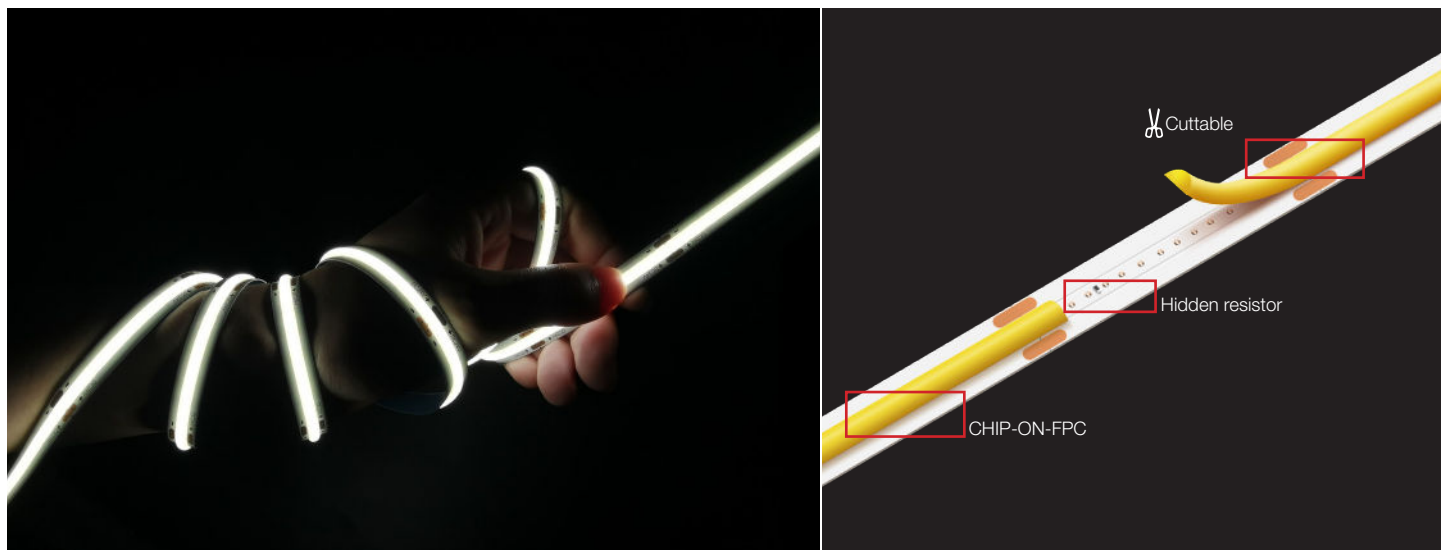


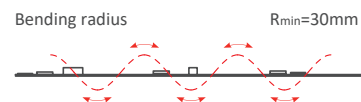


- COB LED STRIP - Premium Series



Features

- Long run series and no welding spot
- Dot-free, no shadows, high temperature resistance
- Lighter and thinner, small in size
- 180° big luminous angle, Ra 90+
- Support PWM, 0~10V, DALI, and DMX dimming
- Anti-sulfuration, good luminous flux maintenance rate
- Stable internal structure and long service life
- Seamless linear lighting with good flexibility
- Multiple specifications available



Installation

- Fix with 3M adhesive.

Optical & Electrical Parameters

■ Single color

Model No.	Voltage	Ra	CCT/Wavelength	LM/m	LM/W	W/m
TGR-320-12(HS) 5years warranty	12V DC	>90	3000K	850	85	10.0
			4000K	950	95	
			6500 K	1000	100	
TGR-320-24(HS) 5years warranty	24V DC	>90	3000K	850	95	10.0
			4000K	950	90	
			6500 K	1000	95	
TGR-320-12/24(HS)	12/24V DC	>90	3000K	595	70	8.5
			4000K	680	80	
			6500 K	723	85	
TGR-320-12/24(HS)	12/24V DC	>90	2700K	750	75	10.0
			3000K	800	80	
			4000K	900	90	
			5000K	900	90	
			6500 K	950	95	
TGR--384-24(HS)	24V DC	>90	3000K	560	70	8.0
			4000K	600	75	
			6500 K	640	80	
TGR-480-12/24(HS) 5years warranty	12/24V DC	>90	3000K	900	90	10.0
			4000K	1000	100	
			6500 K	1050	105	



