



vivalyte

SMART LED SOLUTIONS

SIGNAGE MODULES

Backlit waterproof LED modules

VTM-STL-H

Top grade 2835 SMD LED brings high brightness, wide angle lens, stable and uniform light distribution for letters and illuminated signs.

VTM-STL-H

General specifications

Input voltage	12/24V DC
Efficacy (lm/W)	160
Ra	≥70
IP class	IP67
Lifetime	50 000H L70
LED type	2835 SMD
Certificates	CE/RoHS/UL

Applications

- Letters
- Illuminated signs
- Creative lighting art



Key features



Outdoor use



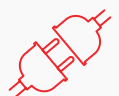
Cuttable every LED



5 years warranty



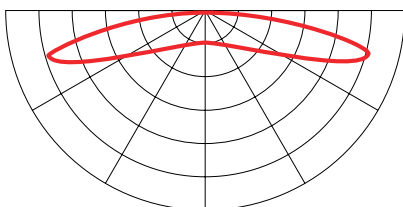
Dimmable



Easy connection and installation

Light distribution graph

Beam angle 170°



Available color temperature

Other color options available on request

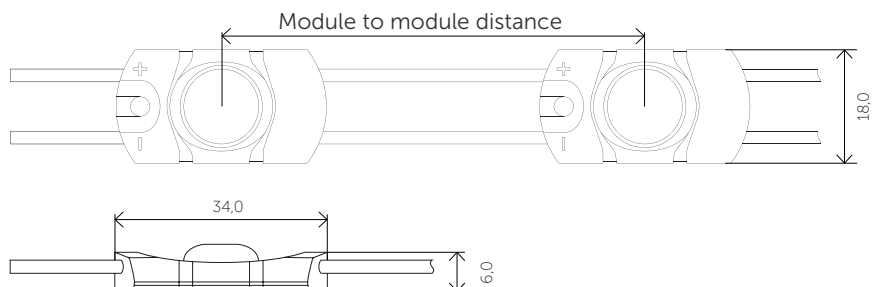


6500K

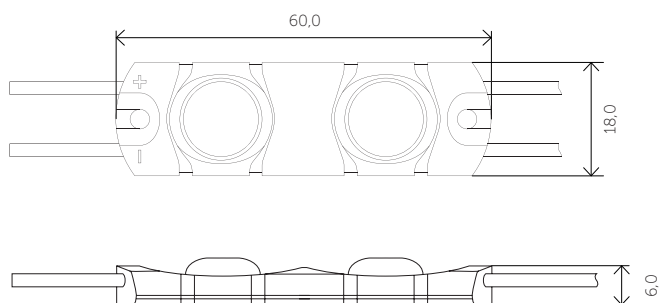
Profile drawings

Unit:mm

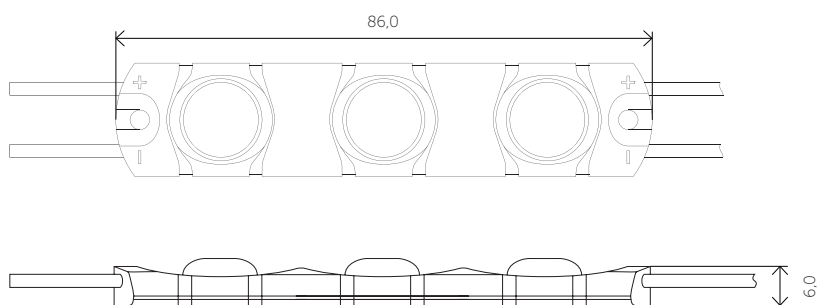
VTM-STL-H1



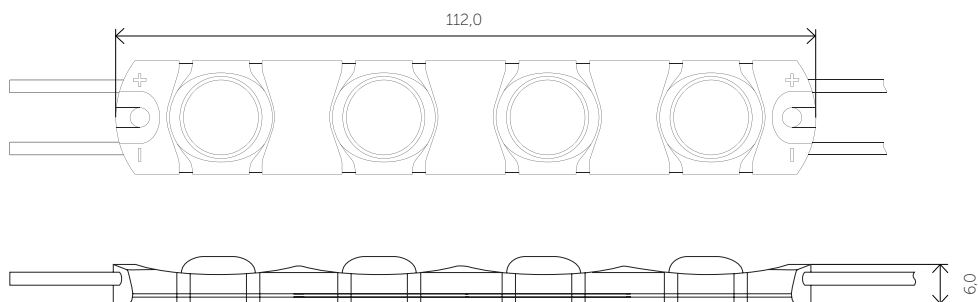
VTM-STL-H2



VTM-STL-H3



VTM-STL-H4



Installation reference

24 V

Article name	Surface Material	Depth(H) (mm)	Illumination (lux)	Uniformity	Density (pcs/m ²)	Spacing (X*Y)mm	Power Density (W/m ²)
VTM-STL-H-2	White Soft Film	60	6420-8020	0.80	10*10	100*100	72
		80	4160-5220	0.80	8*8	120*120	46
		100	2840-3660	0.78	6*7	160*140	30
		120	2170-2630	0.83	5*6	180*160	22
		150	1843-2170	0.85	5*5	180*180	18
		180	1674-1879	0.89	5*5	180*180	18
VTM-STL-H-4	White Soft Film	80	7470-8760	0.85	6*8	160*120	69
		100	5070-6210	0.82	6*6	160*160	52
		120	3410-4370	0.78	5*5	200*200	36
		150	2430-2880	0.84	4*4	250*250	23
		180	2240-2630	0.85	4*4	250*250	23

