

# LED

## NEON FLEX

### N2-8

(WN/RGB/RGBW/PIXEL)

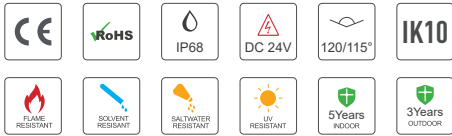






Features

- Color options: WN,RGB, RGBW, Pixel;
- RGB max running length 15m with one end power feed;
- RGBW max running length 10m with one end power feed;
- Top bending with good flexibility, perfectly fixing for many irregular structures;
- PCB designed in parallel with function of skipping the broken cuttable unit;
- High strength silicone body with super tensile resistance;
- Warranty: 5 years indoors, 3 years outdoors;



Optical & Electrical Parameters

Model No.	Voltage	Ra	Color	Lm/m	Lm/W	W/m
N2-8-WN	24V DC	>90	2700K	356	49	7.2
			6500K	380	52	7.2
			W+N	728	50	14.4
N2-8-RGB	24V DC	\	R	77	15.2	5.12
			G	219	42.8	5.12
			B	45	8.9	5.12
			RGB	338	22.0	15.36
N2-8-RGBW	24V DC	\	3000K	193	40.2	4.8
			R	68	14.3	4.8
			G	190	39.6	4.8
			B	44	9.1	4.8
			RGBW	480	25.0	19.2
(PIXEL) N2-8-DMX-RGB	24V DC	\	R	60	9	6.72
			G	105	15	6.72
			B	24	3	6.72
			RGB	171	11	15.36
(PIXEL) N2-8-DMX-RGBW_2700K	24V DC	>90 \	2700K	148	22	6.05
			Red	58	8	6.72
			Green	155	23	6.72
			Blue	37	5	6.72
			RGB	\	\	15.36
			RGBW	335	17	19.68
			3000K	161	24	6.72
			Red	58	8	6.72
(PIXEL) N2-8-DMX-RGBW_3000K	24V DC	>90 \	Green	155	23	6.72
			Blue	37	5	6.72
			RGB	\	\	15.36
			RGBW	374	19	19.68
			4000K	188	28	6.72
			Red	58	8	6.72
			Green	155	23	6.72
			Blue	37	5	6.72
(PIXEL) N2-8-DMX-RGBW_4000K	24V DC	>90 \	RGB	\	\	15.36
			RGBW	413	21	19.68
			4500K	175	26	6.72
			Red	58	8	6.72
			Green	155	23	6.72
			Blue	37	5	6.72
			RGB	\	\	15.36
			RGBW	374	19	19.68
(PIXEL) N2-8-DMX-RGBW_4500K	24V DC	>90 /	Red	58	8	6.72
			Green	155	23	6.72
			Blue	37	5	6.72
			RGB	\	\	15.36
			RGBW	374	19	19.68
			6500K	154	23	6.72
			Red	58	8	6.72
			Green	155	23	6.72
(PIXEL) N2-8-DMX-RGBW_6500K	24V DC	>90 /	Blue	37	5	6.72
			RGB	\	\	15.36
			RGBW	354	18	19.68

Note:  
The dada of RGBW (RGB) is tested when R/G/B/W (R/G/B) are all lit.  
Suggested to use DMX controller.  
Beam Angle: 120° (WN,RGB,RGBW), 115° (PIXEL).

Basic Parameters

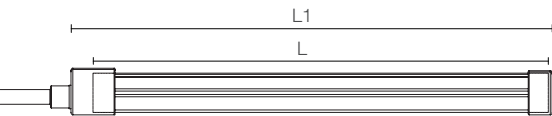
Model No.	LED QTY	Standard Run	Pixel	Working Temperature	Storage Temperature
N2-8-WN	240pcs/m	10m	\	-20~+60℃	-20~+70℃
N2-8-RGB	96pcs/m	15m	\		
N2-8-RGBW	96pcs/m	10m	\		
N2-8-DMX-RGB	60pcs/m	15m	10Pix/m		
N2-8-DMX-RGBW	60pcs/m	10m	10Pix/m		

Note: It is not recommended for customers to cut by themselves, customizable lengths are available (customizable lengths are multiples of the min cutting unit, where WN's min cutting size is 50mm, RGB's min cutting size is 62.5mm, RGBW's min cutting size is 62.5mm, DMX-RGB/RGBW's min cutting size is 500mm).

