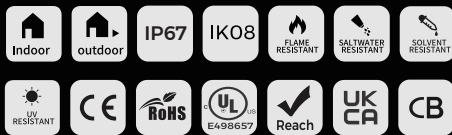


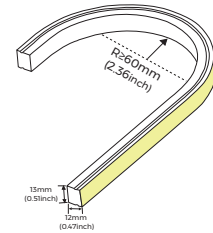
Neon Specification

NMT1312



【Features】

- Light source: high luminous efficiency LED lamp beads, LM80 test certification;
- Process material: high light transmittance, high purity silica gel material, IP67 protection level;
- Optical design: unique optical light distribution structure design, uniform light emission on the surface without shadows;
- Appearance design: 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;
- Product application: signboard lighting, outdoor/internal decorative lighting, architectural contour application;
- White 5 year warranty, G/B/CCT/RGB/RGBW with 3 years warranty or working life =36000H,whichever comes first;48V/SPI/DMX512 with warranty 2 years or working life=20000H,whichever comes first;



Note: The bending radius of Symphony is $R \geq 80\text{mm}$ (2.6inch)

【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- 8XX24 CXN050XCXXX-Plus	2300K	>80/90	24V	0.4 (0.12A/ft)	9.6 (2.93W/ft)	10.6 (5.05W/ft)	640(195/ft)	5000mm (16.4ft) 10000mm (32.8ft)	6LED/50mm
	2700K						640(195/ft)		
	3000K						670(200/ft)		
	4000K						670(200/ft)		
	5000K	670(200/ft)							
NMT1312- 0X24 CXN050XCXXX-Plus	G 525-530nm	/		0.34 (0.1A/ft)	8 (2.44W/ft)	8.8 (2.68W/ft)	/		
	B 465-470nm								
NMT1312- 0RGB24 CXN050XC0500-Plus	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-Plus	RGB-2300K	/		0.6 (0.18A/ft)	14.4 (4.39W/ft)	16 (4.88W/ft)	/		12LED/62.5mm
	RGB-2700K								
	RGB-3000K								
	RGB-3500K								
	RGB-4500K								
	RGB-5000K								
NMT1312- 9SWDW24 CXN050XC0500-Plus	2700-5000K	>90		0.5 (0.15A/ft)	12 (3.66W/ft)	13.2 (4.02W/ft)	780(235/ft)	14LED/55.6mm	