12V

Article name	Surface Material	Depth(H) (mm)	Illumination (lux)	Uniformity	Density (pcs/m ²)	Spacing (X*Y)mm	Power Density (W/m ²)
VTM-STL-H-1	White Soft Film	50	5190-5610	0.94	12*12	80*80	52
		60	3280-3880	0.85	10*10	100*100	36
		80	2050-2360	0.87	7*8	140*120	21
		100	1591-1772	0.90	6*7	160*140	16
		120	1440-1532	0.94	6*7	160*140	16
VTM-STL-H-2	White Soft Film	60	6810-7560	0.90	10*10	100*100	72
		80	3890-4470	0.87	7*8	140*120	41
		100	2450-3020	0.81	5*6	180*160	22
		120	1930-2210	0.87	5*5	200*180	18
		150	1734-1927	0.90	5*5	200*180	18
		180	1476-1641	0.90	5*5	200*180	18
VTM-STL-H-3	White Soft Film	60	9820-11750	0.84	10*12	100*80	130
		80	5250-5710	0.92	7*7	140*140	53
		100	3100-3580	0.87	5*5	180*180	27
		120	1783-2140	0.83	4*4	250*250	18
		150	1642-1857	0.88	4*4	250*250	18
		180	1513-1648	0.92	4*4	250*250	18

Safety & operation instructions

- Requires proper installation by qualified people
- All connections must be made while disconnected from the main power
- For indoor installation environment only
- Operating temperature range: -20°C to 60°C
- Storage temperature range: -20°C to 70°C
- LED bars can be fixed with double-sided tape or screws, clean surface required
- 12/24V DC input: safe, low voltage loss & longer run

Specifications

Article name	Input voltage	Power	Lumen output	Efficacy (lm/W)	Maximum series connections (pcs)	(mm)
VTM-STL-H-1 65K	12V (DC)	0.36W	58 lm	160	50	158
VTM-STL-H-2 65K	12V (DC)	0.72W	115 lm	160	30	204
VTM-STL-H-3 65K	12V (DC)	1.08W	173 lm	160	25	250
VTM-STL-H-2 65K	24V (DC)	0.72W	115 lm	160	50	204
VTM-STL-H-4 65K	24V (DC)	1.44W	230 lm	160	30	296

Backlit LED modules

VDL-S1E-12

Smallest and thinnest 1W SMD LED, with Ultra brightness, uniform light, long lifespan and stable performance. Used **for indoor and outdoor signage** and totems, advertising box letters or channel letters, back light boxes & banners, exhibition stands, eye catchers for indoor walls, ceilings, ...

VDL-S1E-12

General specifications

Input voltage	12 VDC
Input current	100 mA
Light output	105 lm
CRI	≥ 76
Power consumption	1,2 W
IP class	IP65
LED type	3030 LEDs
Certificates	CE/RoHS/UL

Applications

- Advertising box letters
- Backlight boxes and banners
- Exhibition stands
- Ceilings & walls
- Signage letters



