Specification

Product name： Economic High Efficiency 3-LED Module

Product model： PWM7816-3YL2835-12V

formulate	verify	approve

UL CE RoHS LED module DC 12V 2835 SMD IP 65 5 warranty

T +44 (0) 1942 671122 E sales@plusopto.co.uk W www.plusopto.co.uk
B13 Derwent Court William Way Moss Industrial Estate Leigh Lancashire WN7 3PT

Part No.:

PWM7816-3YL2835-12V	78.4x15.5x7.6mm	3-LED SMD2835 175° Waterproof DC12V Constant Voltage LED Module

Product picture:

Features:

1、 High light efficiency SMD2835 Chip, can reach 140Lm / W

2、 Large beam angle 175 degrees, uniform light;

3、 Using aluminum PCB board, good heat dissipation;

4、 Injection on the back of the module, the module thickness is thin and lightweight;

5、 CE & RoHS approved

Application:

Suitable for 5-15cm sign letter or airports, subways, banks, buildings, shopping malls and other advertising etc single side light box.

Parameters：

Item No.	LED Color	CCT（K） Wavelength (nm)	CRI Ra	Color tolerance SDCM	Bean Angle （°）	Luminous Flux （lm）	Lighting effect (lm/W)	Input Voltage （VDC ）	Current （mA）	Power (W/pcs)
PWM7816-3YL2835-12V	White	3000 4000 6500 10000	≥80	≤5	175	200	135	12	120	1.44

Other parameters：

Item No.	IP Rank	Working temperature （℃）	Storage temperature (℃)	Standard cascade number (pcs)	Max Cascade number from one end of power supply (pcs)	Max Cascade number from two end of power supply(pcs)	weight (g/pc)
PWM7816-3YL2835-12V	IP65	-25~+60	-25~+70	20	20	40	10.3

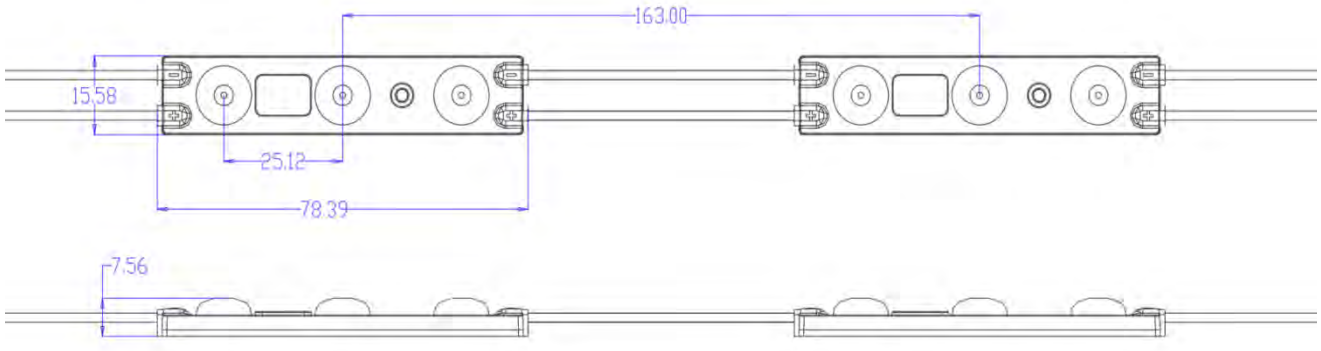
Remark：

（1）Test environment temperature is 25±2℃ (normal temperature)；

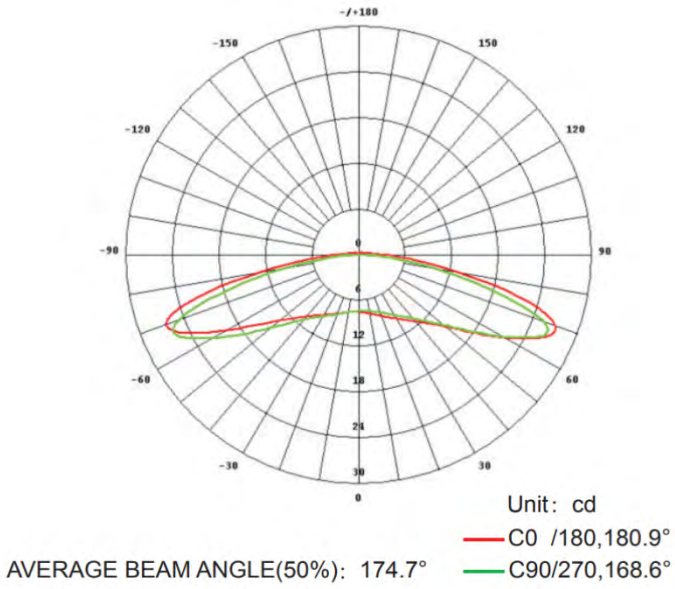
（2）The above data is typical, the actual parameters of the product may differ from the typical data; the data is subject to change without notice；

（3）The above "-" indicates that the parameters of this product are not required at the moment.

