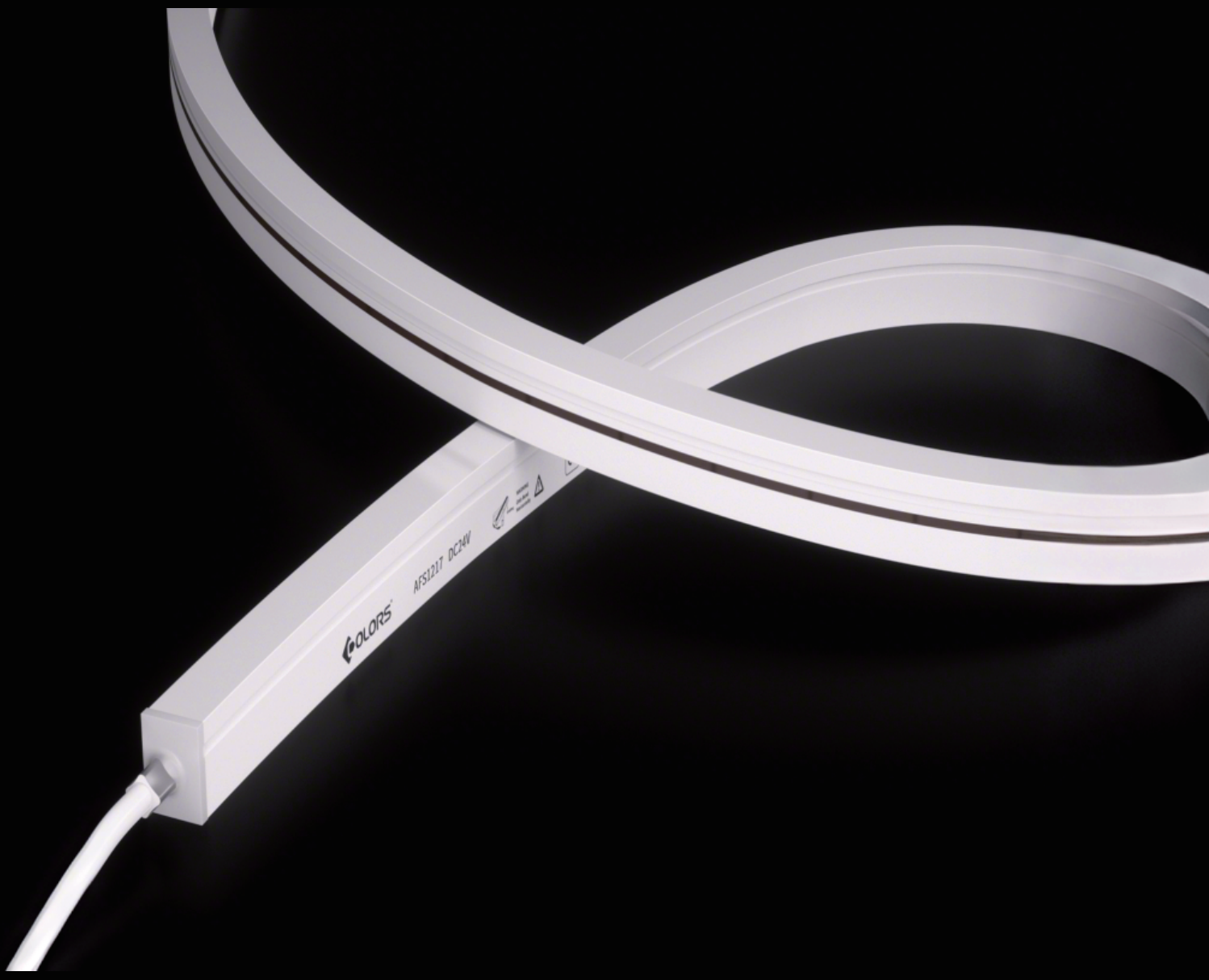
AF Series Specification

AFS1217



E-mail:colors@colorsled.com

Version：A00

www.colorsled.com

【Features】

Light source: Adopting dedicated and outdoor-specific LED, stronger reliability for outdoor application; Finished product ANSI SDCM≤5;

· **Structure**: New anti-tension structure, Integrated anti-tension silicone extrusion process, against internal stress and external tension;
Double-layer circuit conductive, double power supply guarantee, broken boards without power cut;

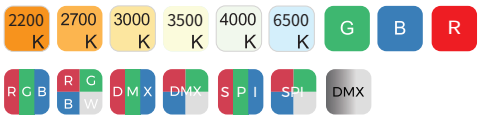
· **DMX Chip model and pixel count**: white light/ RGB/RGBW: UCS512H4LB,12 Pixels/m;

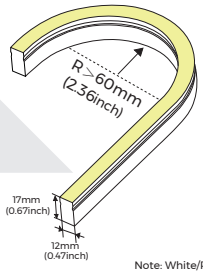
· **Product applications**: outdoor illumination, architectural facade lighting; IP67

· **Working/storage temperature(White/monochromatic light)**: Ta: -40~60°C / 0～60°C
Symphony working/storage temperature(DMX/RGB/RGBW): Ta: -40~50°C / 0°C～60°C

· **Warranty**: **White/R/G/B** with 7 years warranty or working life =84000H,whichever comes first;
RGB(24V)/RGBW(24V)/RGBM/RGBWM/White(DMX) with warranty 5 years or working life=60000H,whichever comes first;
RGB(48V)/RGBW(48V): **Indoor**:5 years warranty or working life =60000H, whichever comes first.
Outdoor:3 years warranty or working life =36000H, whichever comes first.