12V



Key features



Outdoor use



Cuttable **every LED**



3 Years **warranty**

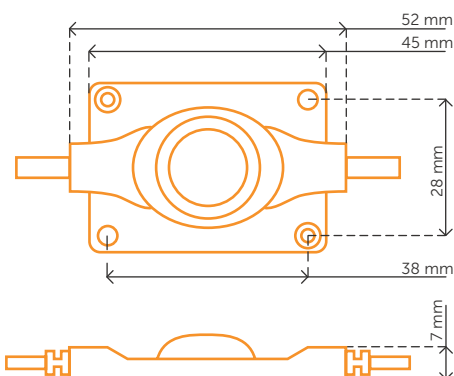


Dimmable



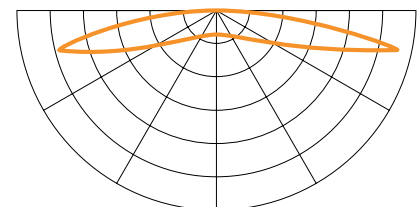
Easy connection
and installation

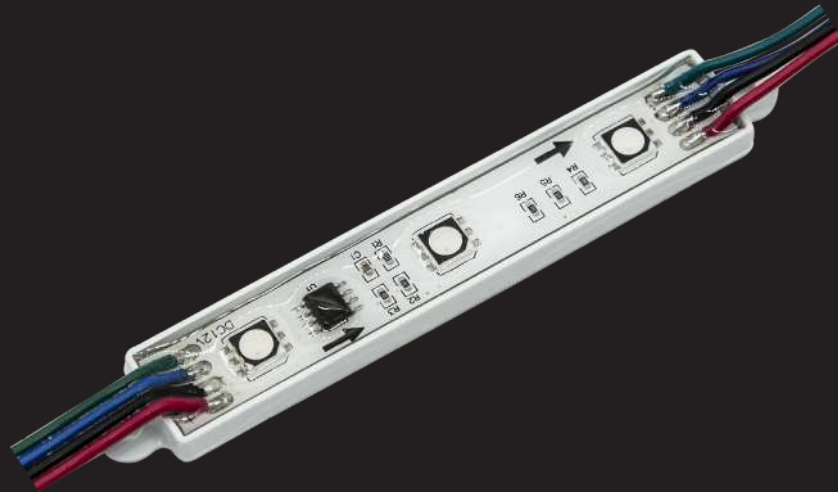
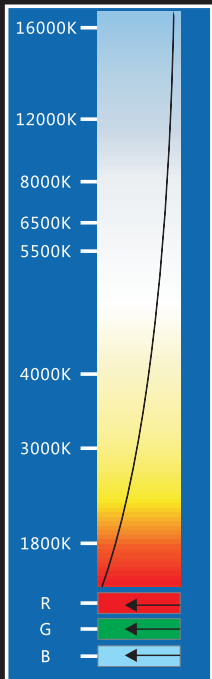
Dimensions



Light distribution graph

Beam angle 160°





Features

1. Adopt TM1914A IC for long distance signal transmission without signal distortion or weakness
2. PWM signal, 256 grades brightness controllable
3. Single-line three-channel LED constant current drive, the external controller can control the chip with single line
4. The signal can resume from break point
5. Support multiple controllers to realize various light effects
6. Controller must be used to lit the product

Application

Suitable for outdoor architectural decoration like big logo, building, amusement park, hotel, curtain wall, sign and stage etc.

Installation

1. Fix by self-adhesive tape
2. Fix by screws

Specification

Model No.	Light Color	Color Temperature /Wavelength(K/nm)	Beam Angle	Ra	Typical Luminous Flux value(lm/pcs)	Efficacy (lm/W)	Voltage (V DC)	Power (W/pcs)
VTM-PQ5-B	R	620-625	145°	--	5-7	≥24	12	0.2
	G	520-525			10-12	≥49		0.2
	B	465-470			2-3	≥9		0.2
	RGB	100000			19-21	≥24.5		0.65

Other Parameters

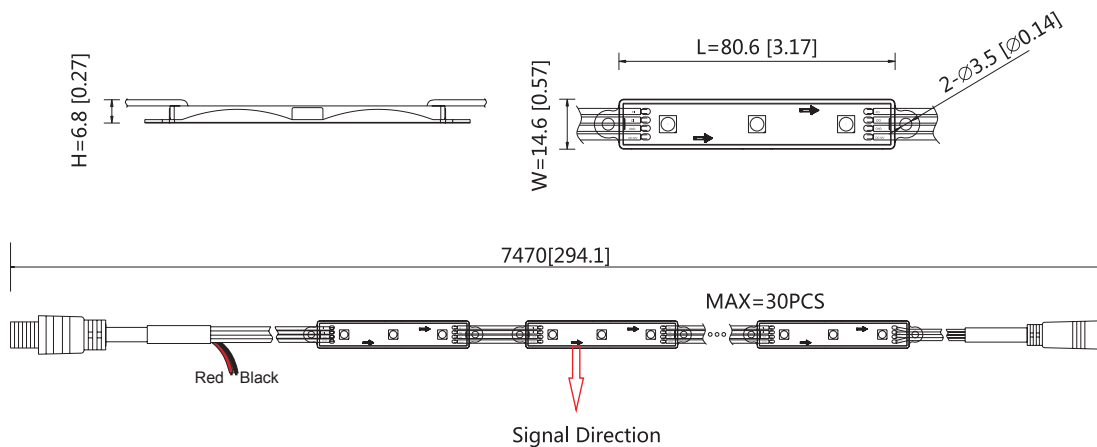
Model No.	LED Qty/pc	Standard Packing Quantity(pcs)	Max Run (pcs)	Min Cuttable Length(pcs)	Working Temperature	Storage Temperature
VTM-PQ5-B	3	30	30	1	-20~+60°C	-20~+70°C

NOTE:

1. Test environment temperature : 25±2°C.
2. The above data is typical values. The actual data of each single product may differ from the typical values. The data is subject to change without notice.
3. Luminous flux is tested when lighting on with the single color.
4. Different color temperature will make luminous flux different.
5. "-" means no data for now.
6. Power and luminous flux tolerance within ±10%.