Dimensions：

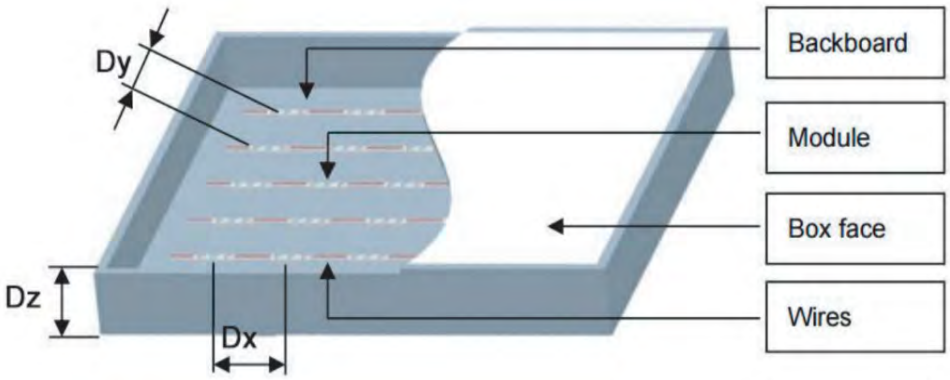


Light distribution curve / isolux diagram：

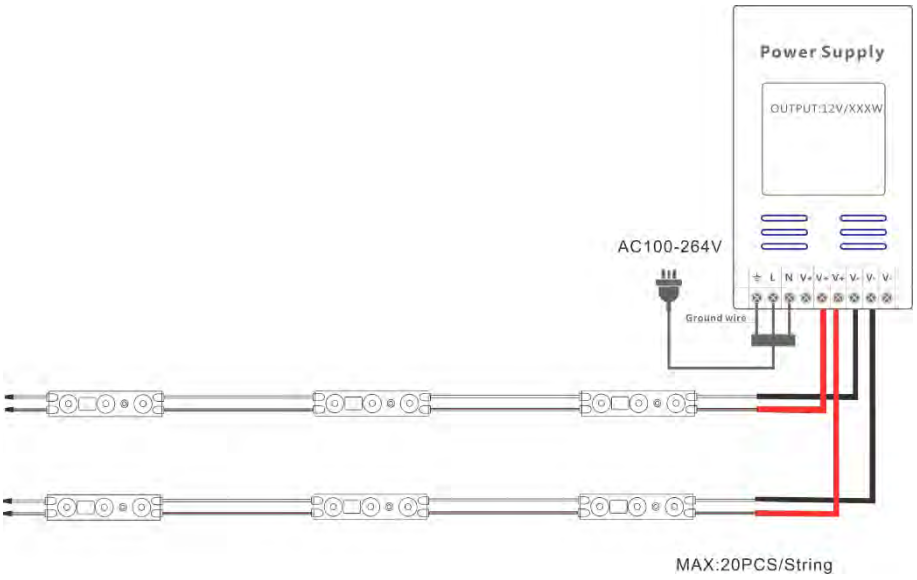


Module Layout Density Guidelines:

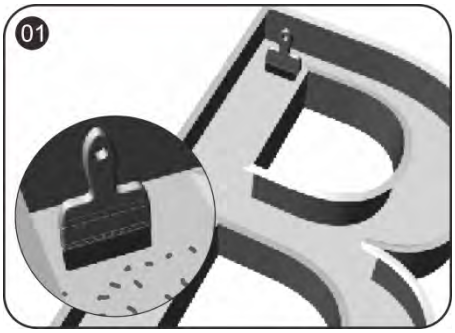
Light box thickness （mm）	LED Spacing （mm）	Installation density (PCS/m²)	Surface illumination (lux)	Watts per square （W/m²）
40mm	Dx=110mm，Dy=65mm	140	7000-12000	207
50MM	Dx=130mm，Dy=80mm	96	7000-8000	138
60MM	Dx=150mm，Dy=100mm	66	5000-6500	96
80MM	Dx=160mm，Dy=120mm	52	3500-5000	74
100MM	Dx=160mm，Dy=140mm	44	2500-3500	64
120MM	Dx=160mm，Dy=160mm	39	2000-3000	56



Installation：

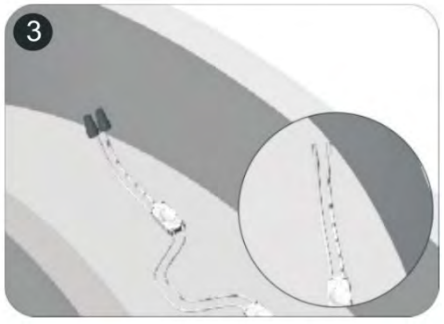


Installation Steps:

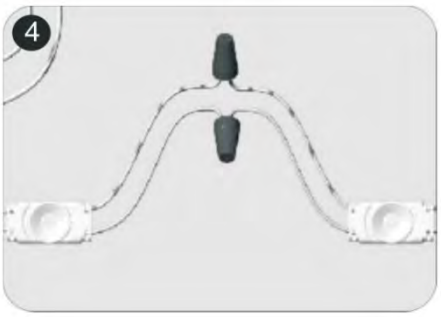


◎ Clean up debris on the mounting surface to ensure surface cleaning.

