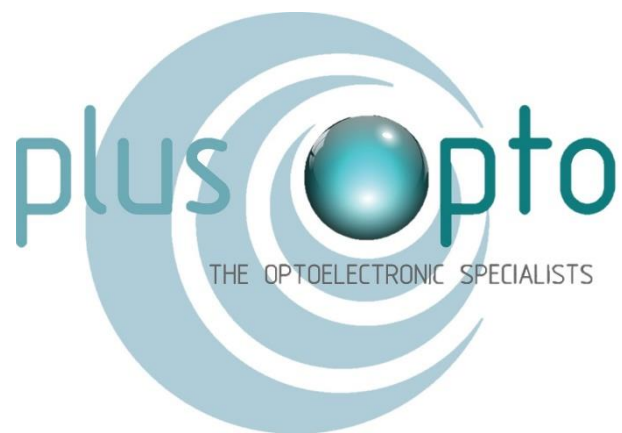
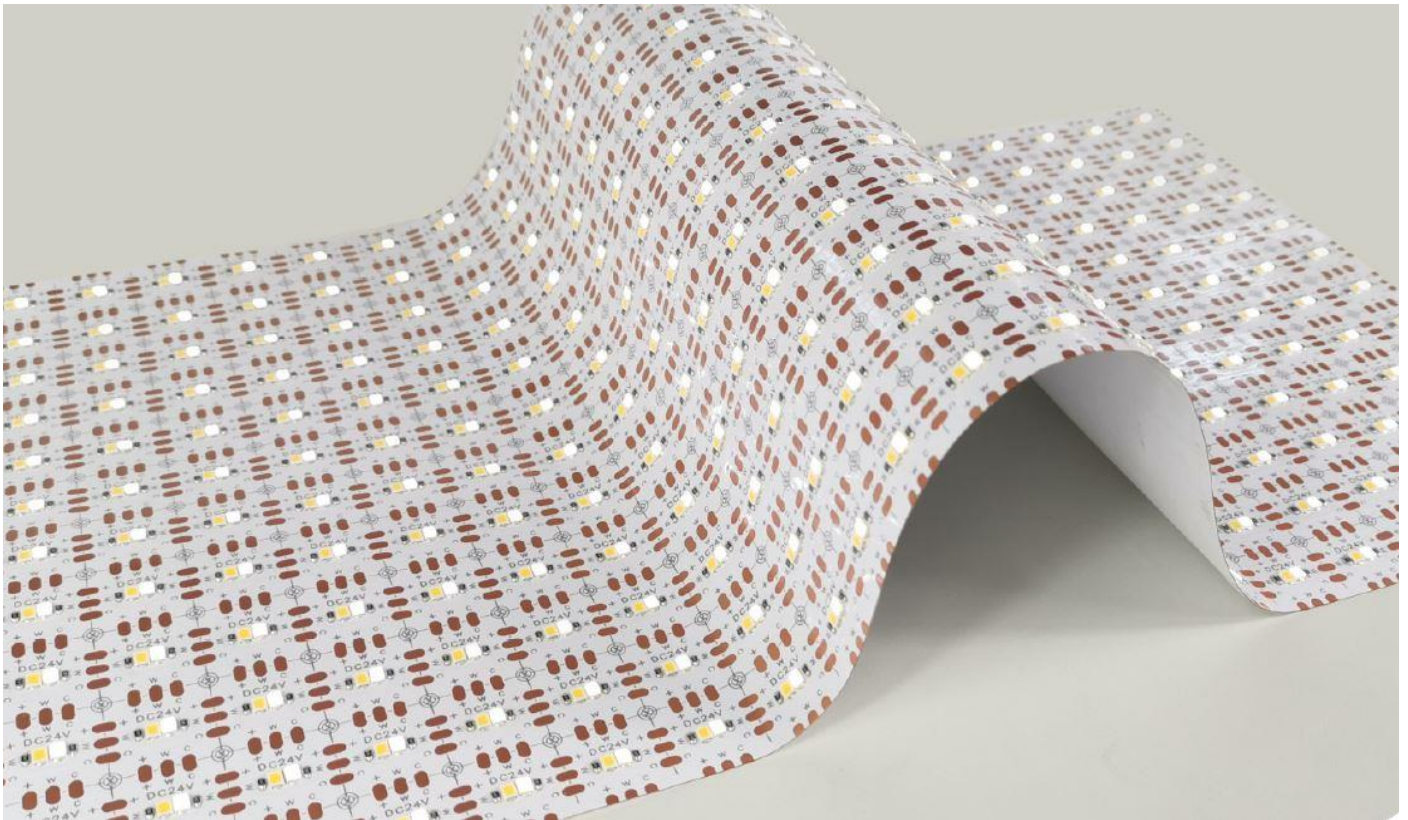