Model No.	Voltage	Ra	CCT/Wavelength	LM/m	LM/W	W/m
TGR-480-12/24(HS)	12/24V DC	>90	2700K	800	80	10.0
			3000K	850	85	
			4000K	950	95	
			5000K	950	95	
			6500 K	1000	100	
TGR-320-24(HS)	24V DC	\	Red	100	10	10.0
			Green	700	70	
			Blue	150	15	
			Ice blue	480	48	
			Yellow	390	39	
			Violet	220	22	

■ WN

Model No.	Voltage	Ra	CCT/Wavelength	LM/m	LM/W	W/m
TGR-576-24(HS)	24V DC	>90	W:2700K	480	80	6.0
			N:6500K	540	90	6.0
			W+N:4000 K	1020	85	12.0

■ RGB

Model No.	Voltage	Ra	CCT/Wavelength	LM/m	LM/W	W/m
TGR-672-24(HS)	24V DC	\	Red	85	10	8.5
			Green	308	70	4.4
			Blue	33	10	3.3
			RGB	\	\	\

Other Parameters

Model No.	Warranty	LED QTY (pcs/m)	Standard Packing Length	No Brightness Difference MAX	Working Temperature	Storage Temperature
TGR-320-12(HS)	5years	320	5m	5m	-20~+60°C	-20~+70°C
TGR-320-24(HS)	5years	320	5/10m	5m		
TGR-320-12(HS)	3years	320	5m	5m		
TGR-320-24(HS)	3years	320	5m	5m		
TGR-320-24(HS)-R/G/B/IB/Y/V	3years	320	5m	5m		
TGR-384-24(HS)	3years	384	10m	10m		
TGR-480-12(HS)	5years	480	5m	5m		
TGR-480-24(HS)	5years	480	5/10m	5m		
TGR-480-12(HS)	3years	480	5m	5m		
TGR-480-24(HS)	3years	480	5/10m	5m		
TGR-576-24(HS)	3years	576	5m	5m		
TGR-672-12(HS)	3years	672	5m	5m		

NOTE:

- The above data was measured under standard conditions and actual data may be different. We would update data without further notice.
- The luminous flux was tested while the corresponding-color products were lightened.
- UL max run refers to operating length at UL class II @100W.24V.
- Luminous flux values were measured accordance to IES LM-80-08. LED chips with tolerance range of +/- 10%.
- Each maximum-run requires a dedicated power feed from the driver. Do not exceed the recommended maximum run length. Max run may exceed Class 2 limits. Actual wattage may be different from the calculated wattage due to voltage drop while using.
- Actual efficacy value is determined by the specific LED driver (power supply). An estimated efficacy value can be calculated as follows: Luminous intensity divided by average power consumption.
- Do not install products in the conditions that exceed the listed ambient temperature. Exceeding the maximum ambient temperature may damage LED chips, reduce the total lamp life, luminous intensity output, and/or adversely impact color consistency.
- It is an advertising signage product. Please do not use it as main lighting.
- Cutting segments are marked on the profiles below.
- If the product power is greater than 15W, auxiliary heat dissipation appliances must be added.
- 180° is the luminous angle observed by the human eye, which is different with the actual tested angle;