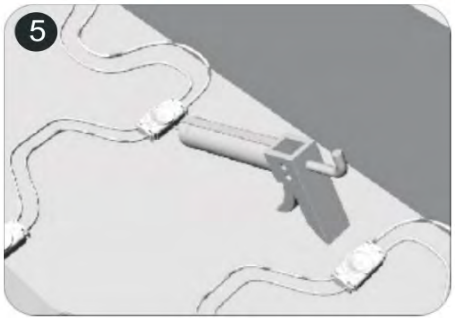
◎ To Peel off the adhesive tape on the back of the module, and lightly stick to installation slot for initial positioning.



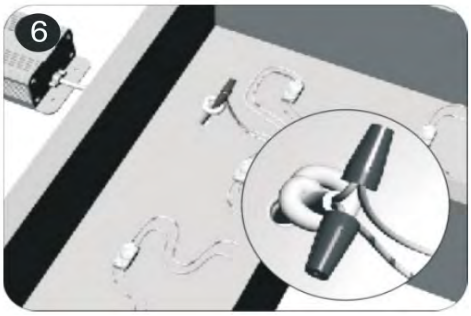
◎ When the wire of the end module is exposed, first peel the wire for about 10mm, then screw the positive and negative wires into the terminal separately and do waterproof and insulation protection and treatment.



◎ When the modules are connected in series, the positive and negative wires of the modules are peeled separately for 10mm and then connected with terminal, and do waterproof, insulation, anti - short circuit and anti - corrosion treatment.



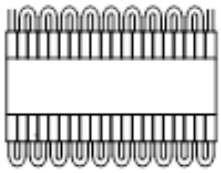
◎ After adjusting the module to the optimal installation position, squeeze the double-sided adhesive and fix it with neutral glass adhesive.



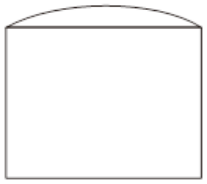
◎ The positive and negative wire need to be correctly connected to the positive and negative terminals of the power supply output.

Packaging：

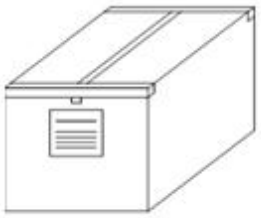
Item No,.	Qty per roll （pcs)	Qty per carton(bag)	Total qty （PCS）	Total Weight (KG)	Dimension of outer carton （mm）		
					Length	Width	Height
PWM7816-3YL2835-12V	200	15	3000	32.1	520	300	280



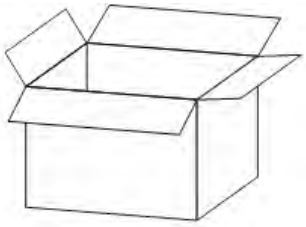
20 pcs per string



Label stick on ESD bag
200pcs/bag



Sealing



3200pcs per carton

Common faults of products and troubleshooting methods：

Fault phenomenon	Potential causes	Solution
All LEDs are off	1. The power is off.	Power transmission
	2. Automatic protection of the power supply after the output of the switching power supply is open or shorted.	Trouble shooting and recovering the power supply
	3. LED modules with power supply terminal polarity reverse	Check the wire connection status to ensure that the positive and negative connections are correct
Some of the LEDs are off	1. Part of the switching power supply is not powered	Check the power supply system and troubleshoot
	2. Part of the electricity supply line error	
	3. Partial led module with reverse polarity connection	Correct connection
LED brightness is not the same or the brightness is not enough	1. Power overload	Replace the power supply with a larger power according to the load
	2. Switching power supply line or circuit loss is too large	Ensure that the operating voltage of the led strips is within ±5% of the rated voltage 1. Cut the length of the wire between the strip and the power cord or use wires with larger diameter 2. Ensure that the number of each led module is less than or equal to the maximum allowable cascade and make each module with a similar connection.
	3. Over connection of LED module	Adjust the number of modules for each power supply and to meet the maximum connection requirements for each power supply
LED flashing	1. Poor contact at the wiring point	Find out the poor contact and troubleshoot.
	2. Switching power supply failure	Replace the switching power supply

T +44 (0) 1942 671122 E sales@plusopto.co.uk W www.plusopto.co.uk
B13 Derwent Court William Way Moss Industrial Estate Leigh Lancashire WN7 3PT