Profile Drawings

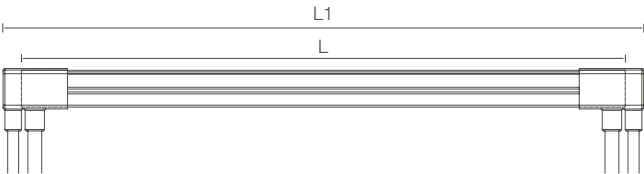
Unit: mm[inch]

N2-8-WN/RGB/RGBW



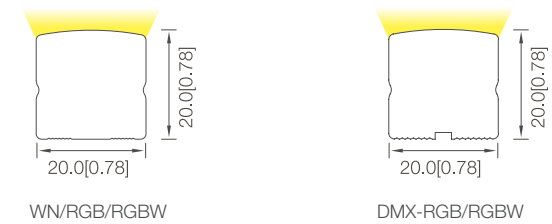
Model No.	L	L1
N2-8-WN	10000±10 [393.70±0.39]	10011±10 [394.13±0.39]
N2-8-RGB	15000±15 [590.55±0.59]	15011±15 [590.98±0.59]
N2-8-RGBW	10000±10 [393.70±0.39]	10011±10 [394.13±0.39]

N2-8-DMX

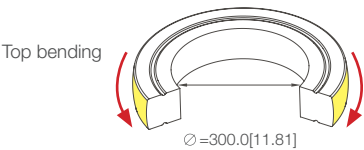


Model No.	L	L1
N2-8-DMX-RGB	15000±15 [590.55±0.59]	15020±15 [591.34±0.59]
N2-8-DMX-RGBW	10000±10 [393.70±0.39]	10020±10 [394.49±0.39]

Sectional view



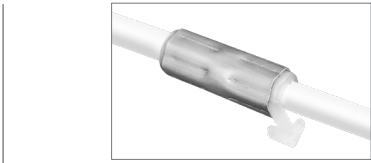
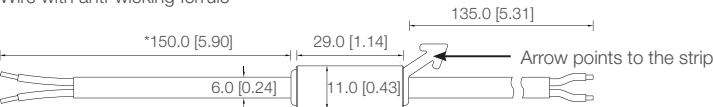
Bending diameter:



Note: within 10/15m, customizable lengths are multiples of the minimum cutting unit,

Wire Spec

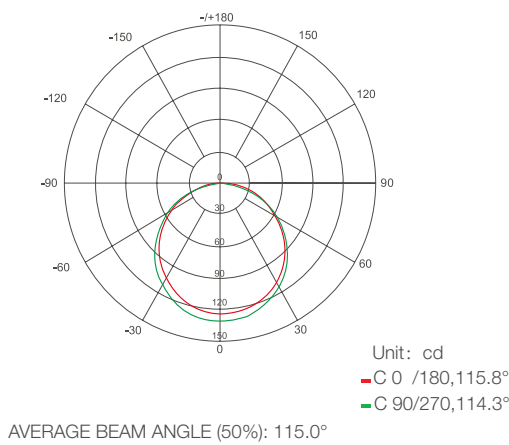
Wire with anti-wicking ferrule



Notes:  
- 2/3/4/5 cores are available.  
- The wire length marked with \*\*\* supports customization  
- The anti-wicking ferrule needs to be above water for any underwater applications. Do not disassemble or reprocess the ferrule; otherwise, we will not be responsible for the consequences.

Luminous Intensity Distribution Diagram

Average Illumination



Flux Out: 272.9lm		RGBW	
Height	Eavg, Emax	Beam Angle: 111.98°	Diameter
0.5m	158.1,531.5lx		148.20cm
1.0m	39.52,132.9lx		296.40cm
1.5m	17.56,59.06lx		444.60cm
2.0m	9.879,33.22lx		592.79cm
2.5m	6.323,21.26lx		740.99cm
3.0m	4.391,14.77lx		889.19cm
3.5m	3.226,10.85lx		1037.39cm
4.0m	2.470,8.305lx		1185.59cm
4.5m	1.951,6.562lx		1333.79cm
5.0m	1.581,5.315lx		1481.99cm

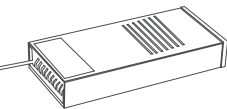
Note: the above two figures are tested with the sample N2-8-DMX at RGBW, for other data, please consult sales rep.