LED SHEETS

FLEXIBLE LED LIGHT SOURCE FOR BACKLIGHTING



PRODUCT OVERVIEW



LED sheets are a thin, light, and flexible LED light source that can be used to backlight a variety of materials, from printed fabrics and duratrans to thick pieces of marble and onyx. Modular by design, they are easily tiled together to facilitate backlights of any size.

Unlike other solutions on the market, the matrix of high-quality LEDs provides a bright, even illumination, no matter the size or configuration. No more dim, uneven illumination, the LED sheets have the power to perfectly light a wide range of materials. Simple to modify, the sheets are quick and easy to cut down on site, ensuring a perfect fit with edge-to-edge illumination.

Available in a range of colours and configurations, from UK stock, individually or as a kit with necessary drivers and controls.

	LED Sheets	Edge-lit panel
Brightness	High	Low
Uniformity	Very good	OK
Thickness	OK	Slim
On-site modification	Easily cuttable into various shapes and sizes	None
Flexibility	Flexible	Not flexible

APPLICATIONS

Backlit natural stone and solid surface



Curved Lightboxes



Luminaires



Lightboxes



KEY FEATURES

BRIGHT AND UNIFORM

High brightness backlighting solution, particularly useful for backlighting thicker materials or materials subject to high levels of ambient light. Significantly higher brightness than standard edge-lit acrylic panels.

Perfectly uniform light across the surface thanks to the matrix of LEDs. Brightness is constant regardless of the size, no hotspots or brighter edges.

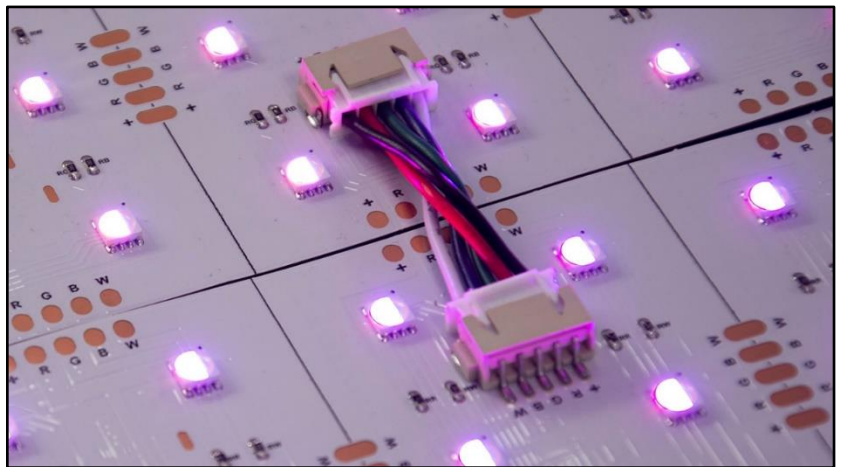


EASY CUSTOMIZATION

Easily customize the shape and size of the LED sheets to suit the application by cutting with a knife or scissors. No need for precise fabrication drawings, they are easily cuttable on site, even around obstacles like switches and sockets.

FAST INSTALLATION

Quick and easy to install. Every sheet is supplied with 3M adhesive backing to allow easy positioning, which is then supplemented with nails, screws, or staples to make a permanent fixing. Once fitted, it's as simple as using the supplied cables to join the sheets together and connect to a power supply and controller.

