

Features

- High quality 2835 LEDs
- Aluminum PCB injection for better outline
- IP65 perfect for indoor and outdoor
- Single module cuttable
- 160° wide beam angle for uniform lighting
- Support PWM, 0-10V, DALI and DMX dimming

Application

- Back-lit lightbox with depth of 6-18cm, luminous letter, LOGO etc.

Installation

- Fix by self adhesive tape or screw.

Optical & Electrical Parameters

Model No.	Light Color	CCT(K)	Beam Angle	Luminous Flux(lm/pcs)	Efficacy (lm/W)	Ra	Voltage (DC)	Power (W/pcs)
ST2W 3.0-2	W	2800-3100	160°	63	95	80+	12V	0.66
		3800-4200		66	100			
		4800-5300		66	100			
		6000-7000		66	100			
		9000-10000		66	100			
		10000-12000		66	100			



Model No.	Light Color	CCT(K)	Beam Angle	Luminous Flux(lm/pcs)	Efficacy (lm/W)	Ra	Voltage (DC)	Power (W/pcs)
ST2W 3.0-3	W	2800-3100	160°	95	95	80+	12V	1.0
		3800-4200		100	100			
		4800-5300		100	100			
		6000-7000		100	100			
		9000-10000		100	100			
		10000-12000		100	100			
	R	620-625	160°	12	25	\	12V	0.48
	G	465-470		39	54			0.72
	B	520-525		6	16			0.36
	Y	570-757		38	80			0.48
ST2W 3.0-4	W	6000-7000	160°	132	100	80+	12V	1.32
		9000-10000						
		10000-12000						

Other Parameters

Model No.	LED Qty/pc	Standard Run	Max Run	Working Temperature	Storage Temperature
ST2W 3.0-2	2	20pcs	20pcs	-20~+60°C	-20~+70°C
ST2W 3.0-3	3				
ST2W 3.0-4	4				

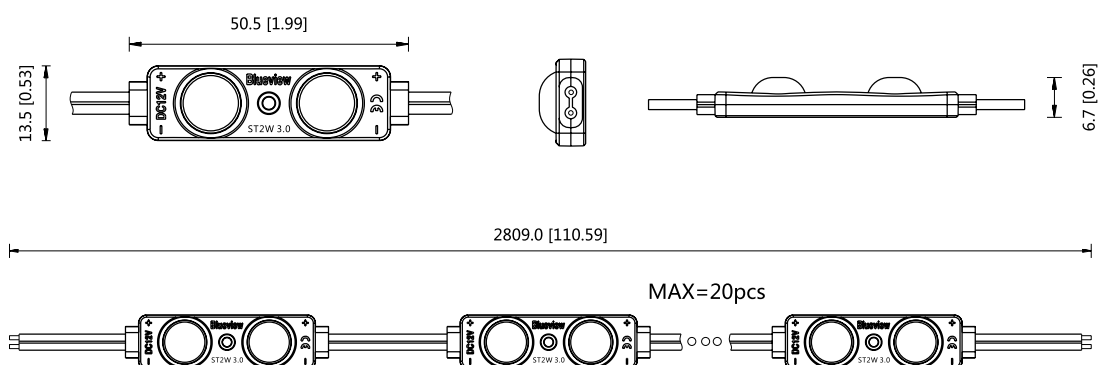
NOTE:

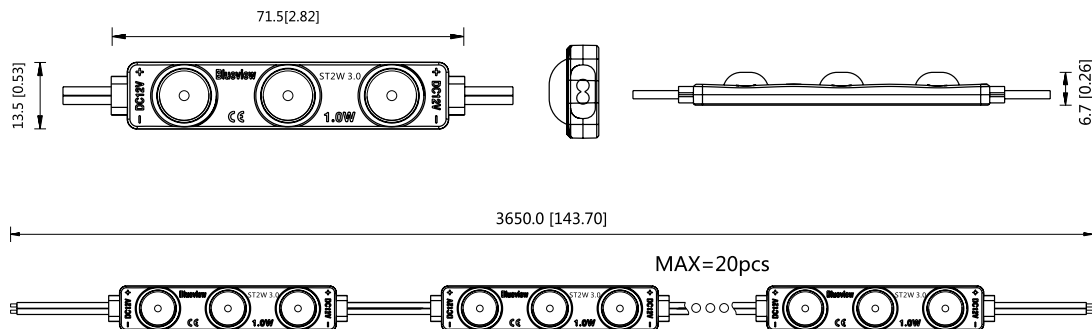
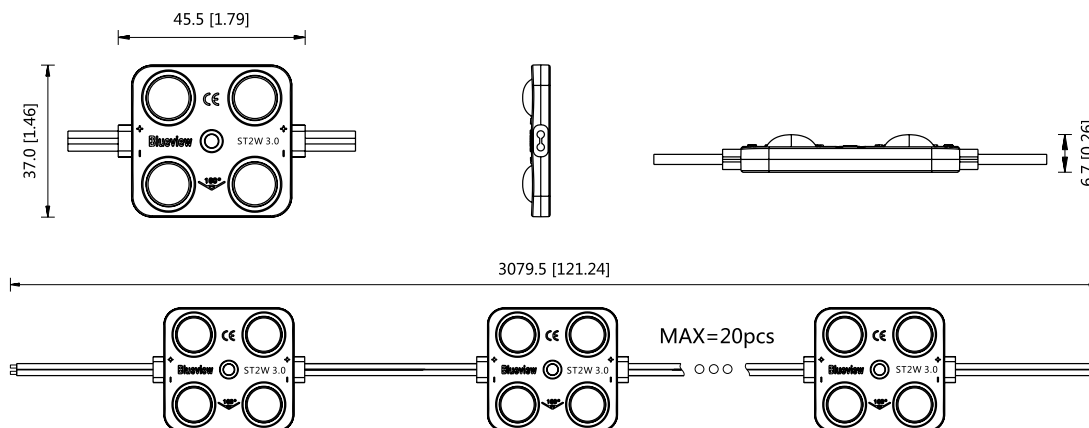
1. Test environment temperature : 25±2°C.
2. Power and luminous flux tolerance within ±10%.
3. The above data was measured under standard conditions and actual data may be different. We would update data without further notice.
4. Max run is based on one end power feed.