Performance

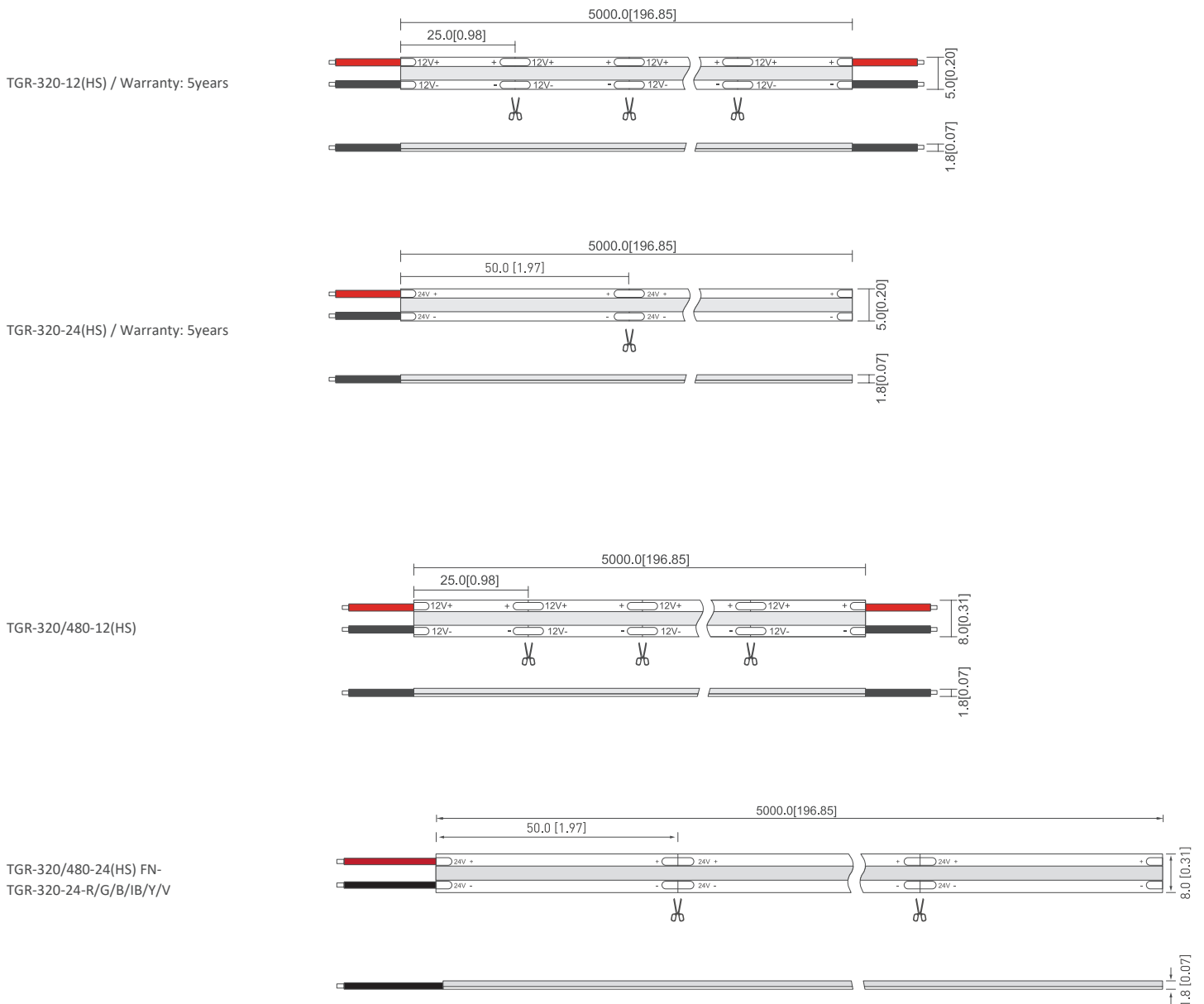
- LED chip data measured in accordance to IES LM-80-08.
- Photometric & Colorimetry data measured in accordance to IES LM-79-08, in Tiger Powers' Innovation Lab.