Recommended power supply upon working length

Working Length	Measured Current	Rated Voltage	Measured Power	Recommended Power Supply	Power Supply Mode
1m	0.64 A	24V DC	15.36 W	20 W	Single Feed
15m	8.93 A	24V DC	214.32 W	300 W	Single Feed

Working Length	Measured Current	Rated Voltage	Measured Power	Recommended Power Supply	Power Supply Mode
1m	0.82 A	24V DC	19.68 W	20 W	Single Feed
10m	7.65 A	24V DC	183.60 W	240 W	Single Feed

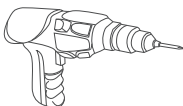
Products and Tools



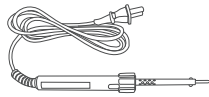
LED power supply



Cutter



Electric drill



Electric iron



Controller (optional)

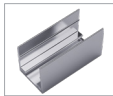
Product accessories



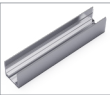
Front cap  
Model No.:  
Dimensions: 26.5\*22\*22mm



Closing End-cap  
Model No.:  
Dimensions: 20\*23\*23mm



Aluminum clip  
Model No.:  
Dimensions: 30\*21.5\*22mm



Aluminum Channel  
Model No.:  
Dimensions: 1000\*21.5\*22mm

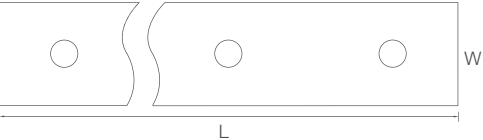


Silicone Glue  
Model No.: WR-7516  
Dimensions: 45g/pc



Screws  
Model No.: PA3  
Dimensions: PA3\*10mm

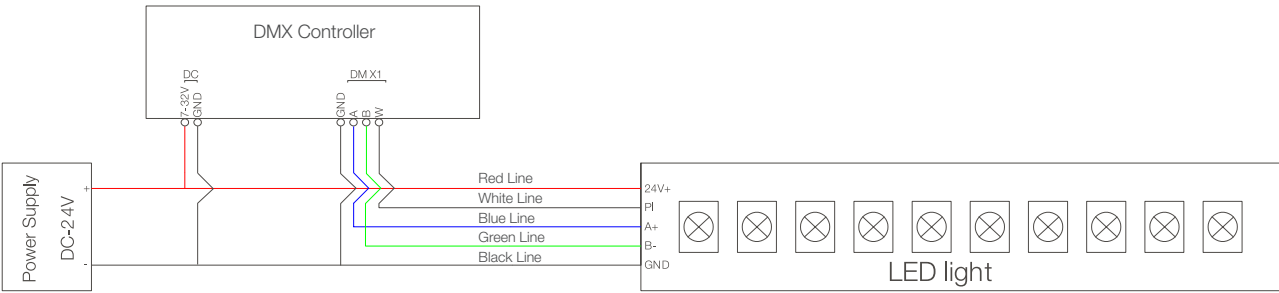
Aluminum channel diagram



Name	L(mm)	W(mm)	Type
Aluminum clip	30	21.5	Optional
Aluminum channel	1000	21.5	Customized
Aluminum channel X	X	/	Customized

Note: accessories can be added according to customer requirements

Controller wiring diagram



- Note:
- 1 . MR-502 controller is used in this case;

2 . The driver IC is TM512AC;

3 . The blue line A+ is data A;

4 . The green line B- is data B;

5 . The white line PI is address wire;

6 . The red and black lines are the positive and negative poles of the light strip;

Packaging Information

Roll the product to a reel

Wrap it with PE film

Put the reel and accessories bag on the work table

Label the reel;

Put the prepared products into a carton box;

Seal the carton box;

Label the carton box;

Use packing belt to pack. Add edge protectors if necessary

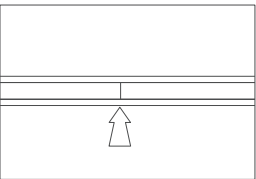
Model No.	Product Size (mm)	Carton Size (mm)	Meter/Reel	Reel/Carton	Gross Weight (kg)
N2-8-WN	10000*20*20	390*390*325	10	3	14.3 (1± 10%)
N2-8-RGB	15000*20*20	375*375*200	15	1	7.50 (1± 10%)
N2-8-RGBW	10000*20*20	375*375*200	10	3	14.3 (1± 10%)
N2-8-DMX-RGB	15000*20*20	375*375*200	15	1	9.80 (1± 10%)
N2-8-DMX-RGBW	10000*20*20	390*390*325	10	3	19.5 (1± 10%)

- Notes:
- For other customized length packaging, please ask our sales rep.
  - The above-mentioned packaging quantity and weight are only for the illustrated packaging method. For other packaging methods, the packaging quantity and weight will be different. The actual weight is subject to the actual product.