Profile Drawings

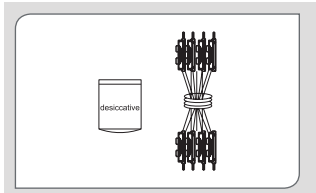
Unit:mm



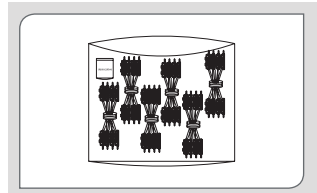
NOTE:

Controller must be used to lit the product. Please contact the sales for detail size.
The signal direction is from controller to outside.

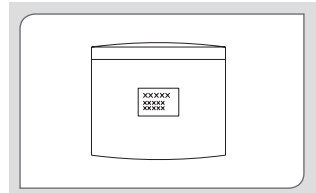
packing



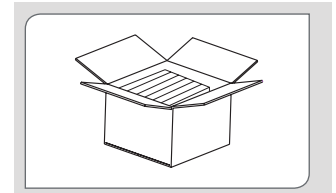
Prepare the desiccant and bind the product.



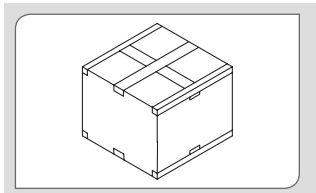
Put the product and desiccant into static shielding bag.



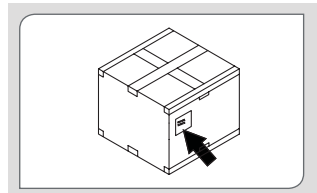
Seal and label the static shielding bag.



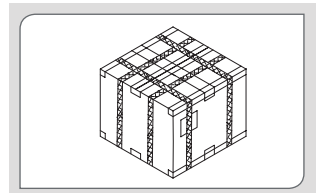
Put the static shielding bag side by side into carton box.



Seal the box.



Label the box;



Use packing belt to pack after adding the edge protectors.

Packaging information

Model No.	Product Size L*W*H(mm)	Carton Size(mm)	PCS/Bag	Bag/Carton Box	Net Weight(kg)	Gross Weight(kg)
VTM-PQ5-B	80.6X14.6X6.8	570X375X285	60	20	15.03(1±10%)	16.52(1±10%)

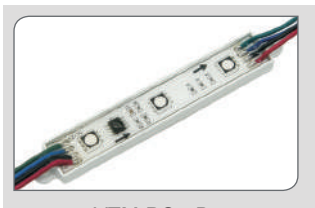
Note:

Packing materials: static shielding bag and carton box.

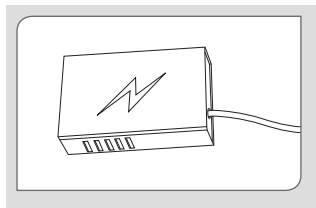
The above quantity and weight are only for the illustrated packaging method. There will be differences in the quantity and weight with other packaging methods.