Compliance & Regulatory Approvals

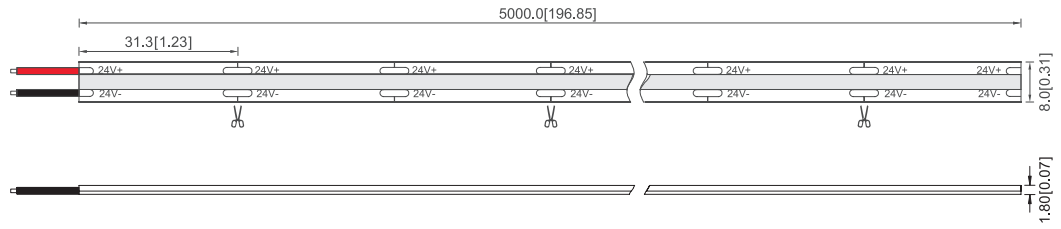
	CE LVD	Standard: EN 60598-2-21: 2015; EN 60598-1: 2015; EN 62471: 2008; EN 62493:2015; EN 62031: 2015+A1: 2013+A2: 2015
	CE EMC	Standard: EN IEC 55015: 2019; EN IEC 61000-3-2: 2019; EN 61000-3-3:2013+A1: 2019;EN 61547: 2009
	CB	Standard: IEC 62031:2018
	UL LISTED	Standard: UL 2108 -Low-voltage Lighting Systems, Power Units, Luminaires and Fittings
	RoHS	Standard: IEC62321

Profile Drawings

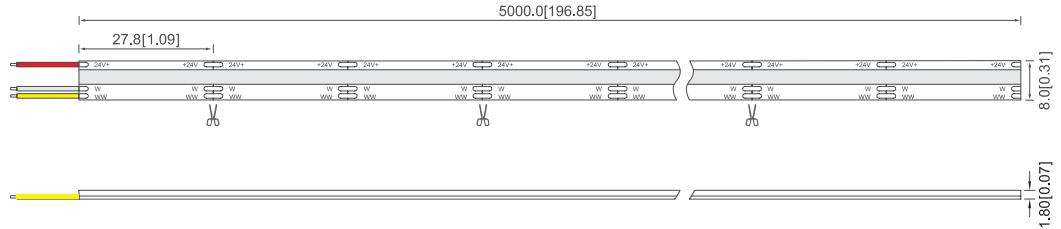
Unit: mm [inch]



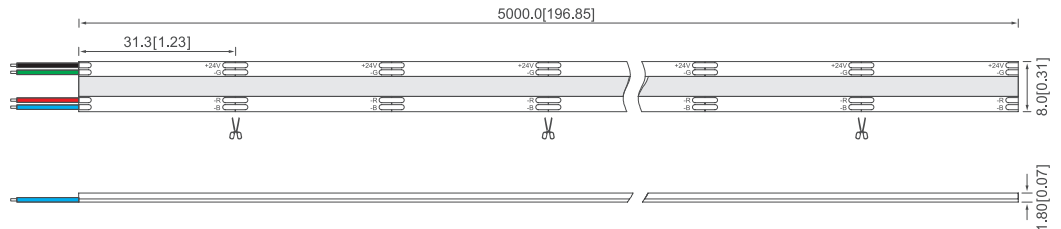
TGR-384-24(HS)



TGR-576-24-WN(HS)



TGR-672-24-RGB(HS)



Note:
Dimension tolerance: length±6mm[0.24inch], width±0.2mm[0.008inch], thickness±0.2mm[0.008inch]

Recommended power supply upon working length

TGR-320-24(HS)				
Operating Length	Total Power	Head-to-tail Voltage Drop	Head-to-tail Current Drop Rate	Single/Double feed
5.0m	35.92W	1.5V	30.0%	Single feed

TGR-320-24(HS)-5mm / Warranty: 5years				
Operating Length	Total Power	Head-to-tail Voltage Drop	Head-to-tail Current Drop Rate	Single/Double feed
4.0m	27.19W	1.5V	30.0%	Single feed

TGR-320-24(HS)-R				
Operating Length	Total Power	Head-to-tail Voltage Drop	Head-to-tail Current Drop Rate	Single/Double feed
5.0m	35.95W	1.5V	30.0%	Single feed