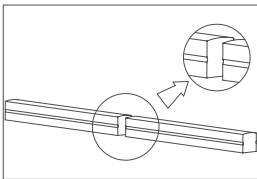
Reliability test

Project	Reference standards	Category	Test conditions	Outcome
Environmental test	Blueview standard	PTC test	TH=-40~+60°C/ 2h, dwell 15min, temperature rise/down takes 45min.	Pass
		High temperature resistance test	Simulated TH=80°C, continuously light on	
		Room temperature aging test	Ta=25°C, continuously light on	
Mechanical Strength Test		Tensile test	Both ends of the strip fixed on the testing equipment. then power on and record the tension value when the sample is turned off.	
		Twisting test	Twist degree: 360°/cycle, 10 cycles, continuously light on	

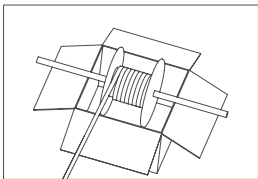
Warning Mark



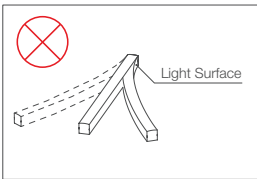
Cuttable identifier



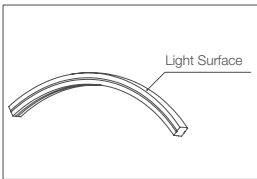
Neat and smooth cut



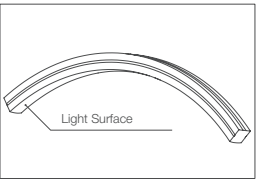
Insert a stick on the reel and place it on the packing box, and rotate the reel to get the product.



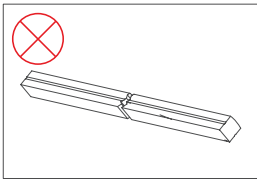
Side bending



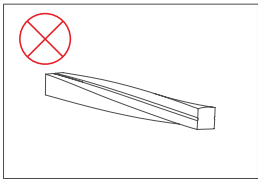
use in convex direction



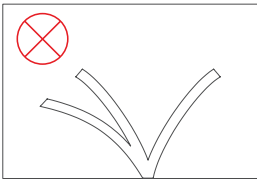
use in concave direction



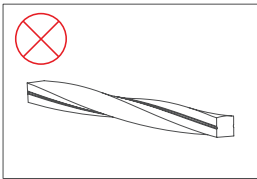
Do not make irregular cuts.



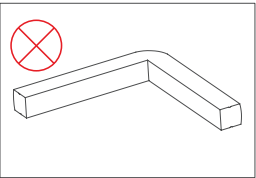
Do not use in distortions



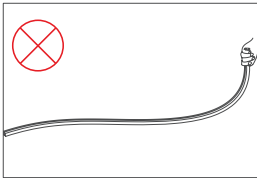
Do not bend many times, for it can endanger electronic lines.



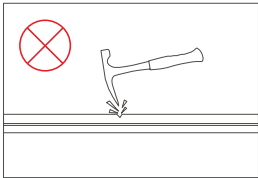
Do not use on wringing (twist)



Do not bend at right angles



Do not throw or pull when taking products



Avoid touching sharp objects

Notes:

- There are cutting marks on the FPCB;
- Please pay attention to the above warnings during transportation and mounting;

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 (0.75mm<sup>2</sup> cross-sectional area) or thicker core wire to avoid adverse consequences caused by overheating, if the power cable needs to be lengthened.
- Make sure the input voltage meets the requirements and lines are connected correctly before lighting on.
- This product is for signage, and do not use as general lighting.
- Series connection within the max run.
- The length of the power cable between the power supply and the LED strip should not exceed 2 meters. Otherwise, large circuit loss will lead to inconsistent brightness.
- Installation, maintenance and repair should be operated by a qualified technician.

Attentions before installation

- Before installation, check that the product parameters are consistent with the requirements (Seeing product specifications or product labels)
- Load voltage, current, power and power supply should be matched with the product.
- Follow the instructions of wiring diagram (first connect the load and then the power supply) to avoid short circuit
- Make sure the correct connection of positive and negative poles between products and power supply. Otherwise, the light will not be on.
- Make sure the power cord firmly screwed into the terminal and it should not be pulled out by hands.
- The terminal should have waterproof and anti-corrosive treatment.

Statements and Recycling

Packaging information

- Repair should be operated by a qualified technician or supplier, 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.

Version	Content	Date
C1.3	First release	2023-12-7