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

【Basic Parameters】

Model	CCT/colors	Color range	CRI	Input voltage (V)	Rated current (A/m)	Rated power (w/m)	Maximum power (w/m)	Lumens (LM/m)	Standard Length	Remark
AFS1217-9XX24CSW025CCXXXX-GV10-ENP-ESD	2200K	2100-2300K	>90	24	0.625 (0.19A/ft)	15 (4.57W/ft)	16.5 (5.03A/ft)	541 (165LM/ft)	5000mm (16.4ft)	16LED/50mm
	2700K	2600-2830K						646 (197LM/ft)		
	3000K	2920-3170K						648 (198LM/ft)		
	4000K	3770-4220K						702 (214LM/ft)		
	6500K	5800-6800K						665 (203LM/ft)		
AFS1217-9XX24CSW025CCXXXX-GV10-ENP-ESD	2200K	2100-2300K	>90		0.4 (0.12A/ft)	10 (3.05W/ft)	11 (3.35W/ft)	469 (143LM/ft)	10000mm (32.81ft)	16LED/50mm
	2700K	2600-2830K						495 (151LM/ft)		
	3000K	2920-3170K						525 (160LM/ft)		
	3500K	3300-3650K						550 (168LM/ft)		
	4000K	3770-4220K						669 (204LM/ft)		
	6500K	6000-7000K						632 (193LM/ft)		
AFS1217L-9XX24CSW025CCXXXX-GV10-ENP-ESD	2200K	2100-2300K			0.2 (0.06A/ft)	5 (1.53W/ft)	5.5 (1.68W/ft)	276 (84LM/ft)	15000mm (49.21ft)	16LED/50mm
	2700K	2600-2830K						280 (85LM/ft)		
	3000K	2920-3170K						300 (91LM/ft)		
	4000K	3770-4220K						310 (95LM/ft)		
	6500K	6150-6950K						298 (91LM/ft)		
AFS1217-0X24CSW025CCXXXX-GV10-ENP-ESD	R	/	/		0.3 (0.09A/ft)	7.2 (2.20A/ft)	7.92 (2.41A/ft)	/	10000mm (32.81ft)	16LED/50mm
	G/B				0.4 (0.12A/ft)	10 (3.05W/ft)	11 (3.35W/ft)			
AFS1217-0RGB24CSW025CCXXXX-GV10-ENP-ESD	RGB				0.5 (0.15A/ft)	12 (3.66W/ft)	13.2 (4.02W/ft)	/	5000mm (16.4ft)	6*3LED/50mm

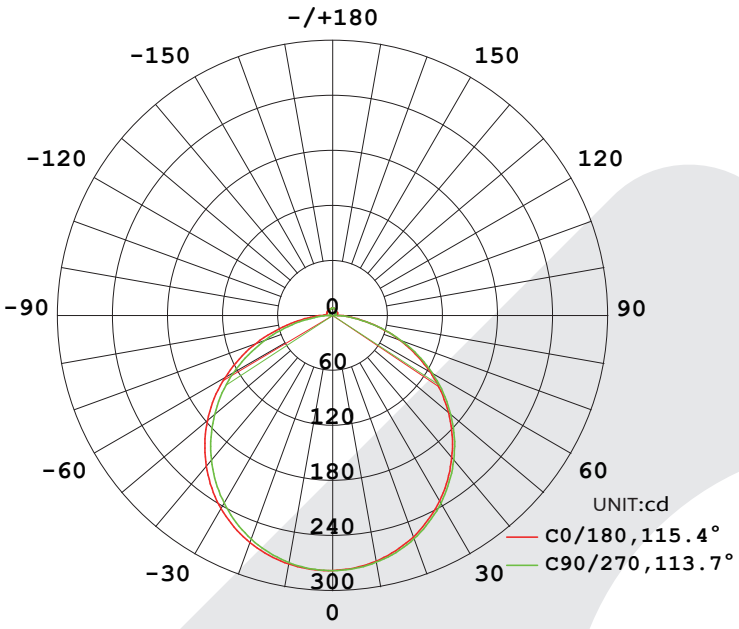
【Basic Parameters】

Model	CCT/colors	Color range	CRI	Input voltage (V)	Rated current (A/m)	Rated power (w/m)	Maximum power (w/m)	Lumens (LM/m)	Standard Length	Remark
AFS1217-0RGBXW24CSW025CC XXXX-GV10-ENP-ESD	RGB+2700K	RGB+(2550-2800K)	/	24	0.5 (0.15A/ft)	12 (3.66W/ft)	13.2 (4.02W/ft)	103 (31LM/ft)	5000mm (16.4ft)	7*4LED/83.3mm
	RGB+3000K	RGB+(2800-3200K)						122 (37LM/ft)		
	RGB+4000K	RGB+(3900-4350K)						119 (36LM/ft)		
AFS1217-0RGBX24CSW025CC XXXX-GV10-ENP-ESD	SPI-RGB	/	/		0.74 (0.23A/ft)	17.8 (5.43W/ft)	19.6 (5.98W/ft)	/	5000mm (16.4ft)	7*3LED/83.3mm UCS5603A 12 Pixels/m
AFS1217-9XWM24CSW025CC XXXX-GV10-ENP-ESD	DMX-2700K	2550-2800K	>90		0.6 (0.18A/ft)	13.5 (4.12W/ft)	14.8 (4.51W/ft)	370 (113LM/ft)	5000mm (16.4ft)	7*3LED/83.3mm DMX-IC: UCS512H4LB 12 Pixels/m
	DMX-3000K	2800-3200K						460 (140LM/ft)		
	DMX-4000K	3900-4350K						460 (140LM/ft)		
AFS1217-0RGBM24CSW025CC XXXX-GV10-ENP-ESD	DMX-RGB	/	/		0.6 (0.18A/ft)	13.5 (4.12W/ft)	14.8 (4.51W/ft)	/	5000mm (16.4ft)	7*3LED/83.3mm UCS512H4LB 12 Pixels/m
AFS1217-0RGBXWM24CSW025CC XXXX-GV10-ENP-ESD	DMX-RGB+2700K	RGB+(2550-2800K)	/		0.7 (0.21A/ft)	16.5 (5.03W/ft)	18.1 (5.52W/ft)	121 (37LM/ft)	5000mm (16.4ft)	7*4LED/83.3mm DMX-IC: UCS512H4LB 12 Pixels/m
	DMX-RGB+3000K	RGB+(2800-3200K)						148 (45LM/ft)		
	DMX-RGB+4000K	RGB+(3900-4350K)						151 (46LM/ft)		
AFS1217-0RGBXWX24CDW025CC XXXX-GV10	SPI-RGB+2700K	W(2550-2800K)	>90	24	0.6 (0.18A/ft)	14.5 (4.42W/ft)	16 (4.87W/ft)	105 (32LM/ft)	5000mm (16.4ft)	7*4LED/83.3mm SPI-IC: UCS7604 12 Pixels/m
	SPI-RGB+3000K	W(2850-3250K)						110 (33LM/ft)		
	SPI-RGB+4000K	W(3900-4400K)						110 (33LM/ft)		
	SPI-RGB+6500K	W(6000-7200K)						110 (33LM/ft)		
AFS1217-9XX48CSW025CCXXXX -GV10-ENP-ESD	2700K	2600-2830K	>90	48	0.2 (0.06A/ft)	10 (3.05W/ft)	11 (3.35W/ft)	503 (153LM/ft)	20000mm (65.62ft)	32LED/100mm
	3000K	2920-3170K						530 (162LM/ft)		
	4000K	3770-4220K						606 (185LM/ft)		
AFS1217-9XW48CSW025CCXXXX -GV10-ESD	2200K	2100-2300K	>90	48	0.09 (0.03A/ft)	4.4 (1.34W/ft)	5.0 (1.52W/ft)	220 (67LM/ft)	50000mm (164ft)	28LED/100mm
	2700K	2600-2830K						220 (67LM/ft)		
	3000K	2920-3170K						230 (71LM/ft)		
	4000K	3770-4220K						300 (92LM/ft)		
	6500K	6000-7000K						250 (77LM/ft)		
AFS1217-0RGB48CSW025CCXXXX -GV10-ESD	RGB	/	>90	48	0.13 (0.04A/ft)	6.3 (1.92W/ft)	7.2 (2.19W/ft)	142 (43LM/ft)	20000mm (65.62ft)	12*3LED/100mm
AFS1217-0RGBXW48CSW025CC XXXX-GV10-ESD	RGB+2700K	W(2550-2800K)	>90	48	0.13 (0.04A/ft)	6.3 (1.92W/ft)	7.2 (2.19W/ft)	54 (16LM/ft)	20000mm (65.62ft)	14*4LED/166mm
	RGB+3000K	W(2850-3250K)						67 (20LM/ft)		
	RGB+4000K	W(3900-4400K)						76 (23LM/ft)		
	RGB+6500K	W(6000-7200K)						73 (22LM/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 ±15%;
3. The above parameters are typical values;