TGR-320-24(HS)-G				
Operating Length	Total Power	Head-to-tail Voltage Drop	Head-to-tail Current Drop Rate	Single/Double feed
4.0m	28.46W	1.5V	30.0%	Single feed

TGR-320-24(HS)-B				
Operating Length	Total Power	Head-to-tail Voltage Drop	Head-to-tail Current Drop Rate	Single/Double feed
4.0m	29.04W	1.5V	30.0%	Single feed

TGR-320-24(HS)-IB				
Operating Length	Total Power	Head-to-tail Voltage Drop	Head-to-tail Current Drop Rate	Single/Double feed
4.0m	28.46W	1.5V	30.0%	Single feed

TGR-320-24(HS)-Y				
Operating Length	Total Power	Head-to-tail Voltage Drop	Head-to-tail Current Drop Rate	Single/Double feed
5.0m	33.31W	1.5V	30.0%	Single feed

TGR-320-24(HS)-V				
Operating Length	Total Power	Head-to-tail Voltage Drop	Head-to-tail Current Drop Rate	Single/Double feed
4.0m	28.41W	1.5V	30.0%	Single feed

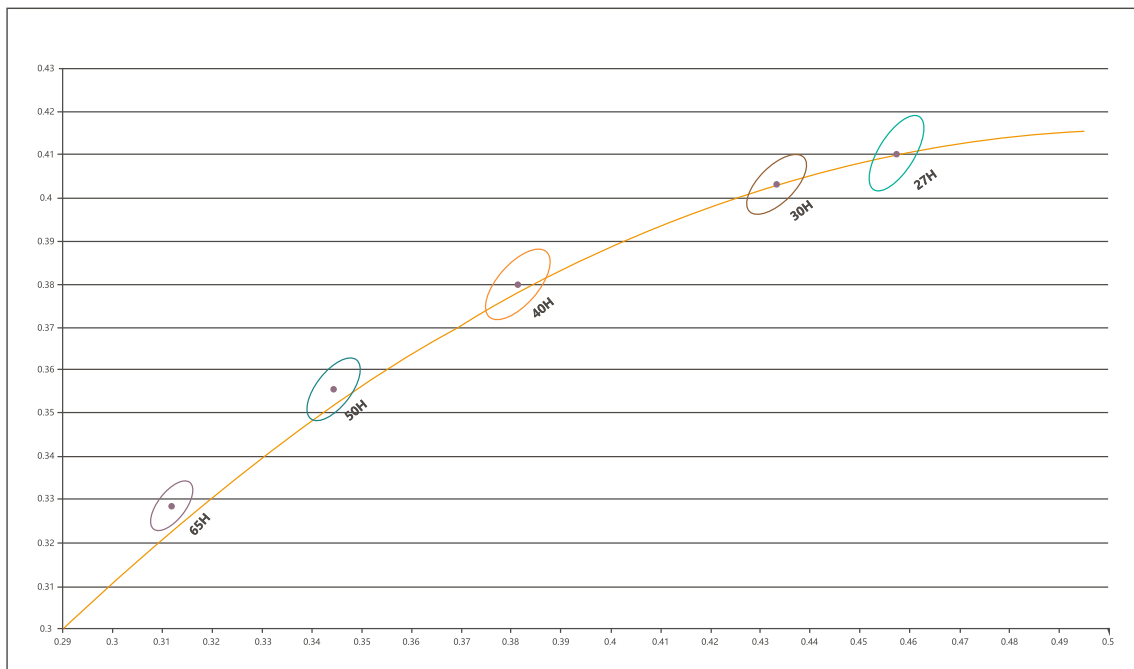
TGR-384-24(HS)				
Operating Length	Total Power	Head-to-tail Voltage Drop	Head-to-tail Current Drop Rate	Single/Double feed
5.0m	33.98W	1.5V	30.0%	Single feed
10.0m	55.70W	1.5V	30.0%	Single feed