Installation

1. Accessories & Tools



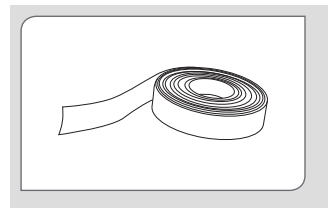
VTM-PQ5-B



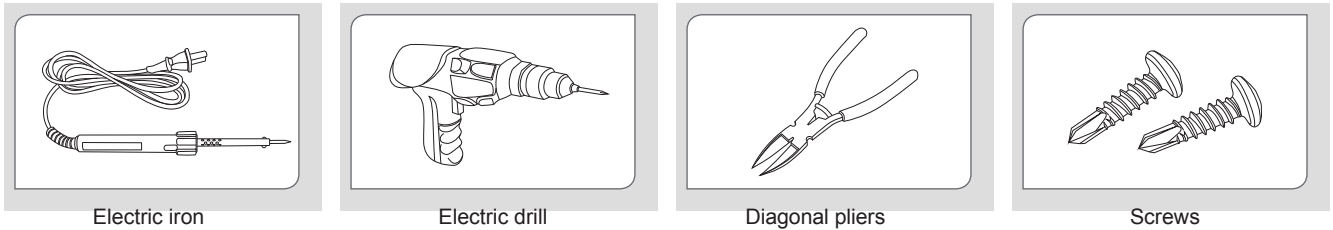
LED power supply



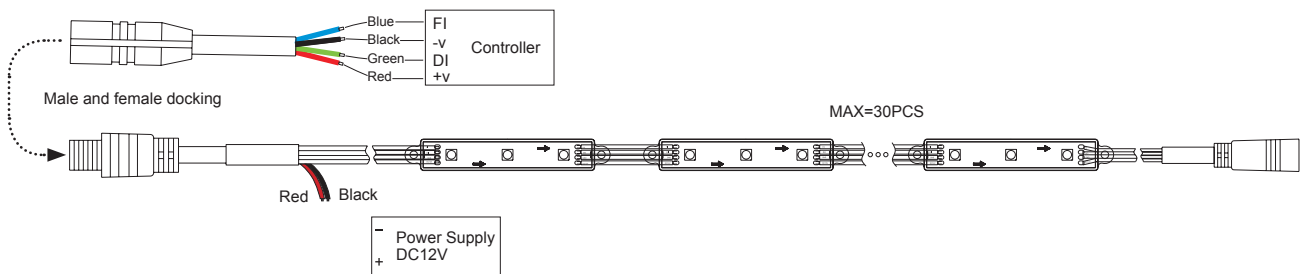
Controller



Insulation Tape



2. Wiring Method



3. Power Supply & Controller Connection

Power Supply Wiring Diagram

Power Supply Rated Power(W):P

Module Rated Power(W):P_{Module}

Controller Load:M(pcs)

Product Max Run: MAX=30PCS

Power Supply LED Loading: N

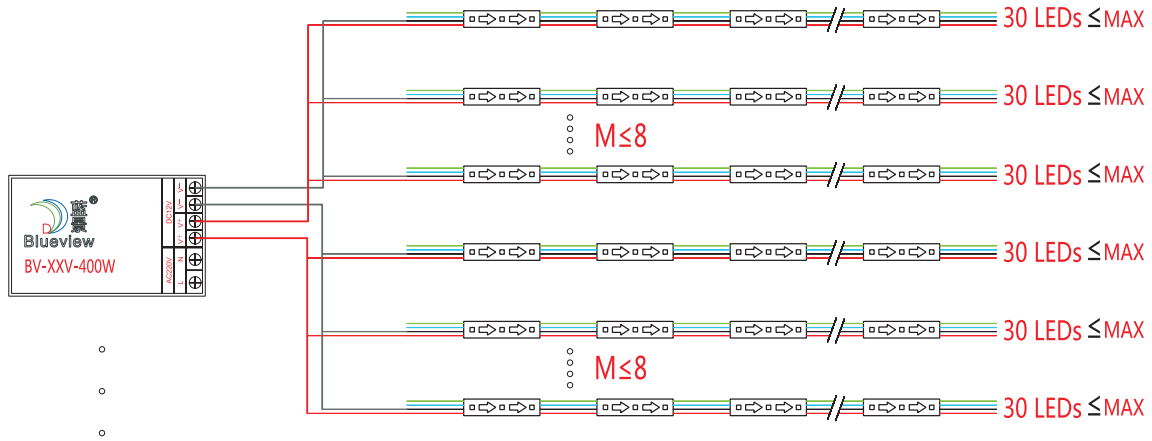
$$N = \frac{PX0.8}{P_{Module}}$$

Eg: Use 0.65W PQ5-B, 400W power supply and 8 ways output controller

$$N = \frac{PX0.8}{P_{Module}} = \frac{400 \times 0.8}{0.65} \doteq 492(\text{pcs})$$

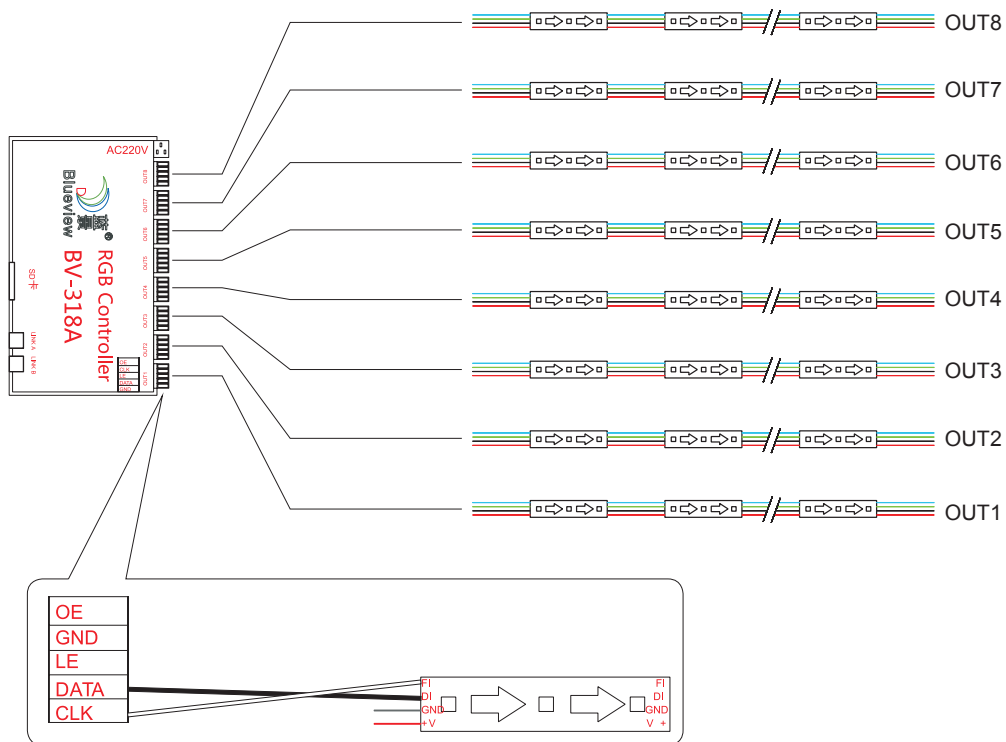
Note:

1. The value of N is taken as an integer.
2. Try to use same amount of products in each output way.
3. The working voltage of module must be matched with power supply and controller.