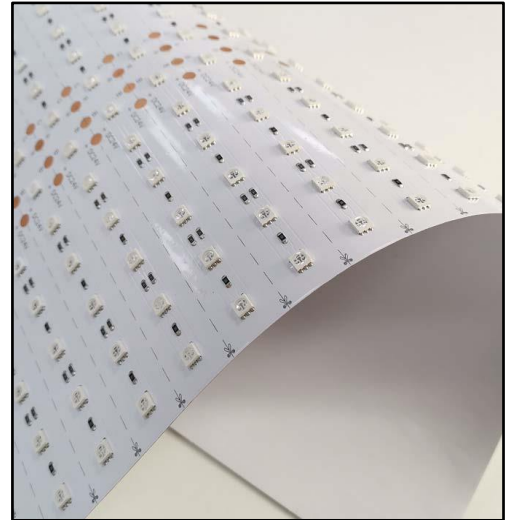


SHORT LEAD TIMES

UK stock for fast delivery. No need for lengthy lead-times related to site surveys / fabrication drawings / pre-fabrication. The sheets can easily be modified to suit the application on site – flexible in more ways than one.

FLEXIBLE SUBSTRATE

Flexible PCB allows the sheets to conform to curved and uneven surfaces, opening up the possibilities of what can be backlit. Not just for curved surfaces, the flexible nature of the PCB allows the LED sheet to wrap around corners and edges.



RANGE OF COLOURS AND CONFIGURATIONS

Available as standard in a variety of colours and configurations

Single colour 11W Economical version for backlighting a variety of materials, available in a range of colour temperatures or red, green, or blue

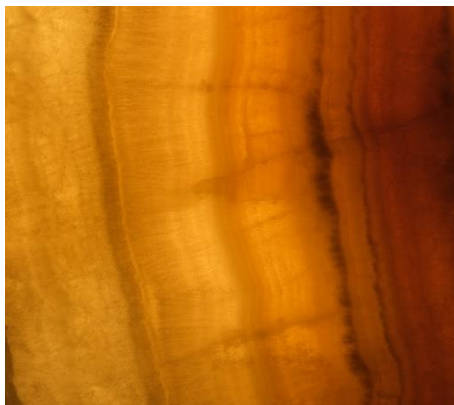
Single colour 32W High output version for backlighting thicker materials in areas with high levels of ambient light, available in a range of colour temperatures or red, green, or blue

Tuneable white Colour temperature adjustable, for tuning the light spectrum to match the material being lit, or to dynamically change mood and visual appearance

RGBW Completely change the character of the material being lit, choosing from the full spectrum of colours, either highly saturated or pastel with the help of the dedicated white LEDs. Can also be set to white light only

THE EFFECT OF COLOUR TEMPERATURE

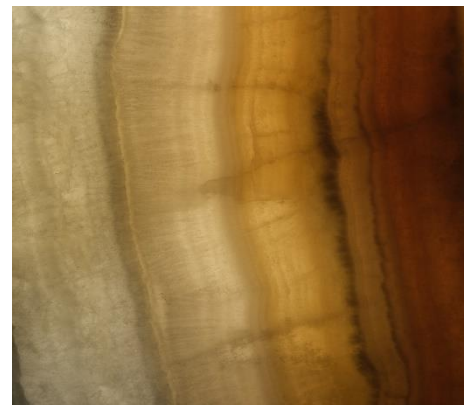
Colour temperature can have a dramatic effect on the mood and character of a piece of backlit material. Warm colour temperatures work better with materials that contain mostly red hues, helping provide the necessary light spectrum to highlight the colours in the material. Conversely, materials that contain mostly grey or blue hues look much more striking with a cool white backlight. Thanks to our tuneable white version there is no need to decide ahead of time what colour temperature will work best, since you can tune the colour temperature on site to bring out the best in any material.