【Light Distribution】



AVERAGE BEAM ANGLE(50%)： 114.6°

Light distribution

Flux out：378.5lm

1m	50.80,176.01lx	305.89cm
2m	12.70,44.001lx	611.78cm
3m	5.645,19.551lx	917.67cm
4m	3.175,11.001lx	1223.56cm
5m	2.032,7.0391lx	1529.45cm
6m	1.411,4.8881lx	1835.34cm
7m	1.037,3.5911lx	2141.23cm
8m	0.7938,2.7501lx	2447.12cm
9m	0.6272,2.1731lx	2753.01cm
10m	0.5080,1.7601lx	3058.89cm

Height Eavg,Emax Angle:113.72° Diameter

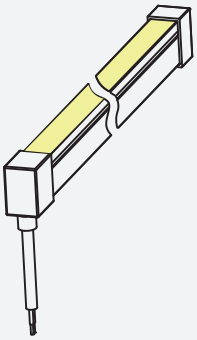
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

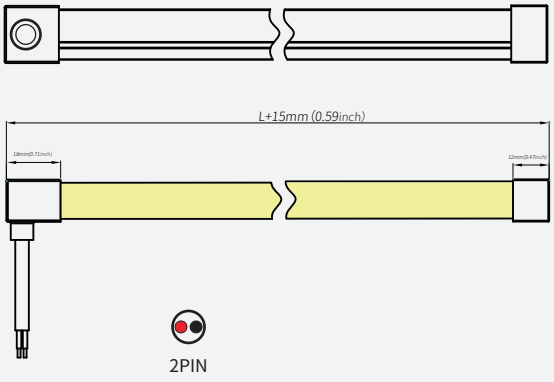
Effective average illuminance

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.

