

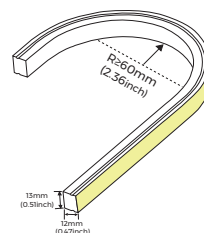
Neon Specification

NMT1312



【Features】

- Light source: high luminous efficiency LED lamp beads, LM80 test certification;
- Process material: three-color silicone extrusion technique is applied, Cutting mark more clear;
- Optical design: unique optical light distribution structure design, uniform light emission on the surface without shadows;
- Appearance design: Standard ESD oil spray, anti-dust; good flexibility, simple shape, exquisite and unique;
- Product certification: UL, CE, ROHS, UACK, CB;
- Environmental characteristics: salt solution resistance, acid and alkali corrosion resistance, flame retardant resistance, UV resistance;
- Working/storage temperature: Ta: -25~55°C / 0°C~60°C;
Symphony working/storage temperature: Ta: -20~40°C / 0°C~60°C;
- Product application: signboard lighting, outdoor/internal decorative lighting, architectural contour application;
- White 5 year warranty, 48V/G/B/CCT/RGB/RGBW with 3 years warranty or working life=36000H, whichever comes first; SPI/DMX512 with warranty 2 years or working life=20000H, whichever comes first.



Note: White/CCT/RGB/RGBW light bending radius R:60mm(2.36inch), SPI/DMX bending radius R:80mm(3.15inch)

【Basic Parameters】

Model	CCT/colors	CRI	Input voltage (V)	Rated current (A/m)	Rated power (w/m)	Maximum power (w/m)	Lumens (LM/m)	Standard Length	Remark
NMT1312- 9XX24 CXN050XCXXX-PRO	2200K	>90	24V	0.4 (0.12A/ft)	9.6 (2.93W/ft)	10.6 (3.23W/ft)	620(189/ft)	5000mm (16.4ft) 10000mm (32.8ft)	7LED/50mm
	2700K						710(216/ft)		
	3000K						740(225/ft)		
	4000K						690(210/ft)		
	5000K						710(216/ft)		
NMT1312- 0X24 CXN050XCXXX-PRO	G 525-530nm	/					/		
	B 465-470nm								
NMT1312- 0RGB24 CXN050XC0500-PRO	RGB	/		0.5 (0.15A/ft)	12 (3.66W/ft)	13.2 (4.02W/ft)	/	5000mm (16.4ft)	7LED/83mm
	R 620-630nm								
	G 525-530nm								
	B 465-470nm								
NMT1312- 0RGBXX24 CXN050XC0500-PRO	RGB~2700K	/		0.6 (0.18A/ft)	14.4 (4.39W/ft)	16 (4.88W/ft)	/	5000mm (16.4ft)	12LED/62.5mm
	RGB~3000K								
	RGB~3500K								
	RGB~4000K								
	RGB~5400K								
NMT1312- 9SWDW24 CXN050XC0500-PRO	2700~5000K	>90		0.5 (0.15A/ft)	12 (3.66W/ft)	13.2 (4.02W/ft)	770(234/ft)	14LED/55.6mm	