Profile Drawings

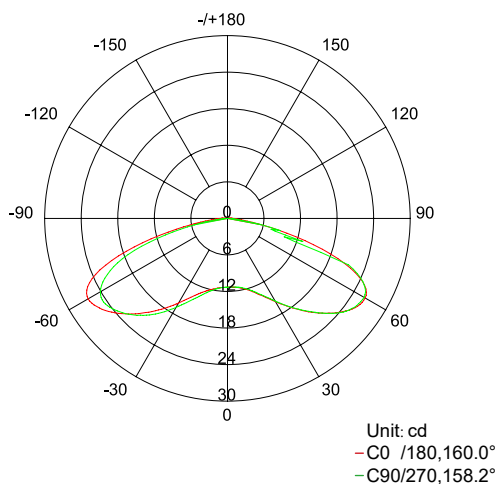
Unit:mm[inch]

ST2W 3.0-2

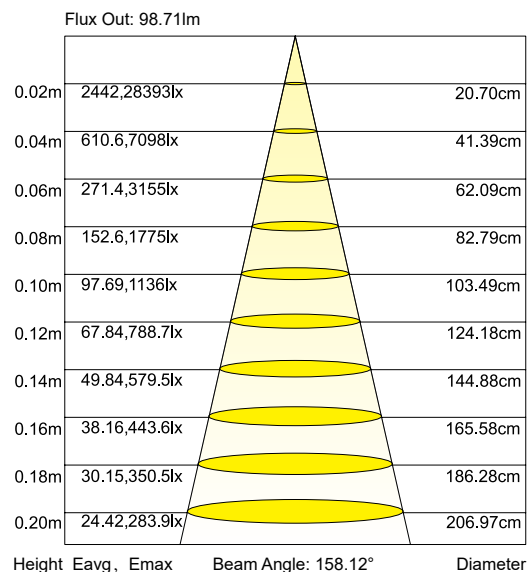


ST2W 3.0-3

ST2W 3.0-4


Note:
 Dimension tolerance: length $\pm 0.2\text{mm}$; width $\pm 0.2\text{mm}$; height $\pm 0.2\text{mm}$.
 For detail drawing, please consult sales rep.

Luminous Intensity Distribution Diagram
Average Illumination


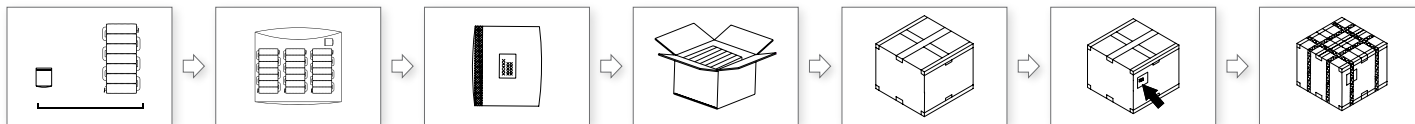
AVERAGE BEAM ANGLE(50%): 159.1°



Note: the above two figures are tested with the sample ST2W 3.0-3, for other data, please consult sales rep.



packing



1. Prepare the desiccant and bind the product.
2. Put the product and desiccant into static shielding bag.
3. Seal and label the static shielding bag.
4. Put the static shielding bag side by side into carton box.
5. Seal the box.
6. Label the box;
7. Use packing belt to pack after adding the edge protectors.