Controller Wiring Diagram(M=8)

Connection of Controller BV-318A



Note:

If the controller is too far from the product, or the signal is too weak, an amplifier must be added.
Common market controller: MR-218A,MR-512,T1000,T8000,SP105E,BV-318A etc.

Attentions before installation

- Before installation, check that the product parameters are consistent with the requirements (Seeing product specifications or product labels)
- Load voltage, current, power and power supply should be matched with the product.
- Follow the instructions of wiring diagram (first connect the load and then the power supply) to avoid short circuit.
- Make sure the correct connection of positive and negative poles between products and power supply. Otherwise, the light will not be on.
- Make sure the power cord firmly screwed into the terminal and it should not be pulled out by hands.
- The terminal should have insulation, waterproof and anti-corrosive treatment.

Common Faults and Troubleshoot

Quick Guide		
Problems	Reasons	Solutions
All LEDs can not light on.	No electric supply.	Power on
	Automatic power protection from the open or short circuit in output of the power supply.	Fix the short circuit problem.
	Wrong connection of power supply.	
LEDs can not light on partly.	Some switching mode power supplies are not powered.	Check the power supply system to fix it.
	Power supply line error.	
	Mistaken wire connection of some of products	Correctly connection
Brightness of LED is inconsistent for insufficient.	Power overloaded.	Replace with more powerful power
	Power supply circuit excessive consumption.	Make sure the working voltage of the product within $\pm 5\%$ of standard voltage, or keep balance by circuit power consumption.
	Excessive quantities in series connection of the product	Reduce the quantities of the product in series connection to meet requirement.
LED flicker.	Connection point fault.	Remove bad connection point.
	Switching power supply failure.	Replace a new power supply.
	Wrong Installation or use of products	Please follow the instructions

Warning

- Do not disassemble or retrofit the light. Do not touch the surface of the light with a sharp object.
- Do not do live-line working during installation, especially for high voltage product.
- Do not use any organic chemical solvents.
- Use neutral glass adhesive to fix this product and it needs to be dried 4 hours in the open environment after operation.
- Treat the ends and the circuit connection points that are not connected to the main line with insulation, waterproof, and anti-corrosion in the installation.
- Use 18AWG (0.75mm² cross-sectional area) or thicker core wire to avoid adverse consequences caused by overheating, if the power cable need to lengthen.
- Make sure the input voltage meets the requirements and lines are connected correctly before lighting on.
- This product is for signage, and do not use as general lighting.
- Series connection within the max run.
- The length of the power cable between the power supply and the led strip should not exceed 2 meters. Otherwise, large circuit loss will lead to inconsistent brightness.
- Installation, maintenance and repair should be operated by a qualified technician.

Statements and Recycling

Statements:

Repair should be operated by a qualified technician, if the external circuit or main line of this product is damaged.
The parameters given in this manual are typical values and for reference only.
All illustrations and drawings in this manual are for reference.
This product is subject to change without notice.

Recycling:

LED lighting products belongs to electronic products, please do recycling treatment according to the relevant WEEE directives.

RGB/RGBW MODULE

PS5-B



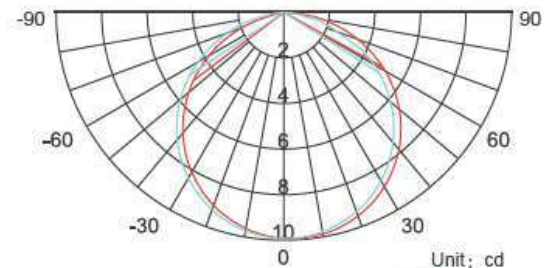
DC 12V **3** yrs warranty

COLOR AVAILABLE



Red Green Blue W

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



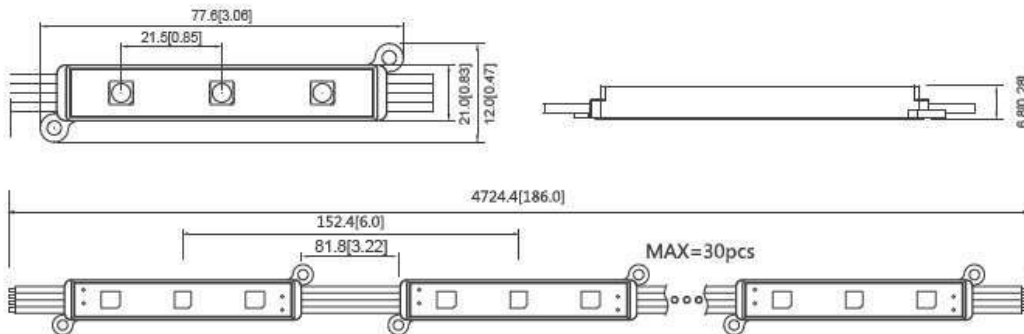
Unit: cd
 — C0 /180,114.1°
 — C90/270,113.8°
 AVERAGE BEAM ANGLE(50%): 114.0°