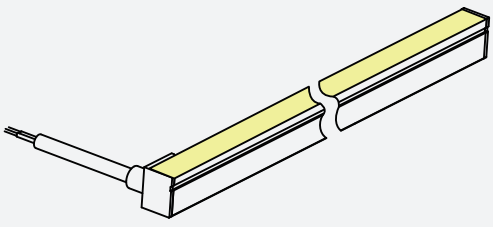
【Product mechanical parameters】

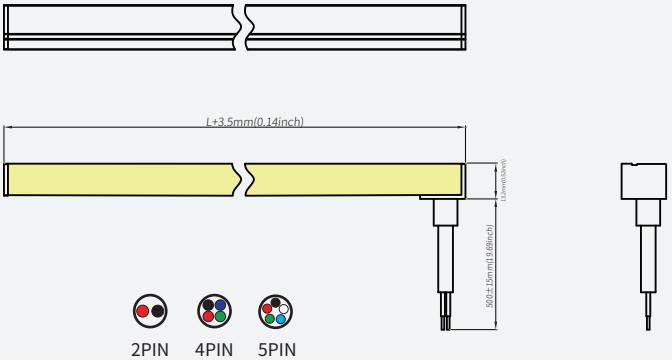
· IP65 Glued cap- bottom outlet





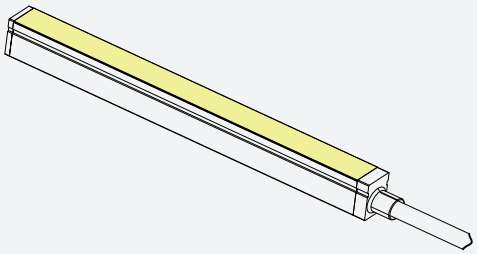
· IP67 No dark cap(ENP)-side outlet

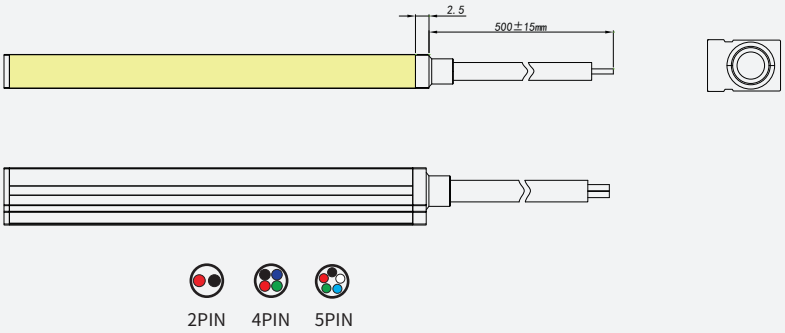




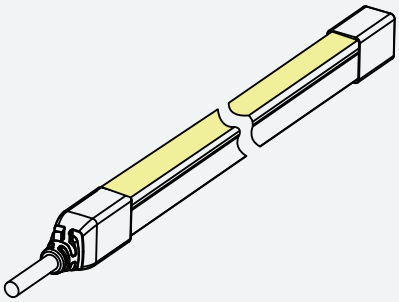
【Product mechanical parameters】

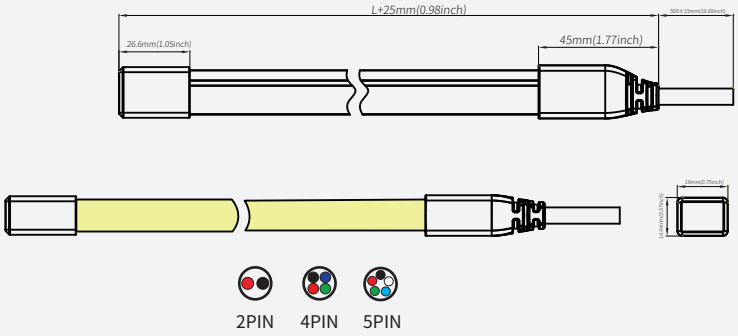
·IP67 No dark cap(ENP)-top outlet



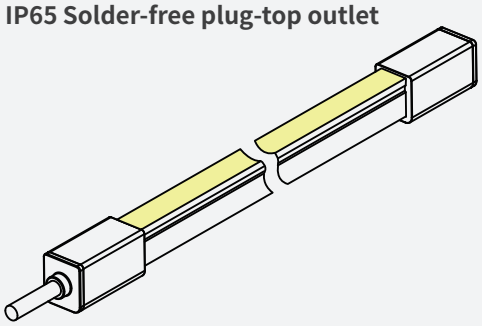


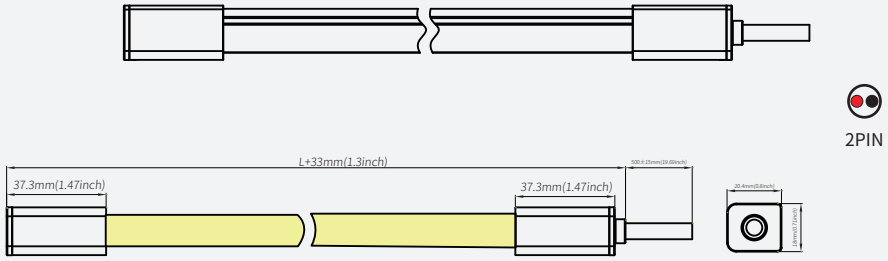
·IP67 Full encapsulted cap(EP)-top outlet



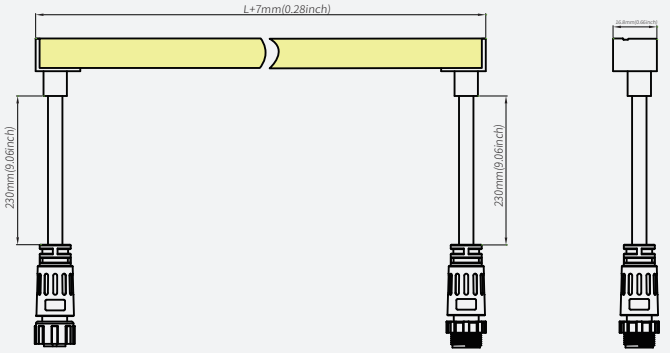


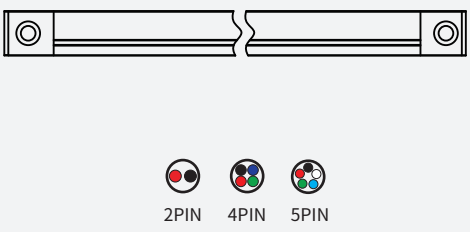
· IP65 Solder-free plug-top outlet



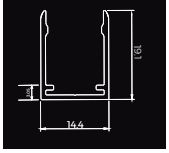
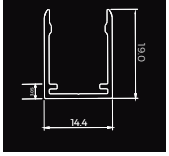
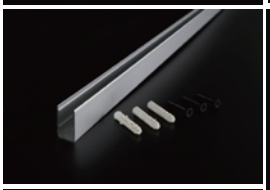
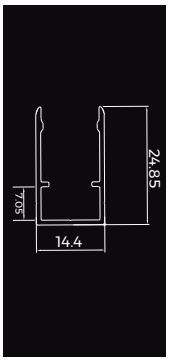
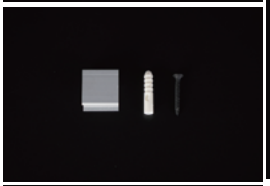
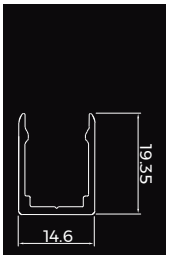
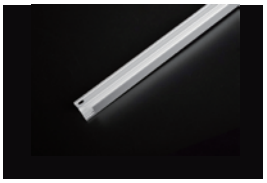
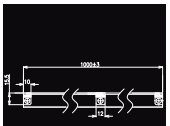
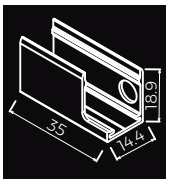
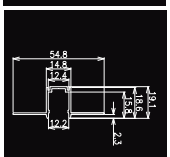
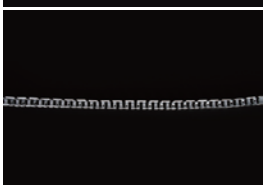
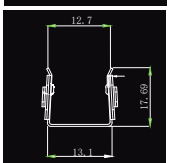


·IP67 No dark cap(ENP)-side outlet



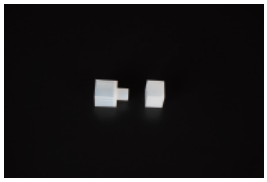
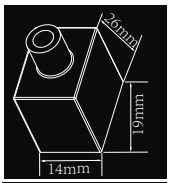
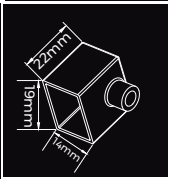
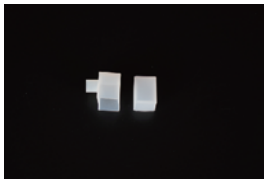
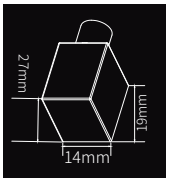
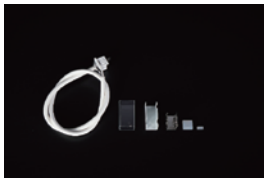
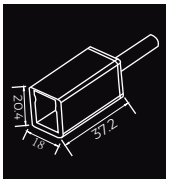
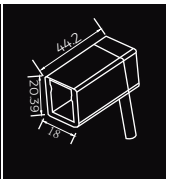
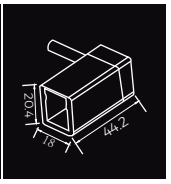
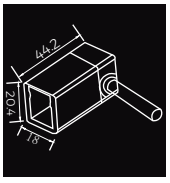
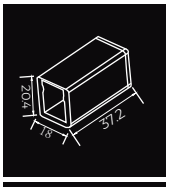
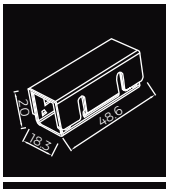
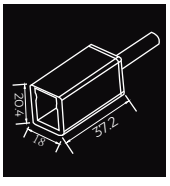