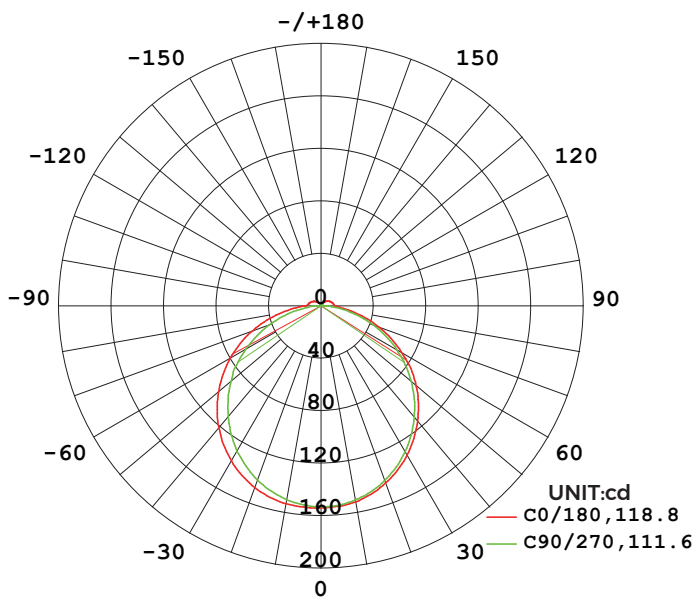
【Basic Parameters】

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-Plus(LP)	2300K	>90	48V	0.11 (0.03A/ft)	5.3 (1.62W/ft)	5.8 (1.77W/ft)	280(85/ft)	50000mm (164ft)	12LED/100mm			
	2700K						320(95/ft)					
	3000K						320(95/ft)					
	4000K						350(105/ft)					
NMT1312- 9XXX48 CSN050CC2000-Plus	2300K	>90		0.2 (0.06A/ft)	9.6 (2.93W/ft)	10.6 (3.23W/ft)	500(150/ft)	20000mm (65.6ft)		24LED/125mm		
	2700K						560(170/ft)					
	3000K						560(170/ft)					
	4000K						600(180/ft)					
NMT1312- 0RGB48 CSN050CC2000-Plus	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-Plus	RGB-2300K	/		0.2 (0.06A/ft)	9.6 (2.93W/ft)	10.6 (3.23W/ft)	/	20000mm (65.6ft)	24LED/125mm			
	RGB-2700K											
	RGB-3000K											
	RGB-3500K											
	RGB-4000K											
	RGB-5000K											
NMT1312- 9LWNW48 CSN050CC2000-Plus	2300~4000K	>90					500(150/ft)		24LED/62.5mm			
NMT1312- 0RGBX24 CDS025CC0500-Plus-EP(SPI)	RGB	/	24V	0.75 (0.23A/ft)	18 (5.49W/ft)	19.8 (6.04W/ft)	350(105/ft)	5000mm (16.4ft)	7LED/83mm SPI-IC:(UCS1603H) DMX-IC:(UCS512B3)			
	R 620-630nm						100(30/ft)					
	G 525-530nm						220(65/ft)					
	B 465-470nm						45(10/ft)					
NMT1312- 8XWX24 CDS025CC0500-Plus-EP(SPI)	2300K	>80					0.75 (0.23A/ft)			18 (5.49W/ft)	19.8 (6.04W/ft)	850(255/ft)
	2700K											850(255/ft)
	3000K											900(270/ft)
	4000K											900(270/ft)
NMT1312- 0RGBM24 CDS025CC 0500-Plus-EP(DMX512)	RGB	/					0.75 (0.23A/ft)			18 (5.49W/ft)	19.8 (6.04W/ft)	350(105/ft)
	R 620-630nm											100(30/ft)
	G 525-530nm											220(65/ft)
	B 465-470nm											45(10/ft)
NMT1312- 8XWM24 CDS025CC 0500-Plus-EP(DMX512)	2300K	>80					0.75 (0.23A/ft)			18 (5.49W/ft)	19.8 (6.04W/ft)	850(255/ft)
	2700K											850(255/ft)
	3000K											900(270/ft)
	4000K											900(270/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:324.5 lm

Height	Eavg,Emax	Angle:111.23deg	Diameter
1m	46.99, 154.11x		292.28cm
2m	11.75, 38.531x		584.55cm
3m	5.221, 17.131x		876.83cm
4m	2.937, 9.6341x		1169.11cm
5m	1.880, 6.1651x		1461.38cm
6m	1.305, 4.2821x		1753.66cm
7m	0.9590, 3.1461x		2045.94cm
8m	0.7343, 2.4081x		2338.21cm
9m	0.5801, 1.9031x		2630.49cm
10m	0.4699, 1.5411x		2922.77cm

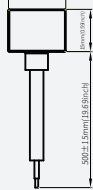
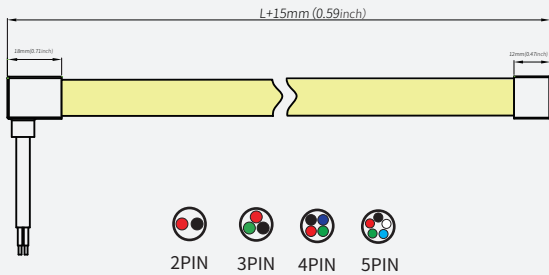
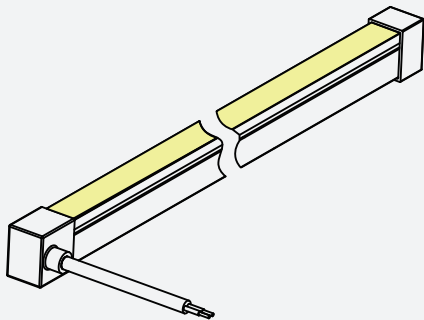
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