TGR-480-24(HS)				
Operating Length	Total Power	Head-to-tail Voltage Drop	Head-to-tail Current Drop Rate	Single/Double feed
5.0m	40.15W	1.5V	30.0%	Single feed

TGR-576-24(HS)				
Operating Length	Total Power	Head-to-tail Voltage Drop	Head-to-tail Current Drop Rate	Single/Double feed
1.0m	11.28W	1.5V	30.0%	Single feed
2.0m	21.36W	1.5V	30.0%	Single feed
3.0m	29.28W	1.5V	30.0%	Single feed
4.0m	35.52W	1.5V	30.0%	Single feed
5.0m	39.60W	1.5V	30.0%	Single feed

Note: If the voltage drop rate exceeds 30%, extra power feed is needed; For more info, please contact sales rep.

IE chromaticity diagram

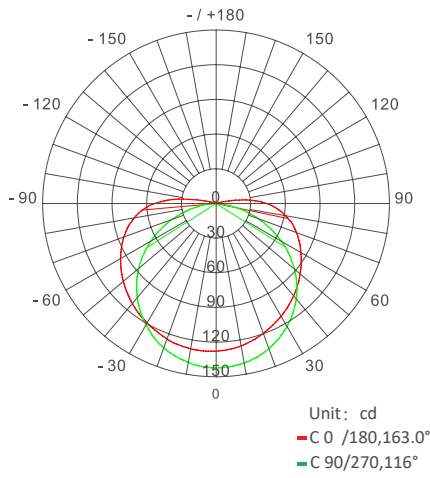


Chromaticity Coordinates

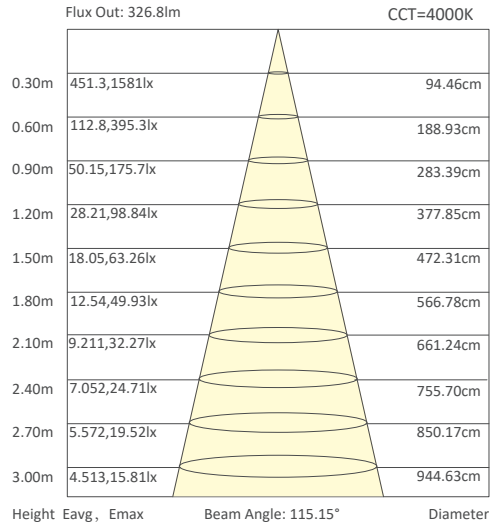
Bin code	27H	30H	40H	50H	65H
Color temperature(nm/k)	2660-2800	2940-3150	3880-4080	4820-5200	6230-6830
Center color coordinates	X: 0.4578 / Y: 0.4101	X: 0.4339 / Y: 0.4033	X: 0.3818 / Y: 0.3797	X: 0.3446 / Y: 0.3551	X: 0.3123 / Y: 0.3283

Luminous Intensity Distribution Diagram

Average Illumination



AVERAGE BEAM ANGLE(50%): 139.1°



Note: above data tested with TGR-320-24-5mm at 4000K , for other data,please consult sales rep.

Reliability test

Project	Reference standards	Category	Test conditions	Outcome
Environmental test	standard	PTC test	TH=-40°C~60°C, cycle every 2h (holding 15min, heating and cooling 45 min)	Pass
		High temperature resistant test	Simulated 80°C, continuous power on	
		Thermal shock test	TH=80°C / 4h, TH = -40°C/4h, continuous cycle and power on	
		High temperature and humidity test	TH=60°C, RH =90%, continuously power on	
		Room temperature bending aging test	Bending diameter 40mm, TH=25°C, continuous power on	
		Room temperature aging test	TH=25°C, continuous power on	
Other tests	standard	Twist test	Fix a sample with a length of 1m on the instrument fixture at the front and end respectively, twist one end, and rotate 360° forward and reverse each time, a total of 10 times.	Pass
		Mounting test	Paste the 5m-long sample on a clean acrylic carrier board, fix the carrier board, pull forcibly to remove the sample, observe the state of the sample, and repeat the above steps for 3 times.	