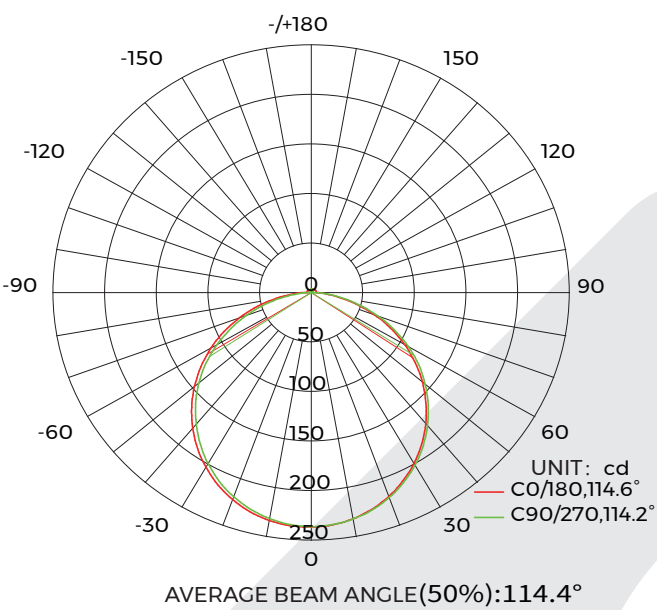
【Basic Parameters】

Model	CCT/colors	CRI	Input voltage (V)	Rated current (A/m)	Rated power (w/m)	Maximum power (w/m)	Lumens (LM/m)	Standard Length	Remark				
NMT1312- 9XXX48 CSN050CC5000-PRO(LP)	2200K	>90	48V	0.11 (0.03A/ft)	5.3 (1.62W/ft)	5.8 (1.77W/ft)	390(118/ft)	50000mm (164ft)	12LED/100mm				
	2700K						370(112/ft)						
	3000K						360(109/ft)						
	4000K						380(115/ft)						
NMT1312- 9XXX48 CSN050CC2000-PRO	2200K	>90					0.2 (0.06A/ft)	9.6 (2.93W/ft)		10.6 (3.23W/ft)	700(213/ft)	20000mm (65.6ft)	
	2700K										650(198/ft)		
	3000K										650(198/ft)		
	4000K										680(207/ft)		
NMT1312- 0RGB48 CSN050CC2000-PRO	RGB	/		0.2 (0.06A/ft)	9.6 (2.93W/ft)	10.6 (3.23W/ft)					/	20000mm (65.6ft)	24LED/125mm
	R 620-630nm												
	G 525-530nm												
	B 465-470nm												
NMT1312- 0RGBXX48 CSN050CC2000-PRO	RGB-2200K	/					0.2 (0.06A/ft)	9.6 (2.93W/ft)		10.6 (3.23W/ft)	/		
	RGB-2700K												
	RGB-3000K												
	RGB-3500K												
	RGB-4000K												
	RGB-5400K												
NMT1312- 9LWNW48 CXN050XC0500-PRO	2100-4000K	>90	0.2 (0.06A/ft)	9.6 (2.93W/ft)	10.6 (3.23W/ft)	520(158/ft)					24LED/62.5mm		
NMT1312- 0RGBX24 CDS025CC0500-PRO-EP(SPI)	RGB	/				24V			0.75 (0.23A/ft)		18 (5.49W/ft)	19.8 (6.04W/ft)	
	R 620-630nm												
	G 525-530nm												
	B 465-470nm												
NMT1312- 8XWX24 CDS025CC0500-PRO-EP(SPI)	2200K	>80					/	840(256/ft)					
	2700K									970(295/ft)			
	3000K									1000(304/ft)			
	4000K		920(280/ft)										
NMT1312- 0RGBM24 CDS025CC 0500-PRO-EP(DMX512)	RGB	/	/										
	R 620-630nm												
	G 525-530nm												
	B 465-470nm												
NMT1312- 8XWM24 CDS025CC 0500-PRO-EP(DMX512)	2200K	>80	840(256/ft)										
	2700K			970(295/ft)									
	3000K			1000(304/ft)									
	4000K			920(280/ft)									

Note:

1. The above parameters are tested based on 1m/3.28ft standard products;
2. The luminous flux is allowed to have an error range of $\pm 10\%$;
3. The above parameters are typical values;

[Light Distribution]



Light distribution

Flux out: 517.6 lm

Height	Eavg, Emax	Angle: 114.01°	Diameter
1m	64.33, 236.8lx		308.06cm
2m	16.08, 59.19lx		616.11cm
3m	7.148, 26.31lx		924.17cm
4m	4.021, 14.80lx		1232.23cm
5m	2.573, 9.471lx		1540.28cm
6m	1.787, 6.577lx		1848.34cm
7m	1.313, 4.832lx		2156.40cm
8m	1.005, 3.699lx		2464.46cm
9m	0.7943, 2.923lx		2772.51cm
10m	0.6433, 2.368lx		3080.57cm