Marble with warm white backlight



Marble with neutral white backlight



Marble with cool white backlight

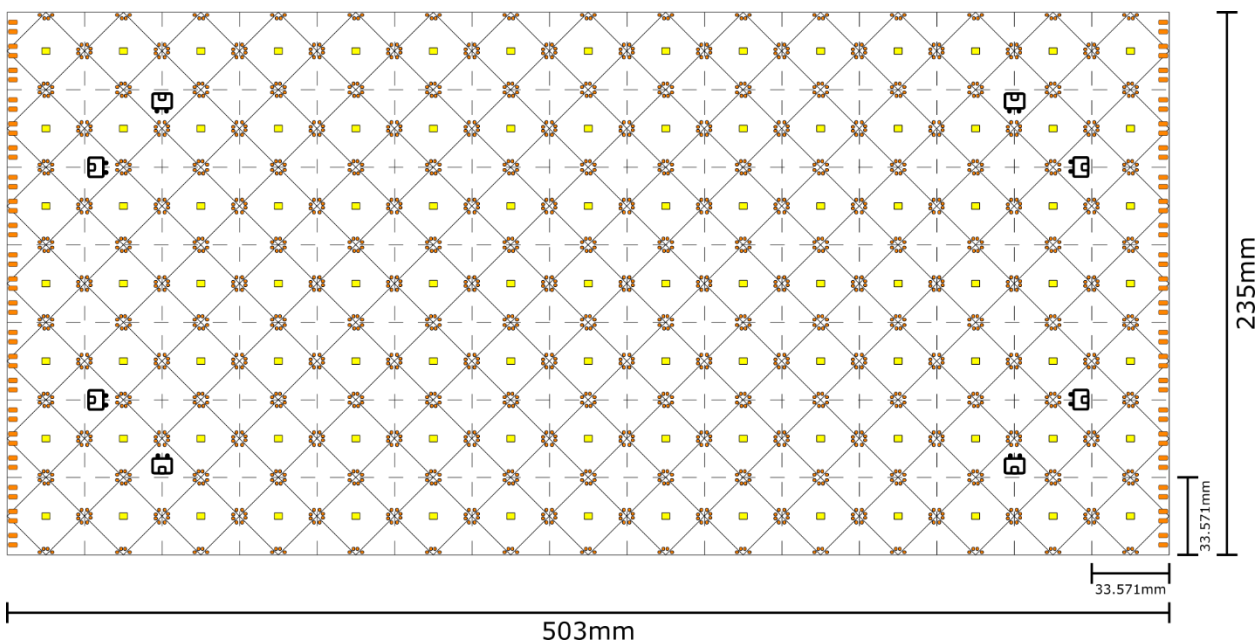
SINGLE COLOUR LED SHEET

Our single colour LED sheet consists of a matrix of 105 LEDs, cuttable in 1 LED increments. Available in a range of colour temperatures, as well as red, green, or blue, the single colour sheet is the most economical sheet for backlighting projects where tuneable white or RGBW lighting is not required.



The single colour sheet is available in 2 configurations, a standard version for backlighting thinner materials or areas with less ambient light, or a high output version specially designed for backlighting thick materials or areas with high levels of ambient light.

	Standard Version	High Output Version
Input Voltage	24 VDC	24 VDC
Power	11 W per sheet 93 W/m ²	32 W per sheet 271 W/m ²
Luminous Flux	1100 - 1200 lm per sheet 9728 lm/m ²	3200 - 3500 lm per sheet 28340 lm/m ²
IP Rating	IP20 as standard IP65 also available	IP20 as standard IP65 also available
Beam Angle	120°	120°
Lightbox Depth	4 - 15 cm	4 - 15 cm
Dimensions	503 x 235 mm	503 x 235 mm
Minimum Increment	33.57 x x33.57 mm	33.57 x 33.57 mm
Available colour temperatures	3000K, 4000K, 6500K, 10000K, Red, Green, Blue	3000K, 4000K, 6500K, 10000K, Red, Green, Blue