Effective average illuminance

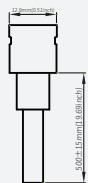
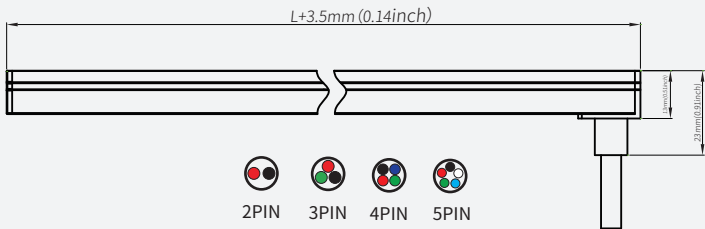
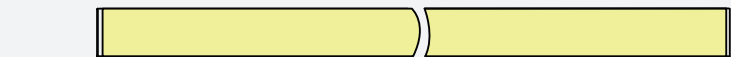
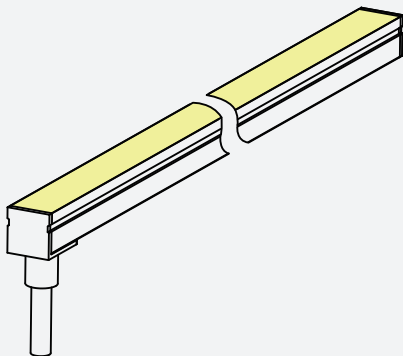
Note: The above data is based on 24V monochrome 4000K color temperature. If you need other models of IES files, please download the corresponding models from the IES database.

[Product mechanical parameters]

· IP65 Glued cap--side outlet

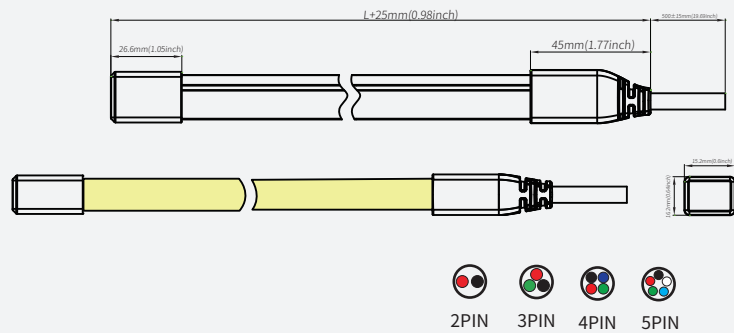
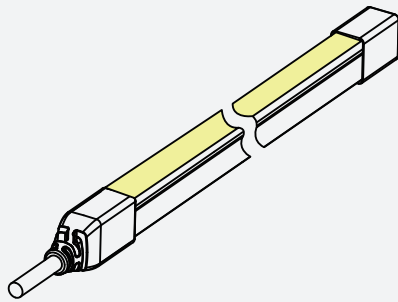