APPLICATION

Suitable for big size channel letters or light box
 5.5modules/meter

DRAWINGS

Unit : mm/inch



OPTICAL & ELECTRICAL PARAMETERS

Model No.	Voltage (DC V)	Beam Angle	CCT/Wavelength (K/nm)	Luminous Flux (lm/pcs)	Efficacy (lm/W)	Ra	Power (W/pc)	Max Run (pcs)
PS5-B	12	120°	W:100000+	22	30	--	0.72	30
			R:620-625	7	27	--	0.24	
			G:525-530	13	52	--	0.24	
			B:465-470	3	13	--	0.24	

VSL Edgelit LED Module

Designed for Edge-lit illuminating light box in all shapes

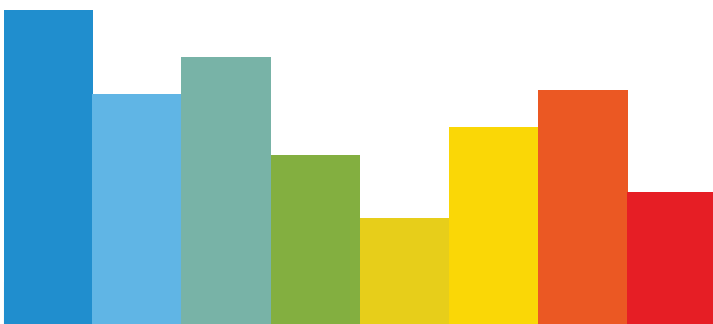


Applications

- Single or double sided light boxes
- Retail displays
- Exhibition stand
- Light wall, ceiling, interior

Key Features & Benefits

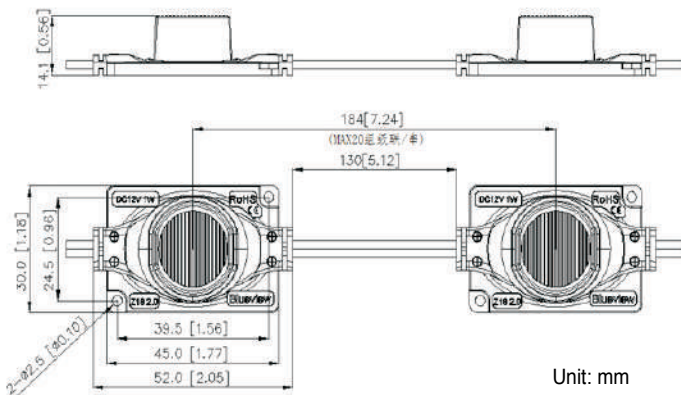
- Top grade 1W SMD3030 LED, high efficiency
- Single LED is around 95lm
- Side-emitting lens, 15°/45° viewing angle
- High reliability, with enhanced cooling design
- Shell: PC + ABS, with fire rating: V0
- Injection material is UV resistance
- Low light decay, extended lifetime, reduced total cost of ownership



Key Technical Specification

Model	LED	Power	CCT	Input Voltage	Lm/W	Light output	Beam Angle	IP rating
VSL-S1-12	1PC	1W	7700-9000K	12V (DC)	95	95 Lumens	10° X 45°	IP65

Light Module Dimensions



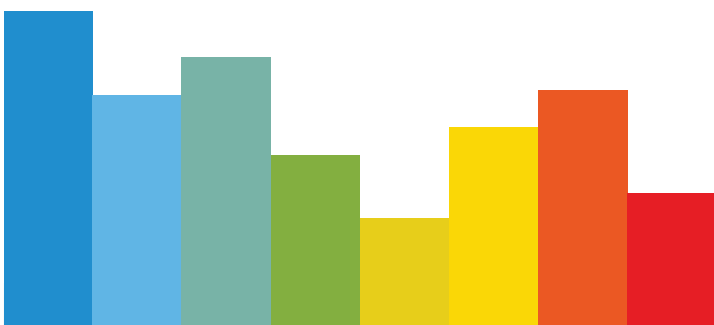
Product Photo



Safety & Operation Notes

- IP65 water proof installation environment.
- DC12V Input, safe, stable and reliable.
- Fixed by 3M self- adhesive and screw, cuttable by each module
- Max. connection: 20pcs per single chain
- All connections must be completed at zero voltage.
- Installation to be carried out by qualified personnel.
- Operating temperature range: -25 to 60°C.
- Storage temperature range: -40 to 70°C.