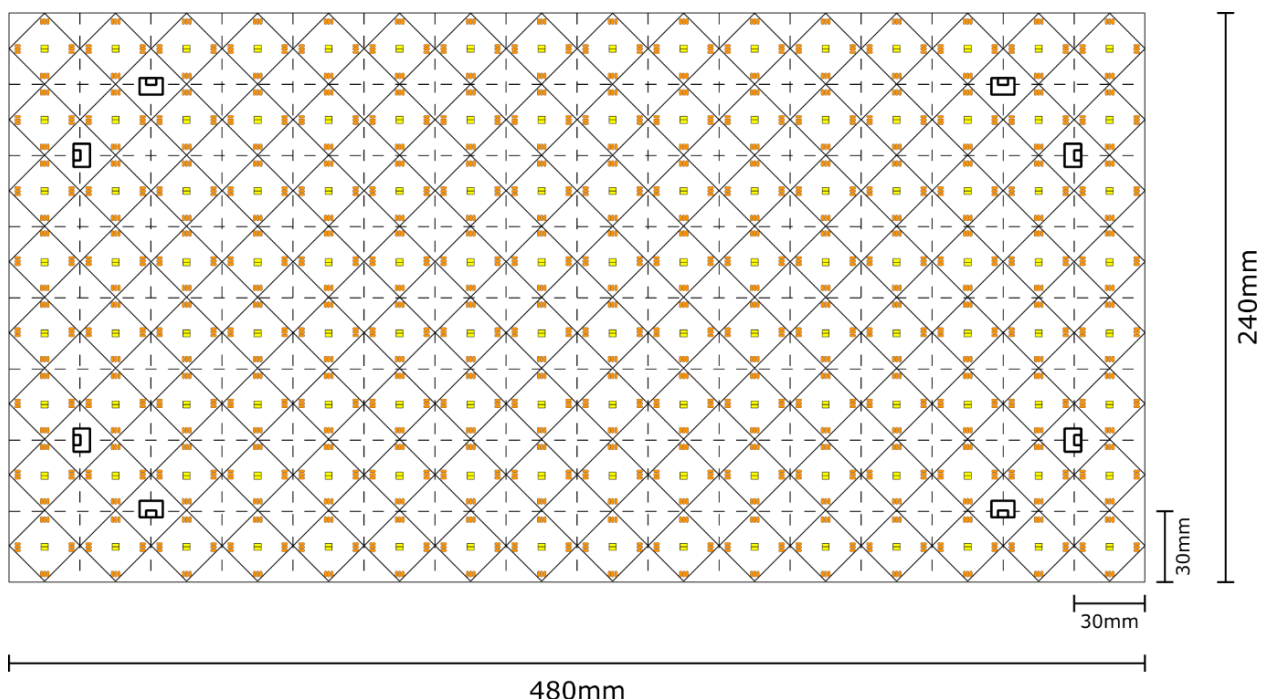
TUNEABLE WHITE LED SHEET

Our tuneable white LED sheet consists of a matrix of 128 tuneable LEDs, which when paired with one of our controllers allows the colour temperature to be adjusted dynamically. The advantages of a tuneable system for backlighting are numerous, especially when backlighting natural stones.



There is no need to pre-determine what colour temperature will complement the material being backlit, simply tune the colour temperature in situ to bring out the best of the material being lit. Alternatively, tuning the colour temperature can be used to radically change the look and feel of the material, allowing for the mood to be changed dynamically.

Input Voltage	24 V DC
Power	16 W per sheet (per channel) 139 W/m ²
Luminous Flux	1440 - 1600 lm per sheet 13194 lm/m ²
IP Rating	IP20 as standard IP65 also available
Beam Angle	120°
Lightbox Depth	4 - 10 cm
Dimensions	480 x 240 mm
Min Increment	30 x 30 mm
CCT range	2700K - 6500K