【Accessory information】

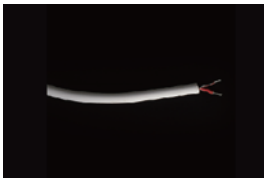
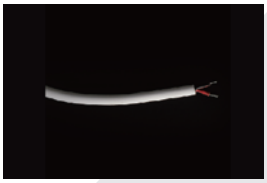
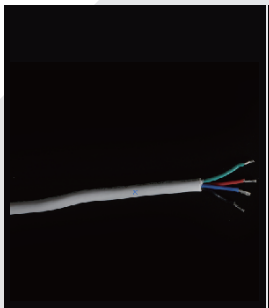
name	describe	Accessories Picture	Section size	Order model	quantity/ case (PCS)	net weight (kg)	Per box net weight (kg)	Gross weight (kg)	Gross weight (mm)	Remark
Alumina carrier	Flat mounting aluminum groove			AS-NMS1217A-1000	60	0.1755	10.53	11.53	1180*125*115	size：L1000*W14.4*H18.85mm With screws
Aluminum clip	Flat mounting of clip			AS-NMS1217A-25	300	0.0044	2.01	2.16	250*250*150	size：L25*W14.4*H18.85mm With screws
Alumina carrier	Aluminum groove reserved outlet position			AS-NMS1217A1-1000	48	0.1755	8.424	9.5	1180*125*115	size:L1000*W14.4*H24.85mm With screws
Aluminum clip	Clip of reserved outlet position			AS-NMS1217A1-25	300	0.0044	2.01	2.16	250*250*150	size:L25*W14.4*H24.85mm With screws
PC carrier	Flat mounting PC groove			AS-NMS1217P-1000	60	0.08	4.8	5.8	1180*125*115	size：L1000*W14.6*H19.35mm With screws
PC carrier	Flat mounting of PC clip			AS-NMS1217P-25	350	0.004	1.505	1.655	250*250*150	size:L25*W14.6*H19.35mm With screws
Alumina carrier	Side opening card slot			AS-AFS1217A4-1000	40	0.149	5.96	7.06	1180*125*115	size：L1000*W14.4*H18.9mm With screws
Aluminum clip	Side opening clip			AS-AFS1217A4-35	350	0.005	1.75	2.4	250*250*150	size：L35*W14.4*H18.85mm With screws
Alumina carrier	Recessed Shaped Slot			AS-AFS1217A5-1000	12	0.258	3.1	4.2	1180*125*115	size：L1000*W54.8*H19.1mm With screws
Moldable carrier	Moldable groovez			AS-NMS1217M1-500	66 (33*2)	0.046	5.5	6.4	500*290*290	size：L509*W13.1*H17.69mm With screws Cannot be used upside down

Note: AS-NMS1217M1-500 cannot be installed with the lighted side down, if you need to install it downward, we recommend using AS-NMS1217A-1000

【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 top direction)			AS-NMS1217GH0-EC	400	0.0035	1.4	1.7	250*250*150	size: L26*W14*H19mm
End-Cap set	End cap set, including end cap and plug (outlet from the side direction)			AS-NMS1217GS0-EC	400	0.0035	1.4	1.7	250*250*150	size: L22*W14*H19mm
End cap set	End cap set, including end cap and plug (outlet from the bottom direction)			AS-NMS1217GD0-EC	400	0.0035	1.4	1.7	250*250*150	size: L27*W14*H19mm
Soldering-free waterproof end cap	Quick connector (outlet from the top direction)			AS-NMS1217HT0-FL	48	0.048	2.3	4.115	365x365x190	Outgoing wire length 500mm\IP65 suit to:AFS1217 /AHS1217/NMS1217 white light and color light
Soldering-free waterproof end cap	Quick connector (outlet from the bottom direction)			AS-NMS1217HB0-FL	48	0.048	2.3	4.115	365x365x190	Outgoing wire length 500mm\IP65 suit to:AFS1217 /AHS1217/NMS1217 white light and color light
Soldering-free waterproof end cap	Quick connector (outlet from the left direction)			AS-NMS1217HL0-FL	48	0.048	2.3	4.115	365x365x190	Outgoing wire length 500mm\IP65 suit to:AFS1217 /AHS1217/NMS1217 white light and color light
Soldering-free waterproof end cap	Quick connector (outlet from the right direction)			AS-NMS1217HR0-FL	48	0.048	2.3	4.115	365x365x190	Outgoing wire length 500mm\IP65 suit to:AFS1217 /AHS1217/NMS1217 white light and color light
Soldering-free waterproof end cap	Quick connector (end cap)			AS-NMS1217TX0-FL	48	0.035	1.68	3.495	365x365x190	IP65 suit to:AFS1217 /AHS1217/NMS1217 white light and color light
Soldering-free waterproof connector	Quick connector (without wire)			AS-NMS1217MX0-FL	96	0.028	2.688	2.96	365x365x190	IP65 suit to:AFS1217 /AHS1217/NMS1217 white light and color light
Soldering-free waterproof connector	Quick connector (with wire in the middle)			AS-NMS1217MH0-FL	48	0.058	2.784	3.062	365x365x190	The middle wire is 300mm long, IP65 suit to:AFS1217 /AHS1217/NMS1217 white light and color light

【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
Glue	588G acidic 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
Wire	2P PVC wire (2M)		/	AS-WS-0002	125	0.0616	7.7	8	250*250*150	Suitable for single color strip
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	4PIN IP68 Waterproof connector			AS-FC-0003	288	0.03	8.64	9.6	365*365*190	Suitable for RGB strip
wire	2P T-Connection Wire		/	AS-FC-0027	20	0.065	1.31	1.6	250*250*150	Suitable for monochromatic led strip Wire length 150mm, IP67