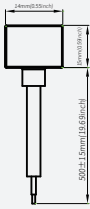
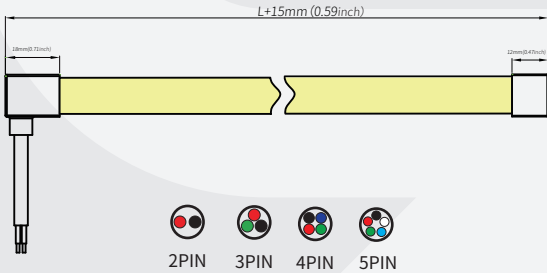
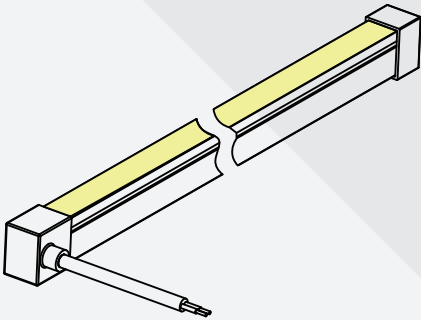
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

Effective average illuminance

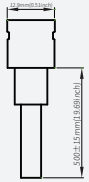
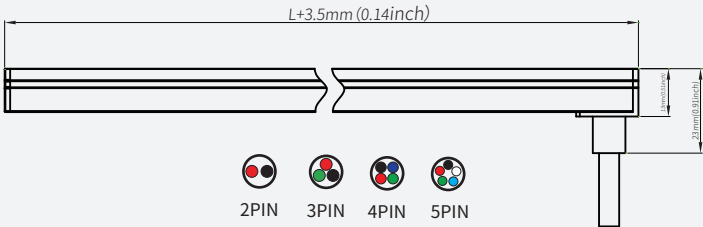
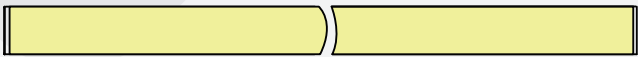
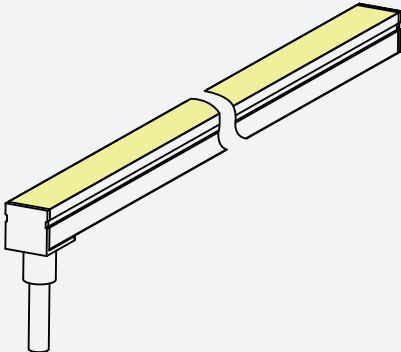
Note: The above data is based on 24V monochrome 4000K color temperature. If you need other models of IES files, please download the corresponding models from the IES database.

[Product mechanical parameters]

• IP65 Glued cap--side outlet

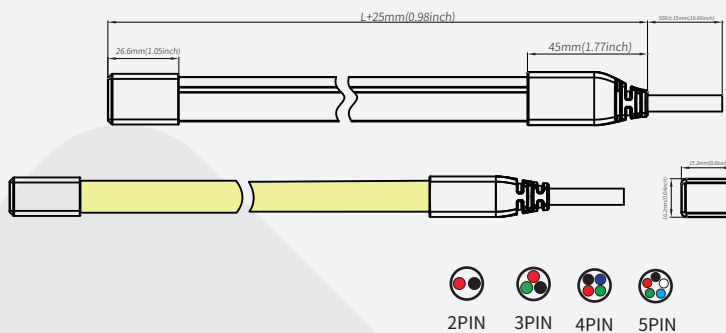
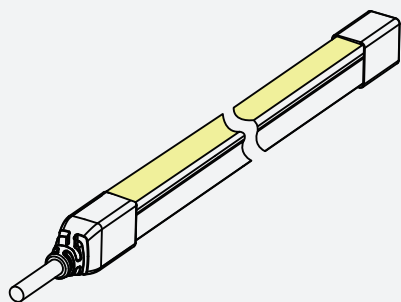


• IP67 No dark cap(NP/ENP)-bottom outlet

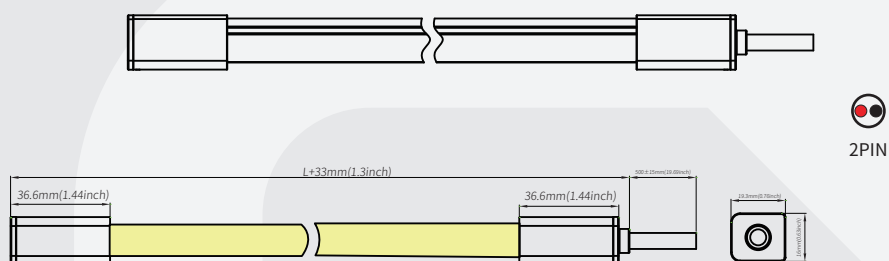
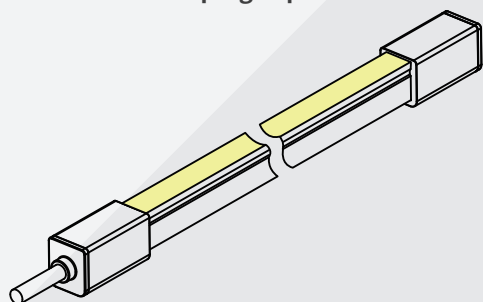