· IP67 No dark cap(NP/ENP)-bottom outlet

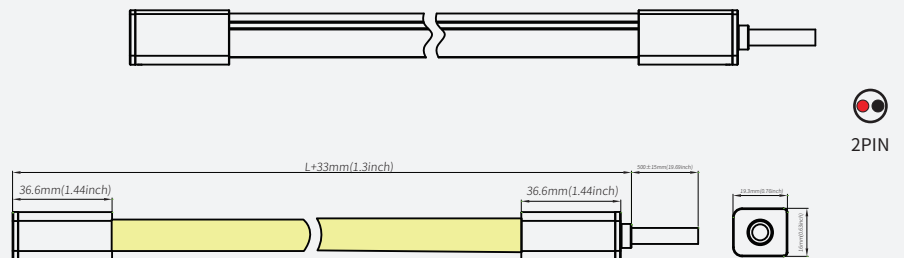
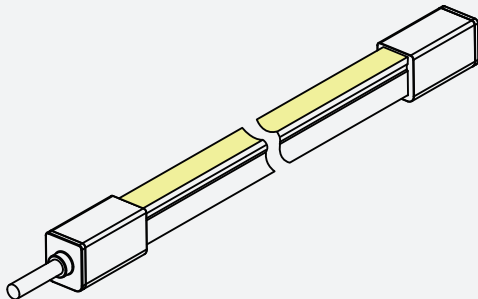


[Product mechanical parameters]

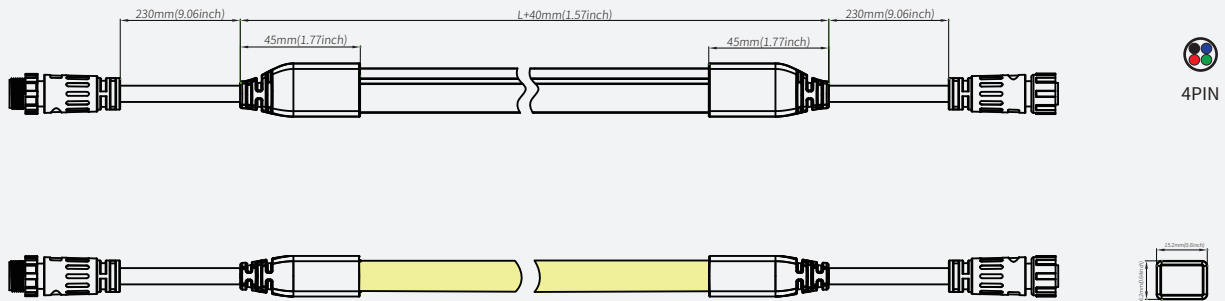
• IP67Full encapsulated cap(EP)-top outlet