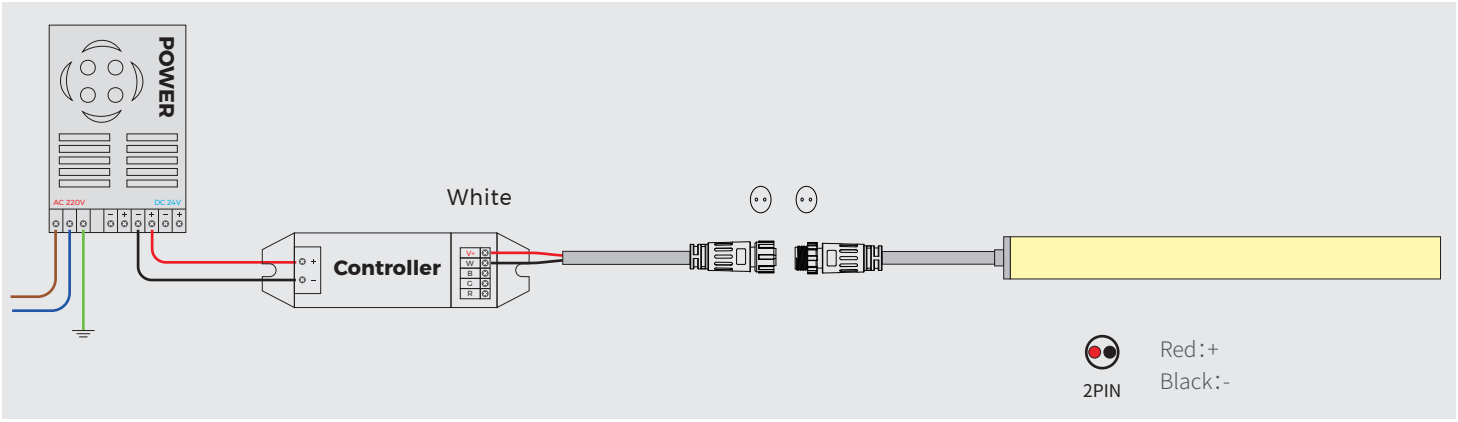
【Accessory information】

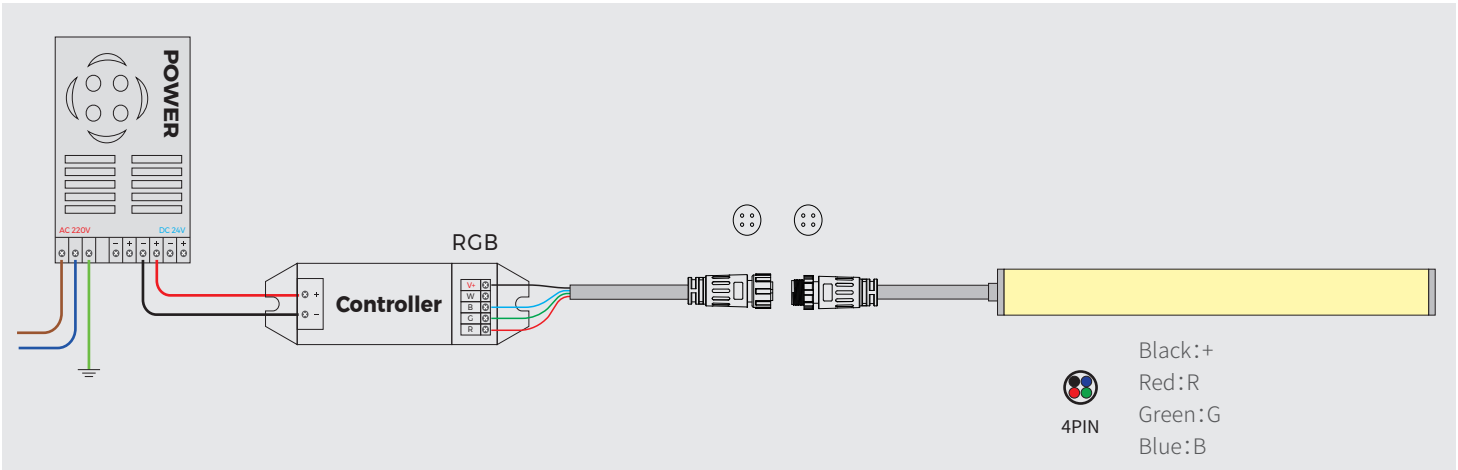
name	describe	Accessories Picture	Section size	Order model	quantity/ case (PCS)	net weight (kg)	Per box net weight (kg)	Gross weight (kg)	Gross weight (mm)	Remark
wire	2P male connector wire		/	AS-FC-0009(0.25M) AS-FC-0010(0.5M) AS-FC-0011(2M)	200 200 50	0.0193 0.031 0.1012	3.86 6.2 5.06	4.16 6.5 5.36	250*250*150	suitable for monochromatic led strip Wire lengths are optional: 0.25M/0.5M/2M
wire	2P female connector wire		/	AS-FC-0012 (0.25M) AS-FC-0013(0.5M) AS-FC-0014(2M)	200 200 50	0.0212 0.0329 0.1031	4.24 6.58 5.16	4.54 6.88 5.48	250*250*150	suitable for monochromatic led strip Wire lengths are optional: 0.25M/0.5M/2M
wire	4P T-Connection Wire		/	AS-FC-0028	20	0.068	1.35	1.65	250*250*150	suitable for RGB led strip Wire length 150mm
wire	4P male connector wire		/	AS-FC-0015 (0.25M) AS-FC-0016(0.5M) AS-FC-0017(2M)	200 200 50	0.0196 0.0316 0.1036	3.92 6.32 5.18	4.22 6.62 5.48	250*250*150	suitable for RGB led strip Wire lengths are optional: 0.25M/0.5M/2M
wire	4P female connector wire		/	AS-FC-0018 (0.25M) AS-FC-0019(0.5M) AS-FC-0020(2M)	200 200 50	0.0215 0.0354 0.1188	4.3 7.08 5.94	4.6 7.38 6.24	250*250*150	suitable for RGB led strip Wire lengths are optional: 0.25M/0.5M/2M
wire	5P T-Connection Wire		/	AS-FC-0029	20	0.069	1.39	1.69	250*250*150	suitable for RGBW led strip Wire length 150mm
wire	5P male connector wire		/	AS-FC-0021 (0.25M) AS-FC-0022(0.5M) AS-FC-0023(2M)	200 200 50	0.0196 0.0316 0.1036	3.92 6.32 5.18	4.22 6.62 5.48	250*250*150	suitable for RGBW/DMX led strip Wire lengths are optional: 0.25M/0.5M/2M
wire	5P female connector wire		/	AS-FC-0024 (0.25M) AS-FC-0025(0.5M) AS-FC-0026(2M)	200 200 50	0.0215 0.0354 0.1188	4.3 7.08 5.94	4.6 7.38 6.24	250*250*150	suitable for RGBW/DMX led strip Wire lengths are optional: 0.25M/0.5M/2M
wire	5P T-Connection Wire		/	AS-FC-0030	20	0.0698	1.396	1.696	250*250*150	suitable for DMX led strip Wire length 150mm