[Product mechanical parameters]

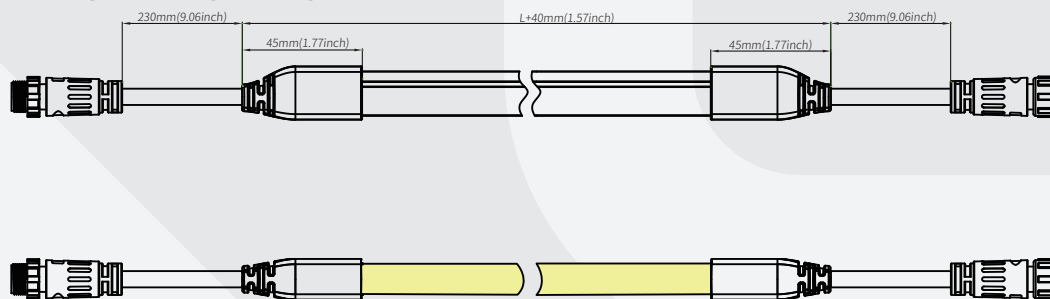
• IP67Full encapsulated cap(EP)-top outlet



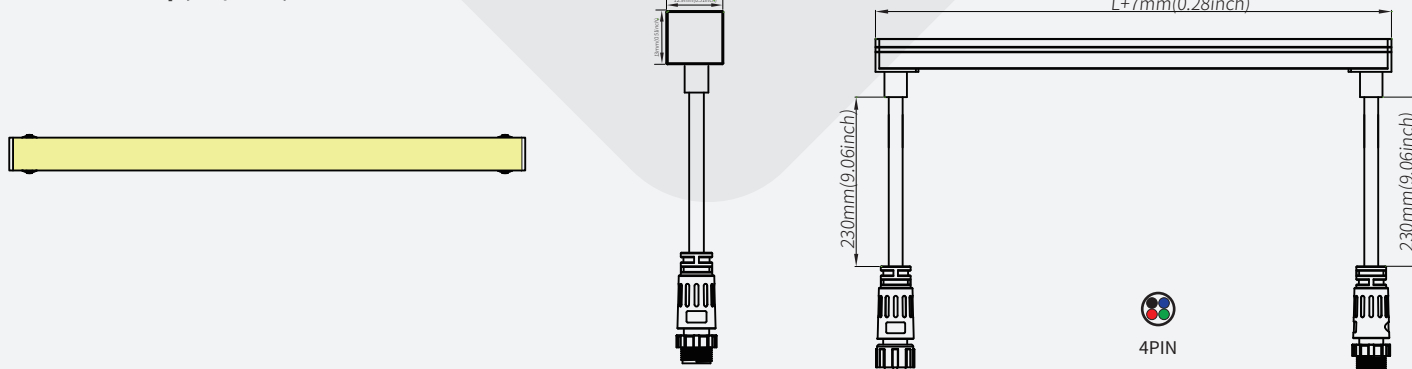
• IP54Solder-free plug-top outlet



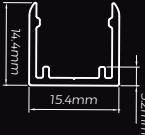
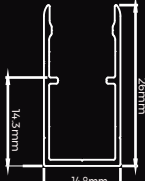
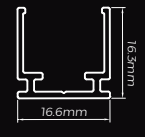
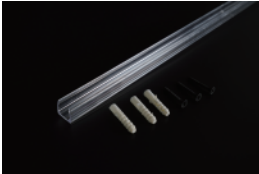
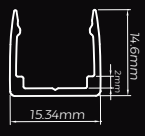
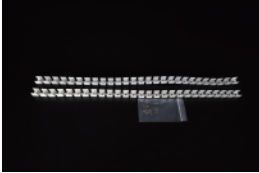
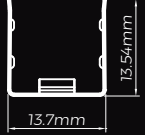
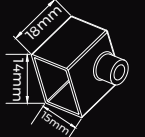
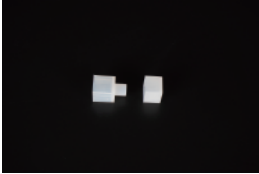
• IP67Full encapsulated cap(EP)-top outlet



