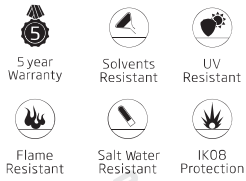


Flexglo™ F22S SPI Pixel Light (Silicone)



Certification Mark		
Test Standard/Directive	UL2108 Class 2	CE-EMC
Certificate Serial Number	20180801-E360029	SZEM171201237LMV
Report Reference	E360029-20130322	SZEM171201237201



Ambient Working Temperature
 $\leq 10W/m$ $-40 \sim 60^{\circ}C$ / $-40 \sim 140^{\circ}F$
 $12W/m$ $-40 \sim 55^{\circ}C$ / $-40 \sim 131^{\circ}F$
 $15W/m$ $-40 \sim 45^{\circ}C$ / $-40 \sim 113^{\circ}F$



Ambient Installation Temperature
 $\geq -40^{\circ}C$ / $-40^{\circ}F$



Storage Temperature
 $-40 \sim 60^{\circ}C$ / $-40 \sim 140^{\circ}F$



Max. Mounting Surface Temperature
 $85^{\circ}C$ / $185^{\circ}F$



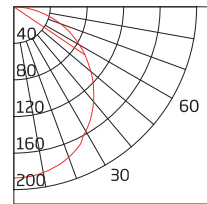
Constant Current
 DC24V

specified in the non-working state of light.

C-SFR-F22S-VB



C-SFR-F22S12-VB-24CC-RGB-WM-
 84-16.5W-83.3



UNIT: cd
 -C90/270

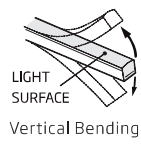
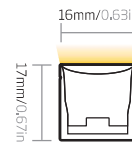
AVERAGE BEAM ANGLE (50%): 113,5°



Min. Bending Diameter
 300mm/11.81in



Min. Cutting Length
 83.3mm/3.28in, 7LEDs
 100mm/3.94in, 6+6LEDs



Vertical Bending



Bending-extreme
 6179 times



Tensile-instantaneous
 > 100 kg.f



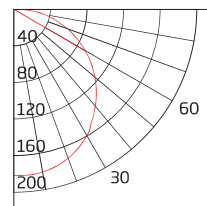
Twist-extreme
 1015 times

Warning: Extreme Destructive Tests in laboratory only, and it's forbidden to operate in practice.

C-SFR-F22S-HB



C-SFR-F22S12-HB-24CC-30K-WM-
 84-80-12W-83.3



UNIT: cd
 -C90/270

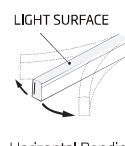
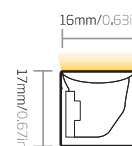
AVERAGE BEAM ANGLE (50%): 112,3°



Min. Bending Diameter
 300mm/11.81in



Min. Cutting Length
 83.3mm/3.28in, 7LEDs
 100mm/3.94in, 6+6LEDs



Horizontal Bending



Bending-extreme
 5747 times



Tensile-instantaneous
 > 100 kg.f



Twist-extreme
 7915 times

Warning: Extreme Destructive Tests in laboratory only, and it's forbidden to operate in practice.

Note:

- The illuminated light length shall be an integral multiple of min. cutting length.
- The waterproof reliability of the lighting fixture depends on the IP rating of connector, and please make sure connector is properly assembled before installation. The highest IP rating we can achieve is IP68.

Feature

Flexglo™ F22S SPI Pixel Light (Silicone) is a product that each segment is individually addressable so that you can achieve myriad color changing or animation effects via compatible controller. It is a SPI protocol product with built-in IC chip of UCS2903 or UCS2904, available in monochrome, dynamic light, RGB and RGBW. Thanks to the excellent weatherproof and UV-resistant performance of silicone material, it features a wide ambient working temperature range of -40-55°C, especially suitable for harsh environment application.

Multiple connector options are available for different applications. Combined with the adoption of the DryWire™ technology,

*The IP68 Injection-moulded Connector is engineered for outdoor use, owing to its elegant appearance and strong adhesiveness acquired by the liquid silicone injection workmanship.

*The IP67 Field Assembly Connector, which is underpinned by the Insulfit™ technology that enables quick assembly in the field along with waterproof reliability (proper assembly required).

This product features a ultra long lifespan in outdoor application by leveraging other ClearTech™ such as the PinBoost™ technology enhancing physical reliability of light engine, the TwinFlex™ technology improving the conductivity and optimizing heat dissipation performance, the C-Mask™ technology making the light body self-cleaning and anti-UV and enabling consistent illumination.