Packaging information

Model No.	Product Size L*W*H(mm)	Carton Size(mm)	Total Quantity/Carton(pcs)	Net Weight(kg)	Gross Weight(kg)
ST2W 3.0-2	50.5*13.5	390*390*325	2000	14.5(1±10%)	15.5(1±10%)
ST2W 3.0-3	71.5*13.5	390*390*325	2000	16.6(1±10%)	17.6(1±10%)
ST2W 3.0-4	45.5*37	390*390*325	1600	18.8(1±10%)	20.3(1±10%)

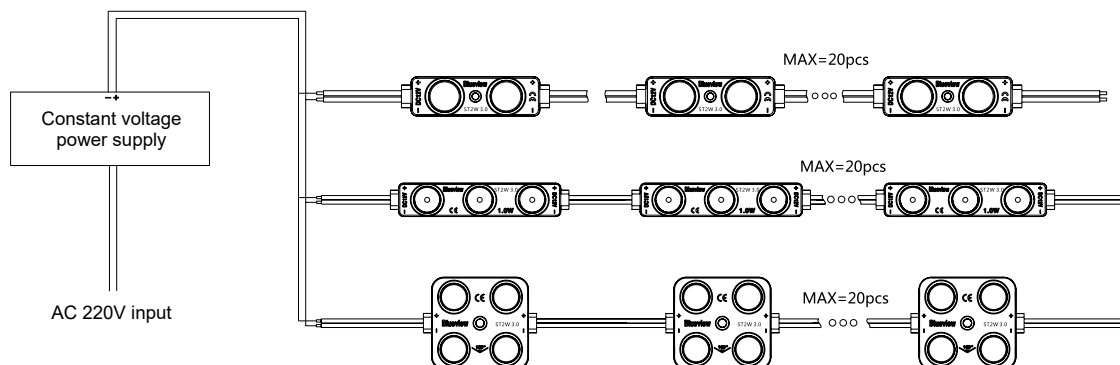
Note:

The volume weight: 9.89kg

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

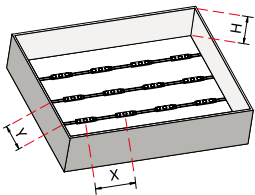
Connection Diagram



Model No	Bottom Color of Lightbox	Surface Material	Depth(cm)	Illumination (lux)	Density (pcs/m ²)	Spacing (X*Y)cm	Visual Effects
ST2W3.0-2	White	White Soft Film	6	5030-5810	10*12	10*8	OK
			8	2870-3270	8*8	12*12	
			10	2360-2690	7*8	13.5*12	
			12	1910-2220	7*7	13.5*14	
			15	1700-1895	7*7	13.5*14	
			18	1510-1622	7*7	13.5*14	



Model No	Bottom Color of Lightbox	Surface Material	Depth(cm)	Illumination (lux)	Density (pcs/m ²)	Spacing (X*Y)cm	Visual Effects
ST2W3.0-3	White	White Soft Film	6	7750-8610	10*12	10*8	OK
			8	5960-6280	10*10	10*10	
			10	3320-3580	7*7	14*14	
			12	2460-2740	6*6	16*16	
			15	1920-2160	5*5	18*18	
			18	1810-1970	5*5	18*18	
ST2W3.0-4	White	White Soft Film	8	4840-5570	8*8	12*12	OK
			10	3850-4380	7*7	14*14	
			12	3590-3990	7*7	14*14	
			15	3070-3340	7*7	14*14	
			18	2800-3010	7*7	14*14	

**Note:**

X indicates the horizontal center spacing between modules;

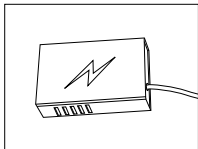
Y indicates the longitudinal center spacing between modules;

Single LED modules are arranged in a square, X=Y.

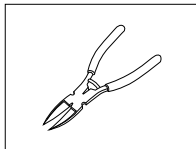
When the depth of lightbox H>18cm, choosing the above density according to different illumination.

Please ask the sales for other data.

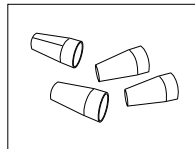
Power greater than 150W is disqualified.

Accessories & Tools

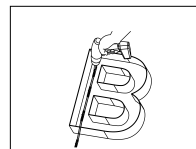
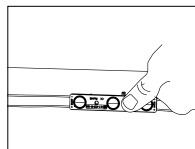
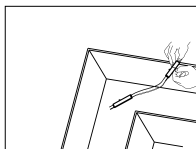
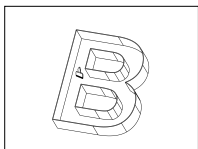
LED power supply



Diagonal pliers



Connection terminal

Installation steps

1. Clean the mounting surface free of dust and debris.
2. Peel away the self adhesive tape on the back of product and mount it onto the lightbox bottom.
3. Prefix the product and make sure it is flat and evenly arranged in light box.
4. Fix the product with screws and check and ensure correct wiring, then power on for self-test.



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.	Fix the short circuit problem.
	Automatic power protection from the open or short circuit in output of the power supply.	
	Wrong connection of power supply.	
LEDs can not light on partly	Some switching mode power supplies are not powered.	Correctly connection.
	Power supply line error.	
	Mistaken wire connection of some of products.	
Brightness of LED is inconsistent or 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 24 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.

Version	Content	Date
A1.5	Update : Basic Parameters	2024-3-21