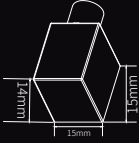
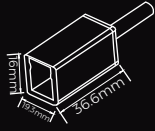
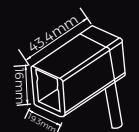
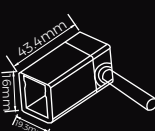
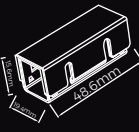
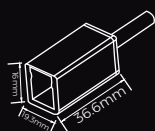
• IP67No dark cap(NP/ENP)-bottom outlet



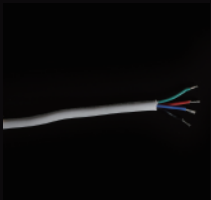
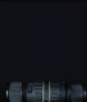
[Accessory information]

name	describe	Accessories Picture	Section size	Order model	quantity/ case (PCS)	net weight (kg)	Per box net weight (kg)	Gross weight (kg)	Gross weight (mm)	Remark
Aluminium carrier	Flat mounting aluminum groove			AS-NMT1312A-1000	60	0.1453	8.8	9.9	1180*125*115	Size:L1000*W15.4* H14.1mm, with screw
Aluminium clip	Flat mounting clip			AS-NMT1312A-25	450	0.0058	2.61	2.91	250*250*150	Size:L25*W15.4* H14.1mm, with screw
Aluminium carrier	Aluminum groove of reserved outlet position			AS-NMT1312B1-1000	64	0.1513	9.1	10.2	1180*125*115	Size:L1000*W14.8* H26mm, with screw
Aluminium clip	clip with reserved outlet position			AS-NMT1312B1-25	300	0.0061	2.745	3.045	250*250*150	Size:L25*W14.8* H26mm, with screw
Alumina carrier	Pre-installed aluminium groove			AS-NMT1312A2-1000	60	0.167	10.02	11.1	1180*125*115	Size: L1000*W16.6*H16.3mm with screws, 5 clips for 1 meter
PC carrier	Flat mount PC slot			AS-NMT1312P-1000	60	0.066	3.96	5	1180*125*115	Size: L1000*W15.4*H14.6mm With screws
PC card	Flat mount PC clip			AS-NMT1312P-25	350	0.004	1.4	1.655	250*250*150	Size: L25*W15.4*H14.6mm With screws
Moldable carrier	Moldable groovez			AS-NMT1312M-500	66	0.046	4.55	6	500*290*290	Size: L500*W13.7*H13.5mm, with screw
End-Cap set	End cap set, including end cap and plug (outlet from the left direction)			AS-NMT1312GS0-EC	400	0.0035	1.4	1.7	250*250*150	/
End-Cap set	End cap set, including end cap and plug (outlet from the top direction)			AS-NMT1312GH0-EC	400	0.0035	1.4	1.7	250*250*150	/

[Accessory information]

