

Features

1. High quality 2835 LEDs
2. Aluminum PCB injection for better outline
3. IP65 perfect for indoor and outdoor
4. Input voltage: DC12V
5. Single module cuttable
6. 160°wide beam angle for uniform lighting

Application

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

Installation

Fix by self adhesive tape or screw.



Specification

Model No.	Light Color	Color Temperature(K)	Beam Angle	Luminous Flux (lm/pcs)	Ra	Efficacy (lm/W)	Voltage (V DC)	Power (W/pcs)
ST2W 2.0-2-W	W	6000-7000	160°	66	80+	100	12	0.66
		9000-10000		66				
		10000-12000		66				
ST2W 2.0-3-W	W	6000-7000	160°	100	80+	100	12	1.0
		9000-10000		100				
		10000-12000		100				
	R	620-625	160°	12	--	25	12	0.48
	G	465-470		37		52		0.72
	B	520-525		5		15		0.36
ST2W 2.0-4-W	W	6000-7000	160°	132	80+	100	12	1.32
		9000-10000		132				
		10000-12000		132				

Other Parameters

Model No.	Standard Packing Quantity(pcs)	Max Run in Single Feed(pcs)	Working Temperature	Storage Temperature
ST2W 2.0-2-W	20	20	-25~+60°C	-25~+70°C
ST2W 2.0-3-W	20	20	-25~+60°C	-25~+70°C
ST2W 2.0-4-W	20	20	-25~+60°C	-25~+70°C

NOTE:

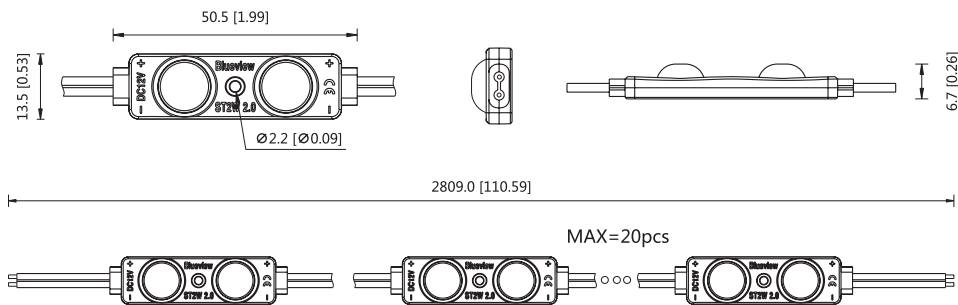
1. Test environment temperature : 25±2°C.
2. The above data is typical values.
3. The actual data of each single product may differ from the typical values.
4. The data is subject to change without notice.



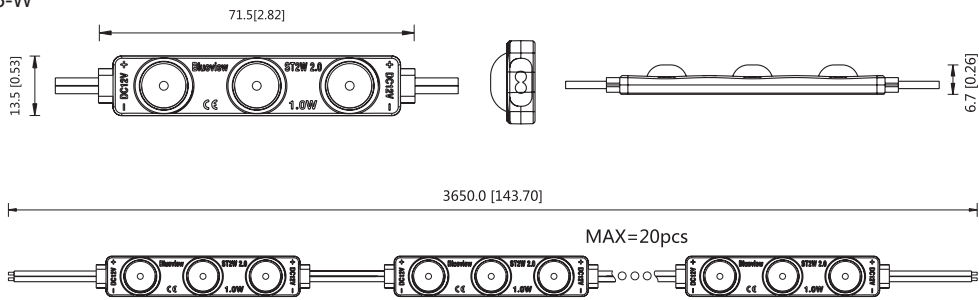
Profile Drawings

Unit:mm[inch]