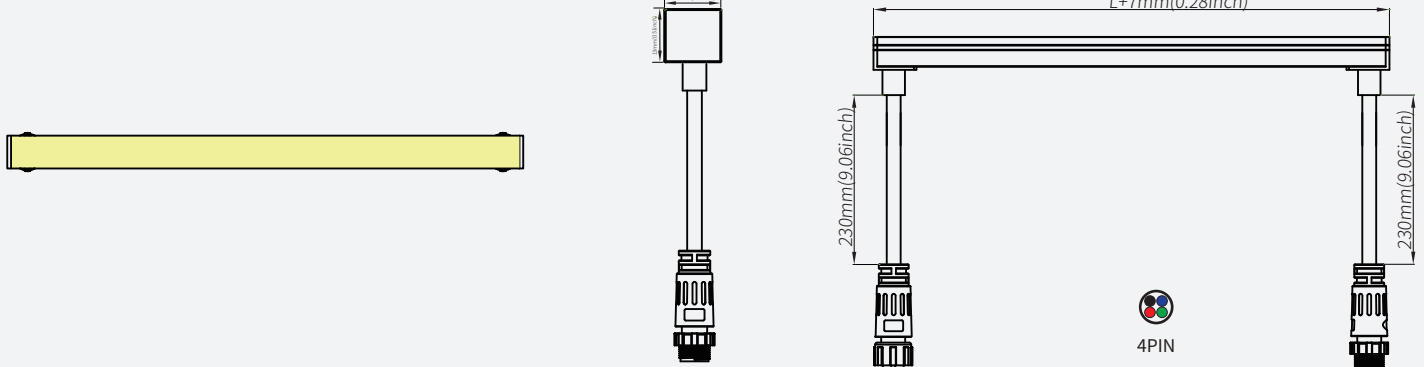
• IP54Solder-free plug-top outlet



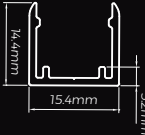
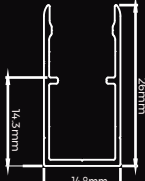
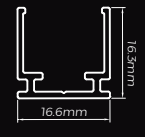
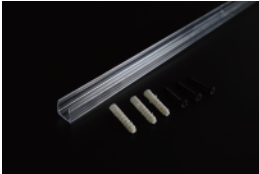
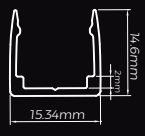
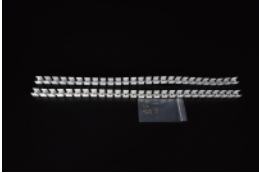
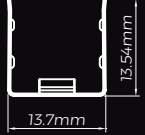
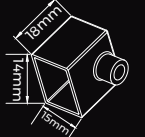
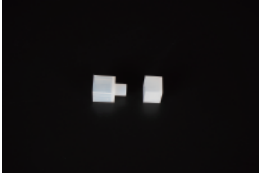
• IP67Full encapsulated cap(EP)-top outlet



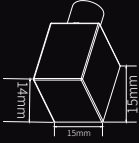
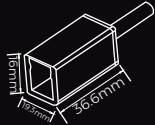
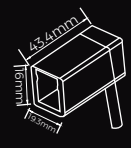
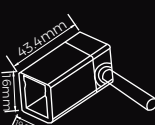
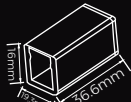
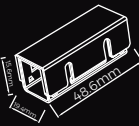
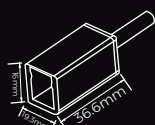
• IP67No dark cap(NP/ENP)-bottom outlet



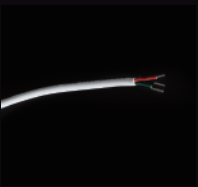
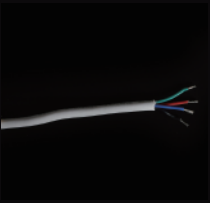
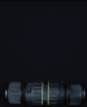
[Accessory information]

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*W15.4* H19.8mm, with screw
Aluminium clip	clip with reserved outlet position			AS-NMT1312B1-25	300	0.0061	2.745	3.045	250*250*150	Size:L25*W15.4* H19.8mm, 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 (without wire)			AS-NMT1312MX0-FL	96	0.026	2.496	2.75	365x365x190	IP54
Weld-free waterproof connector	Quick connector (with 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

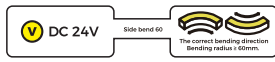
【Product control system solutions】

Product Image	product name	Product number	Order code	Product specifications	Applicable Products
	Monochrome remote	CK1-GBA	402-02-000000-00001	output signal:RF(2.4GHz) Working voltage:3VDC(CR2032) Remote control distance:30m Working temperature:Ta:0-30 °C~0+55 °C	Monochrome light strip (Use with CR1-GBA)
	Monotone light controller	CR1-GBA	402-01-000000-00001	Input voltage:12-48VDC Output current:15A@12/24V-10A@36/48V Output Power:180W@12V-360W@24V 360W@36V-480W@48V Working temperature:Ta:0-30 °C~0+55 °C	Monochrome light strip (Use with CR1-GBA)
	CCT remote control	CK2-GBA	402-02-000000-00002	output signal:RF(2.4GHz) 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:12-36VDC Output current:2CH,8A/CH Output Power:2x(96-288)W Working temperature:Ta:0-30 °C~0+55 °C	CCT light strip (Use with CK2-GBA)
	RGB/RGBW remote control	CK4-GBA	402-02-000000-00003	output signal:RF(2.4GHz) 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:12-36VDC Output current:3CH,6A/CH Output Power:3 x (72-216)W Working temperature:Ta:0-30 °C~0+55 °C	RGB light strip (Use with CK4-GBA)
	RGBW controller	CR4-GBA	402-01-000000-00004	Input voltage:12-36VDC Output current:4CH,5A/CH Output Power:4 x (60-180)W Working temperature:Ta: -30 °C~ +55 °C	RGBW light strip (Used 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