name	describe	Accessories Picture	Section size	Order model	quantity/ case (PCS)	net weight (kg)	Per box net weight (kg)	Gross weight (kg)	Gross weight (mm)	Remark
End-Cap set	End cap set, including end cap and plug (outlet from the bottom direction)			AS-NMT1312GD0-EC	400	0.0035	1.4	1.7	250*250*150	/
Weld-free waterproof End-Cap	Quick connector (out let from the top direction)			AS-NMT1312HT0-FL	48	0.04	1.92	3.735	365x365x190	outlet 500mm\ IP54
Weld-free waterproof End-Cap	Quick connector (out let from the bottom direction)			AS-NMT1312HB0-FL	48	0.04	1.92	3.735	365x365x190	outlet 500mm\ IP54
Weld-free waterproof End-Cap	Quick connector (out let from the left direction)			AS-NMT1312HL0-FL	48	0.04	1.92	3.735	365x365x190	outlet 500mm\ IP54
Weld-free waterproof End-Cap	Quick connector (out let from the right direction)			AS-NMT1312HR0-FL	48	0.04	1.92	3.735	365x365x190	outlet 500mm\ IP54
Weld-free waterproof End-Cap	Quick connector(plug)			AS-NMT1312TX0-FL	48	0.03	1.44	3.255	365x365x190	IP54
Weld-free waterproof connector	Quick connector (wit hout wire)			AS-NMT1312MX0-FL	96	0.026	2.496	2.75	365x365x190	IP54
Weld-free waterproof connector	Quick connector (wit h wire))			AS-NMT1312MH0-FL	48	0.053	2.544	2.8	365x365x190	The middle wire is 300mm long, IP54
Glue	Acid glue		/	AS-PG-0002	150	0.014	2.1	2.4	250*250*150	10ml/pcs
wire	2P PVC wire (0.5M)		/	AS-WS-0001	150	0.01541	2.31	2.61	250*250*150	Suitable for single color strip

【Accessory information】

name	describe	Accessories Picture	Section size	Order model	quantity/ case (PCS)	net weight (kg)	Per box net weight (kg)	Gross weight (kg)	Gross weight (mm)	Remark
wire	2P PVC wire (2M)		/	AS-WS-0002	125	0.0616	7.7	8	250*250*150	Suitable for single color strip
wire	3P PVC wire (0.5M)		/	AS-WS-0015	150	0.0154	2.31	2.61	250*250*150	Suitable for SWW strip
wire	3P PVC wire (2M)			AS-WS-0016	125	0.0616	7.7	8	250*250*150	
wire	4P PVC wire (0.5M)		/	AS-WS-0003	150	0.0194	2.91	3.21	250*250*150	Suitable for RGB strip
wire	4P PVC wire (2M)			AS-WS-0004	125	0.0776	9.7	10	250*250*150	
wire	5P PVC wire (0.5M)		/	AS-WS-0013	150	0.0195	2.925	3.364	250*250*150	Suitable for RGBW strip
wire	5P PVC wire (2M)			AS-WS-0014	125	0.0755	9.4375	10.86	250*250*150	
connector	2PIN IP68 Waterproof connector		/	AS-FC-0001	512	0.016	8.192	9.5	365*365*190	Suitable for single color strip
connector	3PIN IP68 Waterproof connector			AS-FC-0002	512	0.018	9.216	10.2	365*365*190	Suitable for SWW strip
connector	4PIN IP68 Waterproof connector			AS-FC-0003	288	0.03	8.64	9.6	365*365*190	Suitable for RGB strip

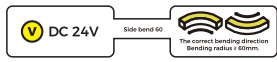
[Product control system solutions]

Product Image	product name	Product number	Order code	Product specifications	Applicable Products
	Monochrome remote	CK1-GBA	402-02-000000-00001	output signal: RF Working voltage: 3VDC (CR2032) Remote control distance: 30m Working temperature: Ta: 0-30 °C-0+55 °C	Monochrome light strip (Use with CR1-GBA)
	Monochrome light controller	CR1-GBA	402-01-000000-00001	Input voltage: DC12-48V Output current: 15A@12V/24V, 10A@36V/48V Output Power: Max 180W@12V/Max 360W@24V/Max 360W@36V/Max 480W@48V Working temperature: -30°C— +55°C	Monochrome light strip (Use with CR1-GBA)
	CCT remote control	CK2-GBA	402-02-000000-00002	output signal: RF Working voltage: 3VDC (CR2032) Remote control distance: 30m Working temperature: Ta: 0-30 °C-0+55 °C	CCT light strip (Use with CR2-GBA)
	Color temperature controller	CR2-GBA	402-01-000000-00002	Input voltage: DC12-48V Output current: 8A Output Power: Max 192W@12V/Max 284W@24V/Max 576W@36V/Max 768W@48V Working temperature: -30°C— +55°C	CCT light strip (Use with CK2-GBA)
	RGB/RGBW remote control	CK4-GBA	402-02-000000-00003	output signal: RF Working voltage: 3VDC (CR2032) Remote control distance: 30m Working temperature: Ta: 0-30 °C-0+55 °C	RGB/RGBW light strip (Use with CR3-GBA)
	RGB controller	CR3-GBA	402-01-000000-00003	Input voltage: DC12-48V Output current: 18A Output Power: Max 216W@12V/Max 432W@24V/Max 648W@36V/Max 864W@48V Working temperature: -30°C— +55°C	RGB light strip (Use with CK4-GBA)
	RGBW controller	CR4-GBA	402-01-000000-00004	Input voltage: DC12-48V Output current: 20A Output Power: Max 240W@12V/Max 480W@24V/Max 720W@36V/Max 960W@48V Working temperature: -30°C— +55°C	RGBW light strip (Use with CK4-GBA)
	Symphony Controller	K-8000C	23-01-00-0050	Power supply: DC 5V-24V input Power consumption: 5W Working temperature: Ta: 0-20 °C-0+85 °C	DMX/SPI magic lights with universal