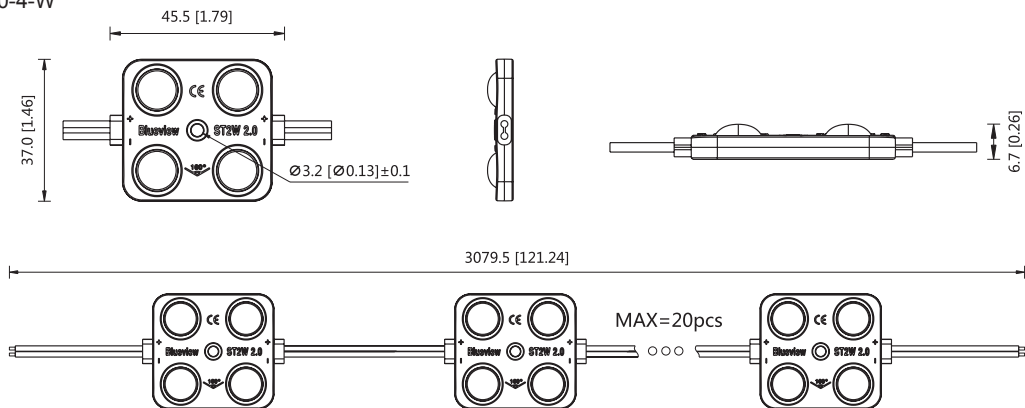
ST2W 2.0-2-W



ST2W 2.0-3-W



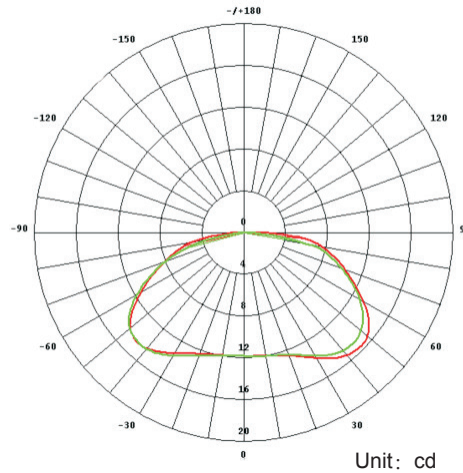
ST2W 2.0-4-W



NOTE:for detail drawing,please consult sales rep.



Luminous Intensity Distribution Diagram



Unit: cd
 — C0 /180,161.2°
 — C90/270,154.5°
 AVERAGE BEAM ANGLE(50%): 157.9°

Average Illumination

Flux Out: 59.82 lm

2cm	2151,29645lx	17.71cm
4cm	537.7,7411lx	35.42cm
6cm	239.0,3294lx	53.12cm
8cm	134.4,1853lx	70.83cm
10cm	86.04,1186lx	88.54cm
12cm	59.75,823.5lx	106.25cm
14cm	43.90,605.0lx	123.96cm
16cm	33.61,463.2lx	141.67cm
18cm	26.55,366.0lx	159.37cm
20cm	21.51,296.5lx	177.08cm

Height Eavg, Emax Beam Angle: 154.54° Diameter

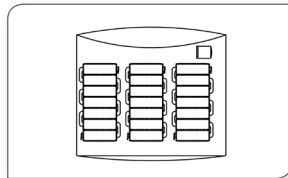
Note: the above two figures are tested with the sample ST2W 2.0-2-W, for other data, please consult sales rep.



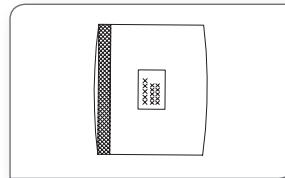
packing



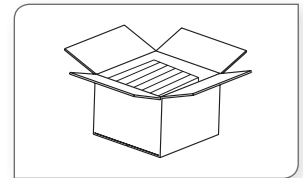
Prepare the desiccant and bind the product.



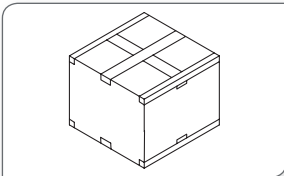
Put the product and desiccant into static shielding bag.



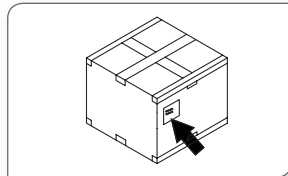
Seal and label the static shielding bag



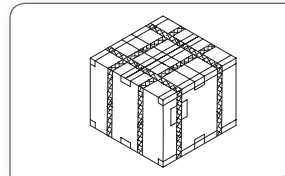
Put the static shielding bag side by side into carton box.



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)	Total Quantity/Carton(pcs)	Net Weight(kg)	Gross Weight(kg)
ST2W 2.0-2-W	50.5X13.5X6.7	390X390X325	2000	14.5(1±10%)	15.5(1±10%)
ST2W 2.0-3-W	71.5X13.5X6.7	390X390X325	2000	16.6(1±10%)	17.6(1±10%)