Project Reference



VSL Edge-Lit LED Module

Side-emitting lens ideal for edge-lit single or double side light box

Applications

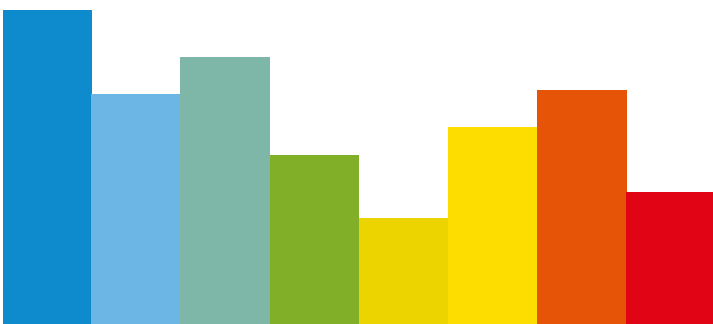
- Single or double sided light boxes
- Retail displays
- Exhibition stand
- Light wall, ceiling, interior

Product Photo



Key Features & Benefits

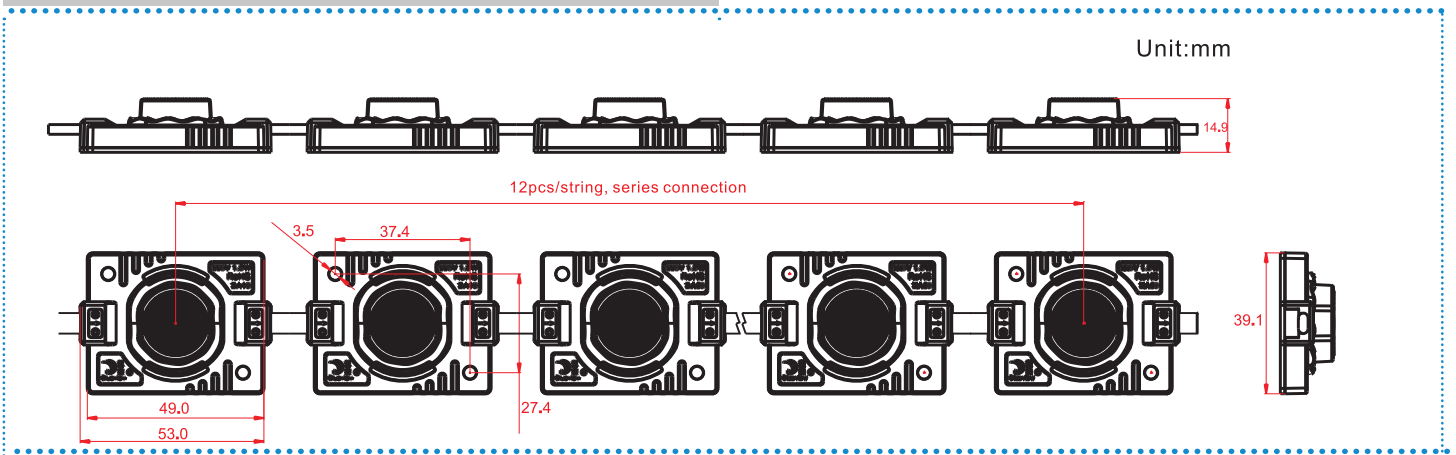
- Highpower Grade A 3030 2W LED, enhanced reliability
- Ultra brightness, single LED light output 190 lumens
- Side-emitting lens, 15°/45° viewing angle
- Constant current design, brings uniform light and stable performance
- Aluminum PCB with enhanced cooling and extended life time (>50000 hours)
- Low light decay, reduced total cost of owner ship.
- Shell: PC + ABS, with fire retarding effect, fire rating: V0
- Suitable for 50-100mm super slim light box



Key Technical Specification

Model	Beam angle	LED	Input Voltage	Power 1 module	CCT	Light output 1 module	IP rating	Color Index	Cuttable
VSL-S2W-12-3	10x45°	1 PCS	12V (DC)	2 W	6500-7000K	190lm/LED	IP66	>80	3 module

Light Bar Dimensions



Safety & Operation Notes

- IP66 Water proof rated, endurance for harsh outdoor environment.
- Cuttable every 3 pieces of module, 3 LED per string.
- DC12V Input, safe, stable and reliable.
- All connections must be completed at zero voltage.
- Installation to be carried out by qualified personnel.
- The maximum number of LED module connected in series depends on the rated wattage of the power supply and wire gauge
- Operating temperature range: -25 to 60° C.
- Storage temperature range: -25 to 70°C.

Project Reference



Vivalypte BVBA
 Airbase 1, Vlamingstraat 4, Wevelgem B-8560, Belgium
 +32 56 43 28 08
 info@vivalypte.com
 www.vivalypte.com