Packaging Information

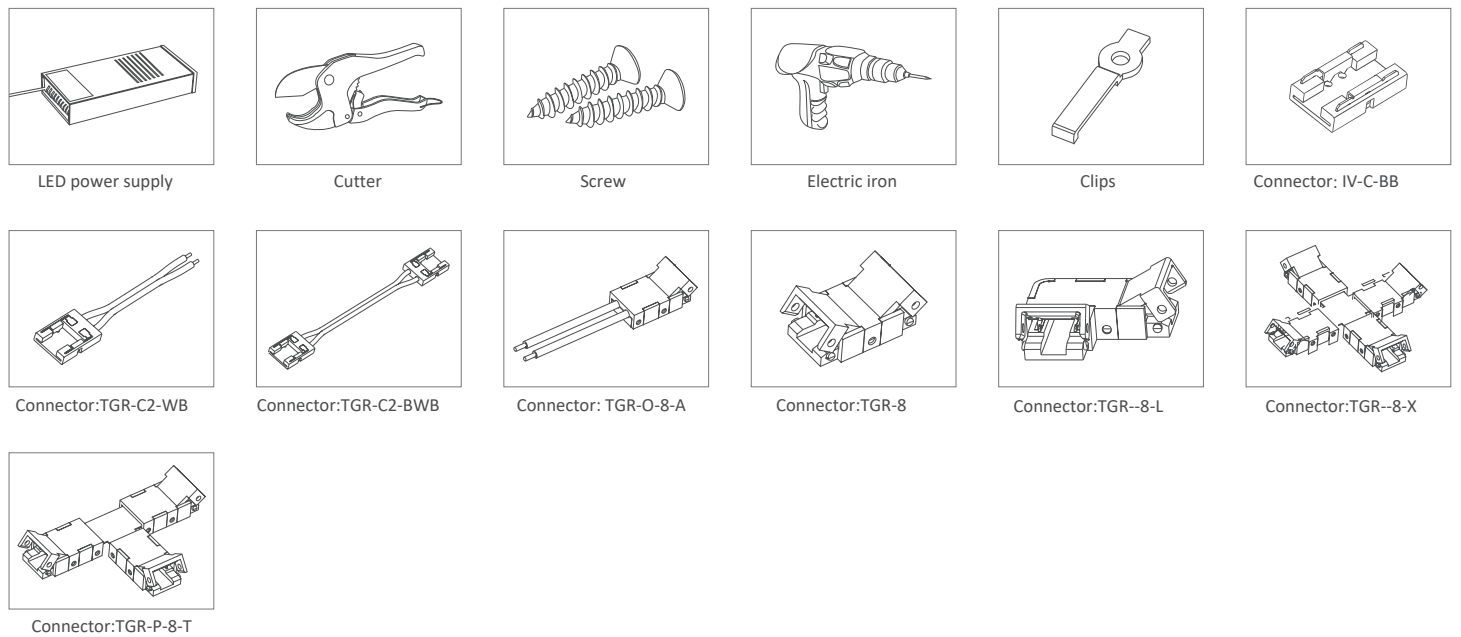


Model No.	Product Size L*W (mm)	Carton Size (mm)	Meter/ Reel	Reel/ Carton	Net Weight (kg)	Gross Weight (kg)
TGR-320-12(HS) / 5years warranty	5000*5	550*400*340	5	140	5.70(1±10%)	9.50(1±10%)
TGR-320-24(HS) / 5years warranty	5000*5	550*400*340	5	140	5.70(1±10%)	9.50(1±10%)
TGR-320-12(HS)	5000*8	550*400*340	5	120	6.00(1±10%)	10.80(1±10%)
TGR-320-24(HS)	5000*8	550*400*340	5	120	6.00(1±10%)	10.80(1±10%)
TGR-320-24(HS)-R/G/B/IB/Y/V	5000*8	550*400*340	5	120	6.00(1±10%)	10.80(1±10%)
TGR-384-24(HS)	5000*8	550*400*340	5	120	6.00(1±10%)	10.80(1±10%)
TGR-480-12(HS) / 5years warranty	5000*8	550*400*340	5	120	6.30(1±10%)	10.80(1±10%)
TGR-480-24(HS) / 5years warranty	5000*8	550*400*340	5	120	6.30(1±10%)	10.80(1±10%)
TGR-480-12(HS)	5000*8	550*400*340	5	120	6.30(1±10%)	10.80(1±10%)
TGR-480-24(HS)	5000*8	550*400*340	5	120	6.30(1±10%)	10.80(1±10%)
TGR-576-24(HS)	5000*8	550*400*340	5	120	6.50(1±10%)	11.20(1±10%)
TGR-672-24(HS)	5000*8	550*400*340	5	120	6.70(1±10%)	11.60(1±10%)