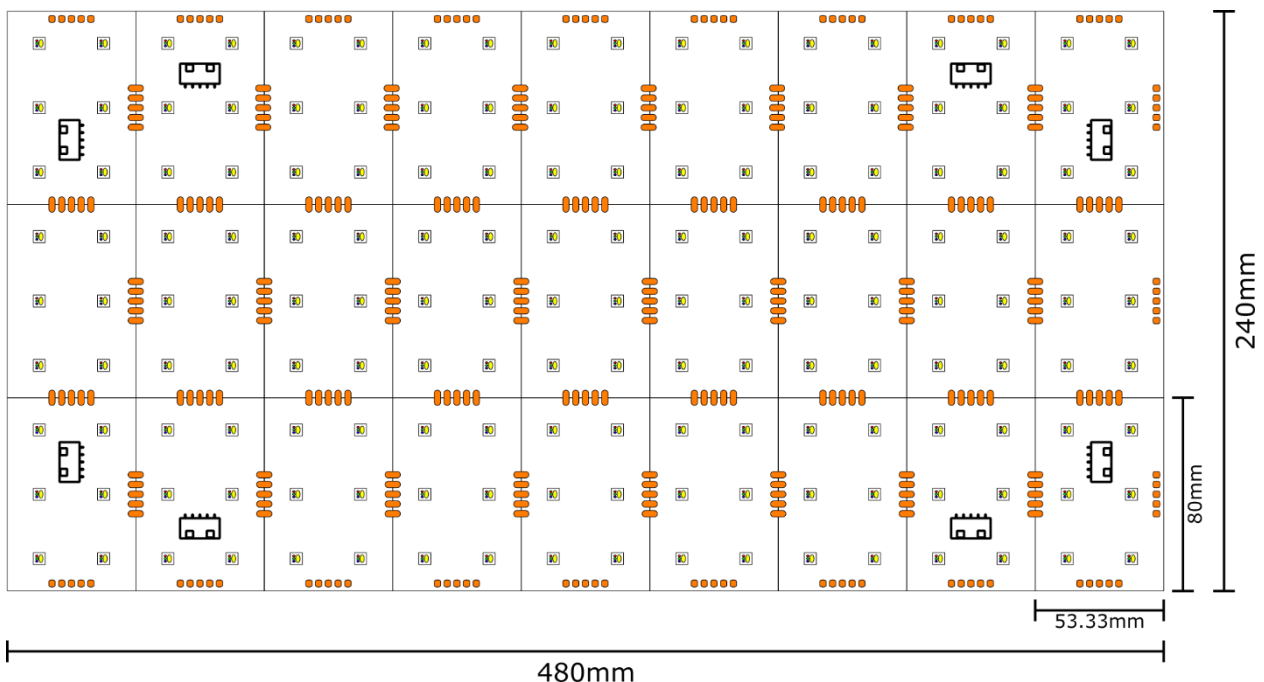
RGBW LED SHEET

Our RGBW LED sheet consists of a matrix of 162 RGBW LEDs, which when paired with one of our controllers allows both the colour to be set to any RGB value, as well as a range of pastel colours thanks to the additional white LED. The white LED can also be enabled on its own to backlight the material with a high quality white light.