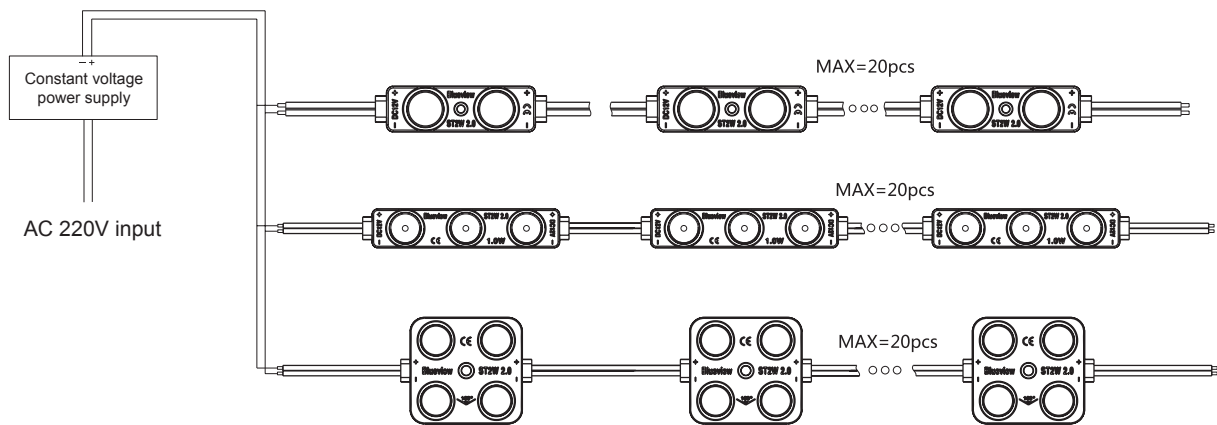
● Packing materials: static shielding bag and carton box.

Note:

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. Connection Diagram

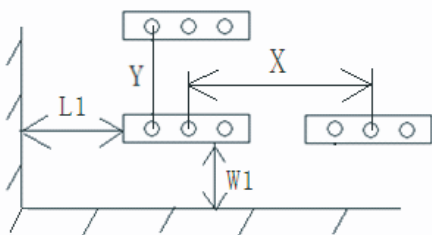


2.Installation Reference

Model No	Bottom Color of Lightbox	Surface Material	Depth(cm)	Illumination (lux)	Density pcs/ m ²	Spacing (X*Y)cm	Visual Effects
ST2W 2.0-2-W	White	White Soft Film	8	5670-6290	12*12	8*8	OK
			10	3680-3960	10*10	10*10	
			12	2640-2970	8*8	12*12	
			15	2110-2380	7*8	13.5*12	
			18	1770-1930	7*7	13.5*14	
ST2W 2.0-3-W	White	White Soft Film	6	7980-8950	10*12	10*8	OK
			8	6340-6700	10*10	10*10	
			10	3430-3700	7*7	14*14	
			12	2290-2570	6*6	16*16	
			15	1820-2080	5*5	18*18	
			18	1750-1930	5*5	18*18	



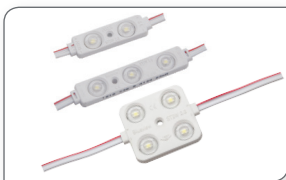
ST2W 2.0-4-W	White	White Soft Film	10	5760-6480	8*10	12*10	OK
			12	4240-4680	7*8	14*12	
			15	3180-3620	7*7	14*14	
			18	2980-3280	7*7	14*14	



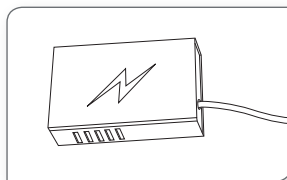
Note:

- 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.

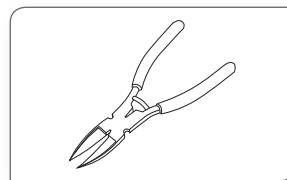
2. Accessories & Tools



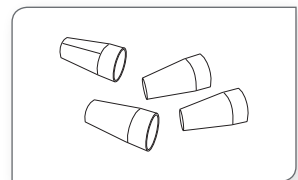
ST2W 2.0



LED power supply

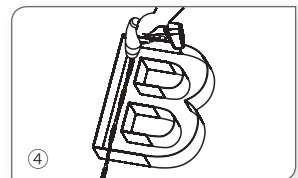
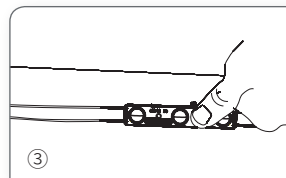
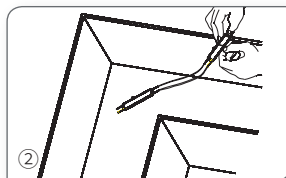
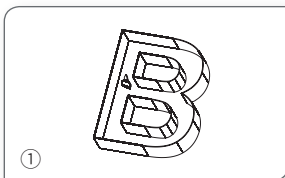


Self-tapping screw



Connection Terminals

3. Installation steps



1. Clean the mounting surface.
2. Peel away the self adhesive tape on the back of led modules and stick them onto mounting surface.
3. Evenly arrange the led modules with appropriately space.
4. Fix the product with screws, make sure the correct wiring and 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.	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.