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.
- The gross weights of all above model are less than volume weight, the volume weight is 14.96kg.

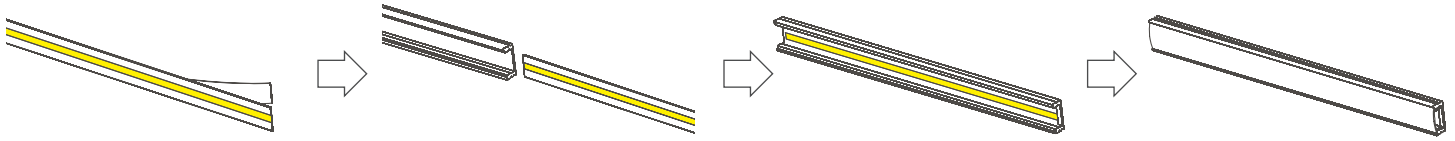
Installation



Note: suitable for all single color models

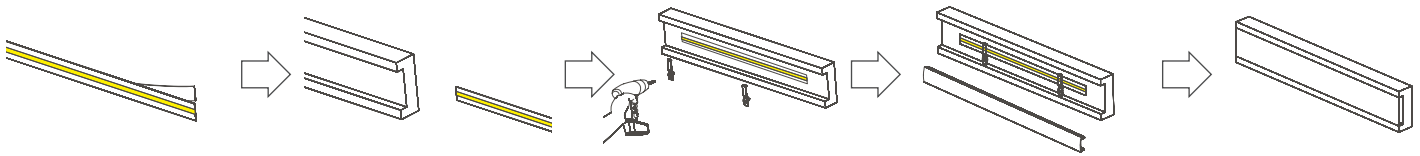


Aluminum channel installation



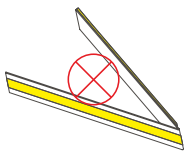
1. Peel away the self adhesive tape on the back of strip.
2. Cut off the excess part based on the installation position.
3. Evenly arrange the strips with appropriate space in the track.
4. Install the cover and end cap.

Covered channel installation

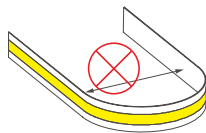


1. Peel away the self adhesive tape on the back of strip.
2. Cut off the excess part based on the installation position.
3. Evenly arrange the strips with appropriate space in the track and fix them with clips.
4. Install the cover and end cap.
5. Finished

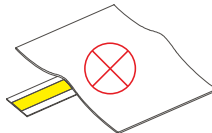
Warning Mark



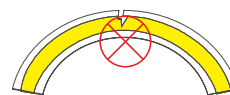
Do not fold the LED strip



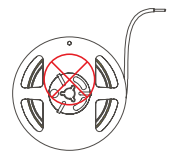
Can not bend less than min bending diameter.



Do not cover the LED strip



Do not bend the LED strip horizontally



Do not light on the LED strip when it on the reel

Attentions before installation

- Check whether the power line is screwed into the terminal firmly, and it is better not to pull it out by hand.
- 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.
- The wiring terminal must be provided with effective waterproof and anti-corrosion treatment.

Quick Guide

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 tor 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.
- 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.