【Product control system solutions】

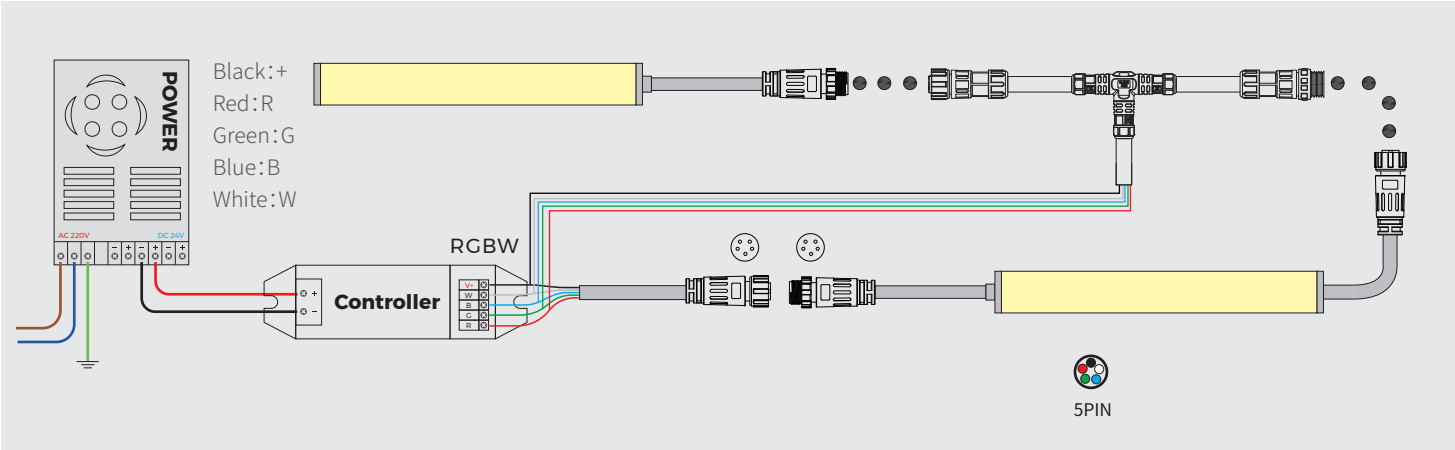
Product Image	product name	Product number	Product specifications	Applicable Products
	Monochrome remote	R6-1	output signal:RF Working voltage:3VDC(CR2032) Remote control distance:30m Working temperature:Ta:0-30 °C~0+55 °C	Monochrome light strip (Use with CR1-GBA)
	Monotone light controller	CR1-GBA	Input 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 R6-1)
	RGB/RGBW remote control	R8-1	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/ CR4-GBA)
	RGB controller	CR3-GBA	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 R8-1)
	RGBW controller	CR4-GBA	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 R8-1)
	Symphony Controller	K-8000C	Power supply:DC 5V-24V input Power consumption:5W Working temperature:Ta:0-20 °C~0+85 °C	DMX/SPI magic lights with universal