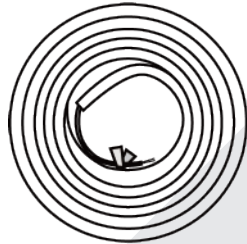
[Packaging Solutions]

· standard packaging

1. Line marking, the line marking is affixed at a distance of 80mm from the end of the line;



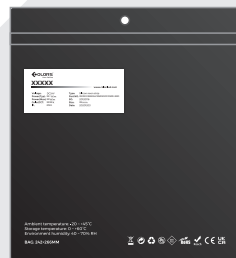
Voltage & bending warning signs



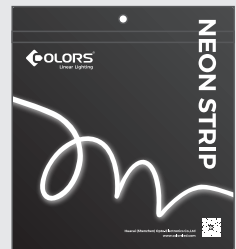
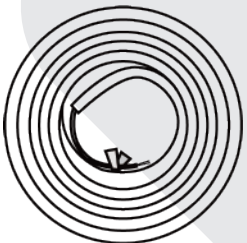
2. Put the product information label on the back of the static bag inside the marking line;



Product Information Label



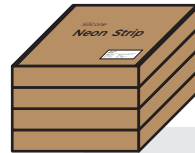
3. Put the light strip into an electrostatic bag, one roll per bag, and seal the bag;



4. Label the carton and pack it into the carton;



5. Pack 4 boxes of products in the carton;



6. Put the product information label and the box number label on the side of the carton, and the QC inspection stamp;



Product Information Label

Box number label



Model	Product size	Product Quantity/box	Product Quantity/case	Product net weight (kg)	Net weight per box (kg)	Gross weight (kg)	Carton size (m)
NMT1312-9XX24CSN050CCXXXX	L5000*13*12mm	5M*4	80M	0.86	13.76	15.31	0.41*0.41*0.26
	L10000*13*12mm	10M*2	80M	1.72	13.76	15.31	
NMS1312-0X24CSN050CCXXXX	L5000*13*12mm	5M*4	80M	0.86	13.76	15.31	
	L10000*13*12mm	10M*2	80M	1.72	13.76	15.31	
NMT1312-0RGB24CSN050CC0500	L5000*13*12mm	5M*4	80M	0.86	13.76	15.31	
NMT1312-0RGBXX24CSN050CC0500	L5000*13*12mm	5M*4	80M	0.86	13.76	15.31	
NMT1312-9SWDW24CSN050CC0500	L5000*13*12mm	5M*4	80M	0.86	13.76	15.31	

【Packaging Solutions】

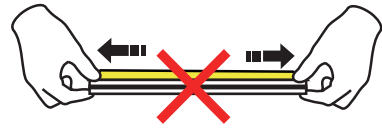
Model	Product size	Product Quantity/ box	Product Quantity/ case	Product net weight (kg)	Net weight per box (kg)	Gross weight (kg)	Carton size (m)
NMT1312-9XX48CSN050CC2000	L20000*13*12mm	20M*3	60M	3.44	10.32	12.19	0.345*0.345*0.33
NMT1312-9XX48CSN050CC5000(LP)	L50000*13*12mm	50M*1	50M	8.6	8.6	10.47	
NMT1312-ORGBW48CSN050CC2000	L20000*13*12mm	20M*3	60M	3.44	10.32	12.19	
NMT1312-ORGB48CSN050CC2000	L20000*13*12mm	20M*3	60M	3.44	10.32	12.19	
NMT1312-9LWNW48CSN050CC2000	L20000*13*12mm	20M*3	60M	3.44	10.32	12.19	
NMT1312-XXXXX24CDS025CC0500-EP	L5000*13*12mm	5M*3	60M	0.86	10.32	12	0.41*0.41*0.26
NMT1312-XXXXX24CDS025CC0500-EP							

