable and superior corrosion robustness.

Current range from 200 to 1800mA

Many other wavelengths are available, such as IR, so if you don't see the wavelength value you are looking for, please ask.

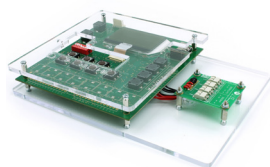


Accessories Designed for the PowerStar



Heat Sink kits with pre-tapped screw holes and mounting screws. Standard lengths of 20,40,60 and 80mm. They also come with Thermal Interface Material (TIM) attached to the top surface and mounting screws. Available in Black.

IHS have produced a range of High-performance, cost effective Thermal Interface Materials (TIM) to perfectly match their standard products.



Our product fills the air pockets between the two surfaces, forming a continuous layer to conduct heat away from the LED to the heatsink. As you'd imagine, this is why it's called thermal interface material. IHS offer TIM in three options – double sided adhesive, single sided adhesive and no adhesive.

IHS have developed a driver to help in the development of Tuneable White and RGB/RGBW LED products. The PSU can also be used with any system that requires up to 4 channels of controllable LED drive.



Select from our range of IP rated AC/DC LED drivers suitable for use with our range of LED engines. All tried and tested ready to plug and play...



The majority of the products in this flyer are available for sale through RS. If you require small quantities please go to their website to check their stock situation.

Product Options

IHS Part Number	Description	Typical Current mA	240-790nm Total radiometric flux	PAR 400-700nm PPF $\mu\text{mol/s}$	PAR 360-780nm PPF $\mu\text{mol/s}$
IHH-XO04-S380-SC211-WIR200.	TSLC N3535U 4 PowerStar UV 385nm	350	412 mW	0.07	1.33
IHH-XO04-S390-SC211-WIR200.	TSLC N3535U 4 PowerStar UV 395nm	350	452 mW	0.43	1.49
IHH-XO04-S400-SC211-WIR200.	TSLC N3535U 4 PowerStar UV 405nm	350	494 mW	1.39	1.68
IHH-XO04-S410-SC211-WIR200.	TSLC N3535U 4 PowerStar UV 415nm	350	494 mW	1.63	1.72
IHH-OM04-DEBL-SC221-WIR200.	OSLON 120 4 PowerStar Deep Blue 445nm	350	710 mW	2.68	2.68
IHH-OW04-BLUE-SC221-WIR200.	OSLON 150 4 PowerStar Blue 465nm	350	576 lm	2.24	2.24
IHH-OM04-TRGR-SC221-WIR200.	OSLON 120 4 PowerStar True Green 519nm	350	315 lm	1.38	1.38
IHH-OW04-YELL-SC221-WIR200.	OSLON 150 4 PowerStar Yellow 594nm	350	180 lm	0.89	0.89
IHH-OM04-RDOR-SC221-WIR200.	OSLON 120 4 PowerStar Amber 617nm	350	505 lm	2.63	2.63
IHH-OW04-RED1-SC221-WIR200.	OSLON 150 4 PowerStar Red 625nm	350	444 lm	2.34	2.34
IHH-OM04-HYRE-SC221-WIR200.	OSLON 120 4 PowerStar Hyper Red 656nm	350	500 mW	2.73	2.74
IHH-OM04-FRED-SC221-WIR200.	OSLON 120 4 PowerStar Far Red 730nm	350	315 mW	0.26	1.89
IHH-OW04-HW90-SC221-WIR200.	OSLON 150 4 PowerStar Hot White 2700K 90 CRI	350	322 lm	1.47	1.60
IHH-OW04-WM80-SC221-WIR200.	OSLON 150 4 PowerStar Warm White 3000K 80 CRI	350	421 lm	1.92	2.06
IHH-OW04-QZ90-SC221-WIR200.	OSLON 150 4 PowerStar Quartz White 3500K 90 CRI	350	347 lm	1.57	1.68
IHH-OW04-NW80-SC221-WIR200.	OSLON 150 4 PowerStar Neutral White 4000K 80CRI	350	1410mW	6.4	6.63
IHH-OW04-WH80-SC221-WIR200.	OSLON 150 4 PowerStar White 5000K 80 CRI	350	465 lm	2.05	2.14
IHH-OW04-UL70-SC221-WIR200.	OSLON 150 4 PowerStar Ultra White 6500K 70 CRI	350	492 lm	2.13	2.19
IHH-OG04-DEBL-SC221-WIR200.	OSLON Square 3rd Gen 4 PowerStar Deep Blue 445nm	700	4972 mW	18.75	18.77
IHH-OG04-HYRE-SC221-WIR200.	OSLON Square 3rd Gen 4 PowerStar Hyper Red 656nm	700	3500 mW	19.09	19.15
IHH-OG04-HW90-SC221-WIR200.	OSLON Square 3rd Gen 4 PowerStar Hot White 2700K 90 CRI	700	2244 lm	10.27	11.19
IHH-OG04-WM80-SC221-WIR200.	OSLON Square 3rd Gen 4 PowerStar Warm White 3000K 80 CRI	700	2937 lm	13.40	14.37
IHH-OG04-QZ90-SC221-WIR200.	OSLON Square 3rd Gen 4 PowerStar Quartz White 3500K 90 CRI	700	2429 lm	10.98	11.76
IHH-OG04-NW80-SC221-WIR200.	OSLON 150 4 PowerStar Neutral White 4000K 80CRI	350	1410mW	6.4	6.63
IHH-OG04-WH80-SC221-WIR200.	OSLON Square 3rd Gen 4 PowerStar White 5000K 80 CRI	700	3254 lm	14.37	15.00
IHH-OG04-UL70-SC221-WIR200.	OSLON Square 3rd Gen 4 PowerStar Ultra White 6500K 70 CRI	700	3448 lm	14.95	15.36

For further information please contact IHS

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

Intelligent Horticultural Solutions is a division of Intelligent LED Solutions focusing on providing LED solutions to the rapidly evolving and highly important horticultural lighting market.