

Bright Green Matrix[™] - Product Data Sheet

Why Use Bright Green Matrix[™]?

Bright Green Matrix[™] is an LED backlight system designed to illuminate large format signs, light boxes and displays. A patent pending *suspended array*[™] of LEDs is used to increase or decrease the light output, in line with the performance and budget requirements of the project.

Bright Green Matrix[™] offers a real alternative to fluorescent tubes, reducing energy consumption by up to 80%, eliminating maintenance costs and producing evenly lit graphics without the 'zebra' striping often associated with tubes.

Bright Green Matrix[™] can be used equally effectively in new build constructions or retrofitted into existing installations.

The Product

Bright Green Matrix[™] is supplied in standard lengths, each pre-installed with LEDs spaced at 125mm intervals. The LEDs are housed in robust aluminium sections which serve to protect the lighting components, help dissipate heat and provide a rigid profile which can be easily fitted into existing or new light box housings. Each length is supplied with connection cables and the LEDs are suitable for external use.



Using 3 standard lengths, Bright Green Matrix[™] can be quickly configured to illuminate a wide range of different light boxes and achieve immediate results.

Code	Length (mm)	Width (mm)	No. of LEDs	Output (Lumens)	Operating voltage	Power
BGT-M1-625	625	25	5	350	20V	7W
BG-M1-1250	1,250	25	10	700	20V	14W
BG-M1-1875	1,875	25	15	1,050	20V	21W

Applications

Bright Green Matrix™ is ideally suited to signs, displays and light boxes in retail, commercial and advertising environments; it is equally suited to retrofitting into existing boxes or incorporating into new designs.

In order to provide even illumination across the display face, it is recommended that there is a minimum of 100mm between the LED plane and the face of the graphic. This distance can be reduced with the use of a separate diffuser or by printing onto a diffusing substrate.

Installation

Bright Green Matrix™ allows full flexibility when designing and installing. By adjusting the spacing between the Matrix lengths and hence the density of the LED array, the light output and power requirement can be pre-determined.

The table below illustrates the level of light output expected, based on a spacing range of 125mm to a maximum of 200mm. The table assumes a total illuminated area of 1250 x 1250mm.

Spacing between lengths (mm)	LED spacing (mm)	No. of lengths	Nos. of LEDs	Output (lumens)	Power
125	125	9	90	6,300	126W
150	125	7	70	4,900	98W
175	125	6	60	4,200	84W
200	125	5	50	3,500	70W

Bright Green Matrix™ is supplied pre-drilled for simple fixing to the base of the light box or to an internal bracket.

Bright Green Matrix™ can be fitted vertically or horizontally within a light box. There is no limit to the size.

Bright Green Matrix™ operates at 20V, compatible power supplies are available. Please refer to the installation guide to determine the power supply configuration.



Ready for installation



Matrix in place



Power on



Completed

Contact and Support

For further support, contact your distributor or email support@brightgreentechnology.com

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