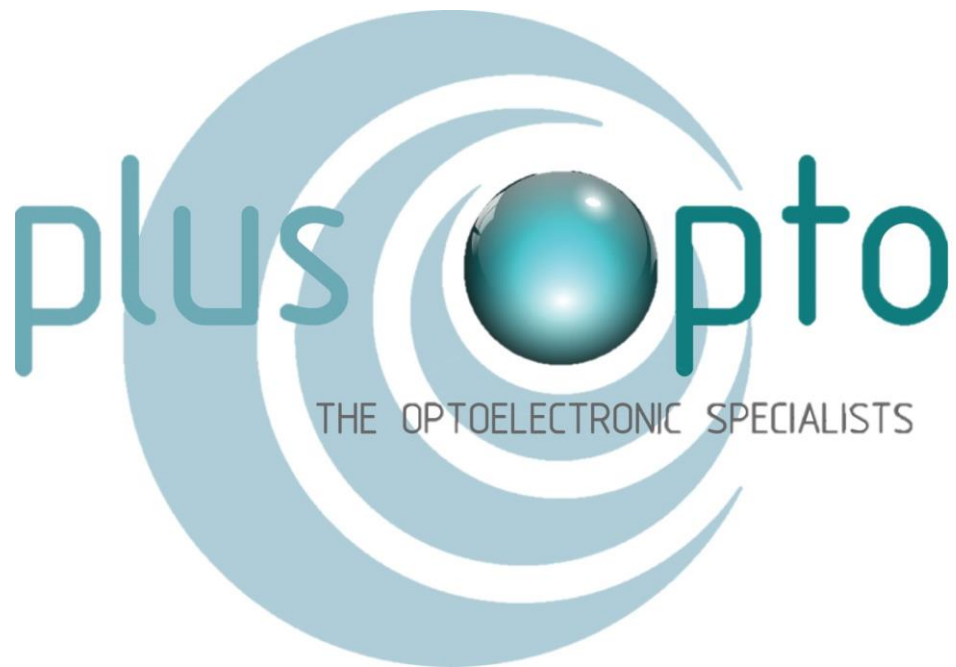
This opens up a world of possibilities, allowing materials to be backlit with dramatic colour effects that bring out all the details of the material being lit, whilst still allowing for a simple and effective white backlight.

Input Voltage	24 V DC	
Power	12 W per channel per sheet 105 W/m ² per channel	
Luminous Flux	R: 240 lm G: 660 lm B: 144 lm W: 1080 lm	R: 2083 lm/m ² G: 5729 lm/m ² B: 1250 lm/m ² W: 9375 lm/m ²
IP Rating	IP20 as standard IP65 also available	
Beam Angle	120°	
Lightbox Depth	4 – 15 cm	
Dimensions	480 x 240 mm	
Min Increment	53.33 x 80 mm	
Available Colour Temperatures	3000K, 4000K, 6000K, 10000K	



ORDER CODES

Part Number	Order Code	Description	CCT (°K)	Luminous Flux (lm/m ²)	Power (W/m ²)	Dimensions
PLS500x235-105SLY2835-30K-24v/11w	08470MSC	White 11W	3000K	9728 lm/m ²	93 W/m ²	503x235mm
PLS500x235-105SLY2835-40K-24v/11w	08471MSC	White 11W	4000K	9728 lm/m ²	93 W/m ²	503x235mm
PLS500x235-105SLY2835-65K-24v/11w	08472MSC	White 11W	6500K	9728 lm/m ²	93 W/m ²	503x235mm
PLS500x235-105SLY2835-30K-24v	08473MSC	White 32W	3000K	28340 lm/m ²	271 lm/m ²	503x235mm
PLS500x235-105SLY2835-40K-24v	08474MSC	White 32W	4000K	28340 lm/m ²	271 W/m ²	503x235mm
PLS500x235-105SLY2835-65K-24v	08475MSC	White 32W	6500K	28340 lm/m ²	271 W/m ²	503x235mm
PLS480x240-128CT-24V	08482MSC	Tuneable White 16W	2700-6500K	13194 lm/m ²	139 W/m ²	480x240mm
PLS480x240-162RGBW30-24V	08467MSC	RGBW	3000K	R: 2083 lm/m ² G: 5729 lm/m ² B: 1250 lm/m ² W: 9375 lm/m ²	R: 105 W/m ² G: 105 W/m ² B: 105 W/m ² W: 105 W/m ²	480x240mm
PLS480x240-162RGBW40-24V	08468MSC	RGBW	4000K	R: 2083 lm/m ² G: 5729 lm/m ² B: 1250 lm/m ² W: 9375 lm/m ²	R: 105 W/m ² G: 105 W/m ² B: 105 W/m ² W: 105 W/m ²	480x240mm
PLS480x240-162RGBW65-24V	08469MSC	RGBW	6500K	R: 2083 lm/m ² G: 5729 lm/m ² B: 1250 lm/m ² W: 9375 lm/m ²	R: 105 W/m ² G: 105 W/m ² B: 105 W/m ² W: 105 W/m ²	480x240mm



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