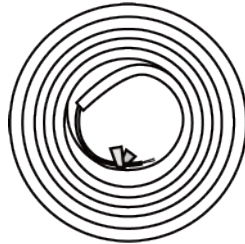
【Packaging Solutions】

· standard packaging

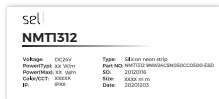
1. Line marking, the line marking is affixed at a distance of 80mm from the end of the line;



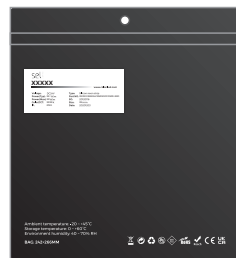
Voltage & bending warning signs



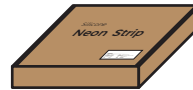
2. Put the product information label on the back of the static bag inside the marking line;



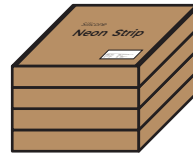
Product Information Label



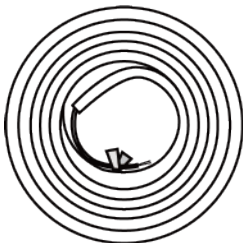
4. Label the carton and pack it into the carton;



5. Pack 4 boxes of products in the carton;



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



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)
NMT1312-8XX24CSN050CCXXX-Plus	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	
NMS1217-0X24CSN050CCXX00-Plus	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-ORGB24CSN050CC0500-Plus	L5000*13*12mm	5M*4	80M	0.86	13.76	15.31	
NMT1312-ORGBXX24CSN050CC0500-Plus	L5000*13*12mm	5M*4	80M	0.86	13.76	15.31	
NMT1312-9SWDW24CSN050CC0500-Plus	L5000*13*12mm	5M*4	80M	0.86	13.76	15.31	

【Packaging Solutions】

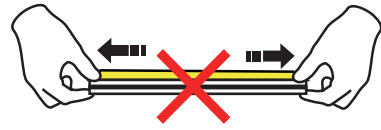
Model	Product size	Product Quantity/ box	Product Quantity/ case	Product net weight (kg)	Net weight per box (kg)	Gross weight (kg)	Carton size (m)
NMT1312-9XX48CSN050CC2000-Plus	L20000*13*12mm	20M*3	60M	3.44	10.32	12.19	0.345*0.345*0.33
NMT1312-9XX48CSN050CC5000-Plus(LP)	L50000*13*12mm	50M*1	50M	8.6	8.6	10.47	
NMT1312-ORGBW48CSN050CC2000-Plus	L20000*13*12mm	20M*3	60M	3.44	10.32	12.19	
NMT1312-ORGB48CSN050CC2000-Plus	L20000*13*12mm	20M*3	60M	3.44	10.32	12.19	
NMT1312-9SWDW48CSN050CC2000-Plus	L20000*13*12mm	20M*3	60M	3.44	10.32	12.19	
NMT1312-XXXXX24CDS025CC0500-Plus-EP	L5000*13*12mm	5M*3	60M	0.86	10.32	12	0.41*0.41*0.26
NMT1312-XXXXX24CDS025CC0500-Plus-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】

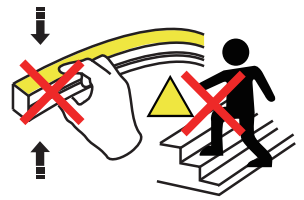
- Please use an isolated power supply to drive the LED light bar, and the ripple of the constant voltage source is less than 5%. Do not use resistance-capacitance step-down, non-isolated power supplies to drive the LED light bar.
- In actual applications, the power supply should reserve 20% of the margin (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