【Reliability test】

test item	Classification	Reference	Test method or condition
Safety test	Mechanical strength	IEC 60598-1; IEC 60598-2-21	The hammer spring Impact energy 0.7J
	IP	IEC 60598-1; IEC 60598-2-21	IP67
	Winding Test	IEC 60598-1; IEC 60598-2-21	φ150mm cylinder, 60N pull, winding 10 times at (-25°C ±2°C), and 10 times after (-15°C ±2°C, 16h).
	Cold Bend Test	IEC 60598-1; IEC 60598-2-21	wound on mandrel, low-temperature (-15°C ±2°C, 16h), around the mandrel for two turns
	Cold Impact test	IEC 60598-1; IEC 60598-2-21	Low-temperature (-15°C ±5°C, 16h), hammer falls from a height of 100mm.
	Insulation Resistance	IEC 60598-1; IEC 60598-2-21	≤ 2MΩ
	Electrical strength	IEC 60598-1; IEC 60598-2-21	500V
Mechanical reliability testing	Bending test	Colors	Each 200mm, bending up and down 100 times
	Bending test	Colors	Each 200mm, bending left and right 100 times
	Torsion test	Colors	Twist clockwise 5 times and then release, repeat 200 times
	Disassembly and assembly test	Colors	Repeat disassembly and assembly, 10 times
Environment Reliability testing	High temperature storing test	IEC 60068-2-2	80°C, 168h
	Low temperature storing test	IEC 60068-2-1	-40°C, 168h
	High temperature and Humidity impact	IEC 60068-2-78	60°C, 85%RH
	Salt Spray test	IEC 60068-2-11	5% salt solution concentration, 24h
	IK	IEC 62262	5 times of impact on each exposed surface
	Lifetime aging test	Colors	35°C, 6000h
	switch test	Colors	10s On, 10s Off, 10000 times

【Precautions】

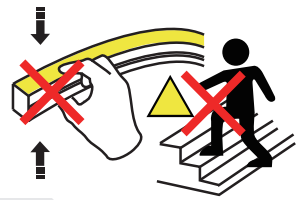
- Please use an isolated power supply to drive the LED light bar, and the ripple of the constant voltage source is less than 5%. Do not use resistance-capacitance step-down, non-isolated power supplies to drive the LED light bar.
- In actual applications, the power supply should reserve 20% of the margin (it is recommended to use only 80% of the power) to ensure sufficient voltage to drive the product.
- Please operate carefully, do not touch the AC power terminal when the power is on to prevent electric shock.
- Pay attention to the positive and negative poles of the power cord, and do not connect it wrongly. Whether the voltage of the power supply and the product are the same, so as to avoid damage to the product.
- During the installation process, please avoid scratching, twisting and irregular bending of the product, otherwise it may cause irreparable damage to the product.
- In order to ensure the life and reliability of the light strip, please do not bend it in an arc with a radius of less than 60mm. A too small bending radius will damage the product itself.
- If the actual application length exceeds the specified use length, it will cause the lamp belt to overload and heat, and the brightness is uneven.
- In order to prevent your eyes from being hurt, try to avoid staring at the light-emitting surface of the light bar for a long time.
- Non-professionals are prohibited from installing, disassembling and repairing the product.
- It is strictly forbidden to use any acidic or alkaline adhesives to fix products (including but not limited to glass glue, etc.).
- IP67 protection products are not suitable for swimming pool underwater.
- Products of different sizes and specifications under the same color temperature value due to structural differences, the final color of the product is slightly deviated, and it must be confirmed before use.
- When the IP67 protection product is installed and applied, the waterproof level needs to be downgraded after self-processing and cutting.
- Please use professional cutting tools when cutting.
- Engineering packaging neon light belt (20~50m), please use pay-off rack during construction to avoid damage to the product caused by pulling force.



No stretching



No distortion



No trampling