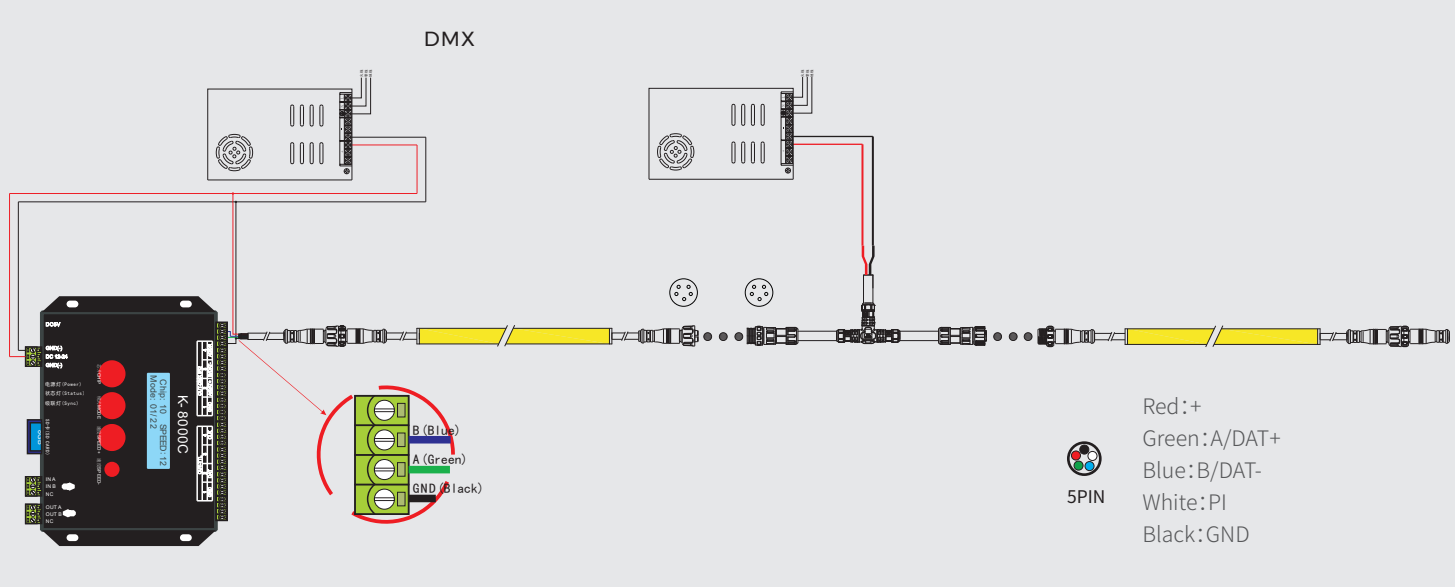
【Product Wiring Schematic】

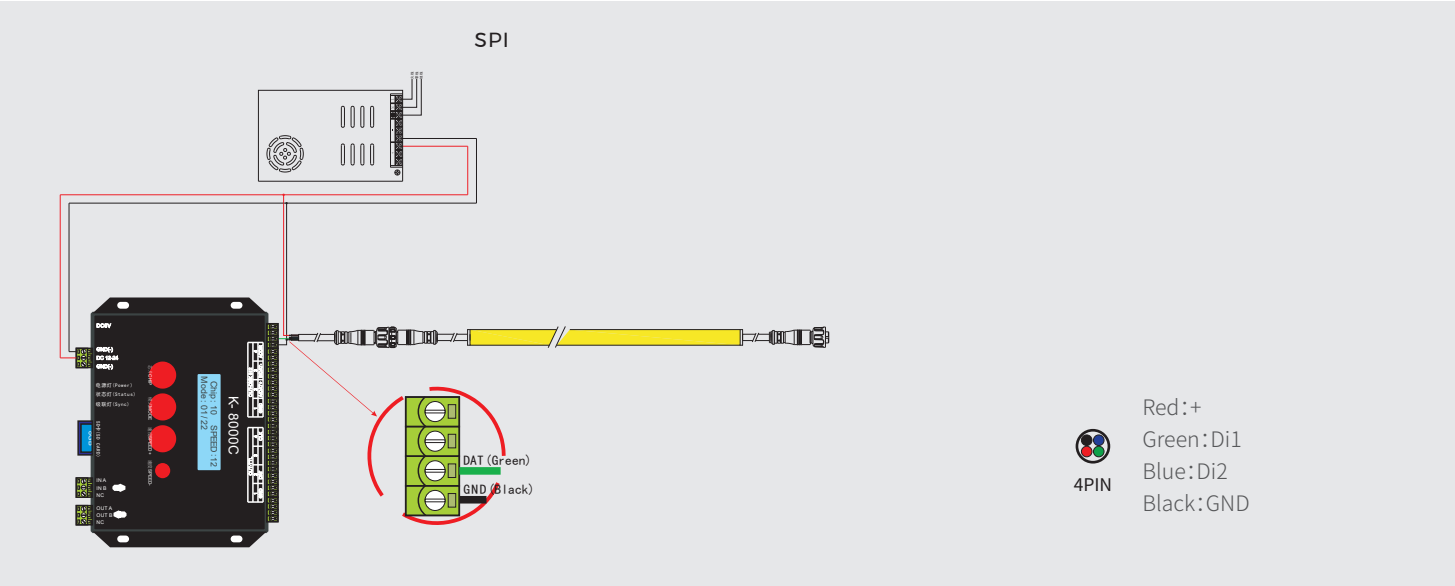




【Product Wiring Schematic】







【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;



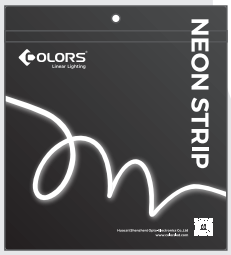
Product Information Label



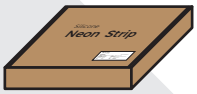
3.Put the light strip into an electrostatic bag, one roll per bag, and seal the bag;





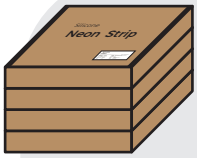


4. Label the carton and pack it into the carton;





5. Pack 4 boxes of products in the carton;

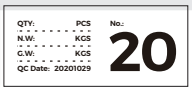




6. Put the product information label and the box number label on the side of the carton, and the QC inspection stamp;



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)
AFS1217-9XX48CSW050CCXXXX -GV10-ENP-ESD	L20000*12*17mm	20M*1	80M	4.68	18.72	21.82	0.41*0.41*0.26
AFS1217-9XX24CSW050CCXXXX -GV10-ENP-ESD	L10000*12*17mm	10M*1	40M	2.34	9.36	10.91	
AFS1217L-9XX24CSW050CCXXXX -GV10-ENP-ESD	L15000*12*17mm	15M*1	60M	3.51	14.04	16.24	

Model	Product size	Product Quantity/ box	Product Quantity/ case	Product net weight (kg)	Net weight per box (kg)	Gross weight (kg)	Carton size (m)
AFS1217-0X24CSW050CCXXXX -GV10-ENP-ESD	L10000*12*17mm	10M*1	40M	2.34	9.36	10.91	0.41*0.41*0.26
AFS1217-0RGB24CSW025CCXXXX -GV10-ENP-ESD	L5000*12*17mm	5M*3	60M	1.5	18	20.2	
AFS1217-0RGBXW24CSW025CCXXXX -GV10-ENP-ESD	L5000*12*17mm	5M*3	60M	1.5	18	20.2	
AFS1217-9XWM24CDW025CCXXXX -GV10-ENP-ESD	L5000*12*17mm	5M*3	60M	1.5	18	20.2	
AFS1217-0RGBM24CDW025CCXXXX -GV10-ENP-ESD	L5000*12*17mm	5M*3	60M	1.5	18	20.2	
AFS1217-0RGBXWM24CDW025CCXXXX -GV10-ENP-ESD	L5000*12*17mm	5M*3	60M	1.5	18	20.2	
AFS1217-0RGBX24CDW025CCXXXX -GV10-ENP-ESD	L5000*12*17mm	5M*3	60M	1.5	18	20.2	

【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】



No stretching



No distortion



No trampling

· 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 t he 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.

· Attention,there are 2 soldering parts per reel (5m/reel) at most when mass production.

. Due to the characteristics of the silicone material, it is normal for the color of the colloid to change slightly after the neon product is used for a long time

. It is strictly forbidden to use 502/705 and other adhesives that are prone to chemical reactions with silica gel during construction and installation. It is recommended to use silicone sealant for bonding

. Long-term storage and the remaining products after cutting and use must be sealed to avoid exposure to organic environments such as aldehydes/benzenes

. When the product is installed and used, it is recommended that the product as a whole be in the same environmental conditions to avoid inconsistent color changes of the product colloid due to differences in product exposure and environmental conditions

.When using dimmer and dimming power supplies like Triac, etc, conduct compatibility tests on the product, dimmers and power supplies to ensure full compatibility. If any issues arise, contact COLORS for technical support.