Electrical Parameter

Category	C-SFR-F22S12-VB/HB 	C-SFR-F22S10-VB/HB 	C-SFR-F22S12-VB/HB 	C-SFR-F22S12-VB/HB
Voltage (V)	24	24	24	24
Current (mA/m)	500	416.7	687.5	916.7
Power (W/m)	12	10	16.5	22
Circuit Type	CC	CC	CC	CC
LED Type	2835	3015	5050	5050
LEDs Qty/m	84	120	84	84
LEDs Qty/unit	7	6+6(12)	7	7
Unit/m (Pixel Qty/m)	12(UCS2903)	10(UCS2903)	12(UCS2903)	12(UCS2904)
Min. Cutting Length (mm)	83.3	100	83.3	83.3
Min. Cutting Length (in)	3.28	3.94	3.28	3.28

Item Code

C	SFR	F22S12	VB	24CC	30K	WM	84	80	12W	83.3
Company	Material	Product Series	Bending Direction	Voltage & Circuit Type	Color/CCT	Base & Lighting Surface	LEDs Qty/m	CRI	Power/m	Min. Cutting Length (mm)
Clear	SFR= Silicone Flex Ribbon	F22 S12=12 Pixels	VB= Vertical Bending HB= Horizontal Bending	DC24V & Constant Current	R=Red G=Green B=Blue A=Amber	WM= White & Milky	84	/	12W	83.3
			VB= Vertical Bending		RGB			80		
		VB= Vertical Bending HB= Horizontal Bending	RGBW(27K)= RGB& 2700K RGBW(30K)= RGB& 3000K RGBW(40K)= RGB & 4000K		/		22W			
		F22 S10=10 Pixels	VB= Vertical Bending HB= Horizontal Bending		22~57K= 2200~5700K		120	80	10W	100

Flexglo™ F22S SPI Pixel Light (Silicone)

Optical Parameter

Item Code	Finished Product						LED	
	Color/CCT	Wavelength/ CCT Tolerance	Color Tolerance	CRI	Lumen/m	Lumen/ft	Color Tolerance	CRI
C-SFR-F22S12-VB-24CC-RGB-WM-84-16,5W-83,3	Red	618-624nm			90lm	27lm	<3nm	
	Green	522-530nm			240lm	73lm	<3nm	
	Blue	468-474nm			40lm	12lm	<3nm	
	R+G+B	R+G+B			370lm	113lm		
C-SFR-F22S12-HB-24CC-RGB-WM-84-16,5W-83,3	Red	618-624nm			85lm	26lm	<3nm	
	Green	522-528nm			225lm	69lm	<3nm	
	Blue	468-474nm			35lm	11lm	<3nm	
	R+G+B	R+G+B			345lm	105lm		
C-SFR-F22S12-VB-24CC-RGBW(27K)-WM-84-22W-83,3	Red	618-624nm			110lm	34lm	<3nm	
	Green	522-530nm			280lm	85lm	<3nm	
	Blue	468-474nm			60lm	18lm	<3nm	
	White	2725±145K	<5SDCM	80	310lm	95lm	<2,3SDCM	82~87
C-SFR-F22S12-VB-24CC-RGBW(30K)-WM-84-22W-83,3	Red	618-624nm			110lm	34lm	<3nm	
	Green	522-530nm			280lm	85lm	<3nm	
	Blue	468-474nm			60lm	18lm	<3nm	
	White	3045±140K	<5SDCM	80	310lm	95lm	<2,3SDCM	82~87
C-SFR-F22S12-VB-24CC-RGBW(40K)-WM-84-22W-83,3	Red	618-624nm			110lm	34lm	<3nm	
	Green	522-530nm			280lm	85lm	<3nm	
	Blue	468-474nm			60lm	18lm	<3nm	
	White	3985±275K	<5SDCM	80	310lm	95lm	<2,3SDCM	82~87
C-SFR-F22S12-HB-24CC-RGBW(27K)-WM-84-22W-83,3	Red	618-624nm			95lm	29lm	<3nm	
	Green	522-528nm			230lm	70lm	<3nm	
	Blue	468-474nm			50lm	15lm	<3nm	
	White	2725±145K	<5SDCM	80	260lm	79lm	<2,3SDCM	82~87
C-SFR-F22S12-HB-24CC-RGBW(30K)-WM-84-22W-83,3	Red	618-624nm			95lm	29lm	<3nm	
	Green	522-530nm			230lm	70lm	<3nm	
	Blue	468-474nm			50lm	15lm	<3nm	
	White	3045±140K	<5SDCM	80	260lm	79lm	<2,3SDCM	82~87
C-SFR-F22S12-HB-24CC-RGBW(40K)-WM-84-22W-83,3	Red	618-624nm			95lm	29lm	<3nm	
	Green	522-528nm			230lm	70lm	<3nm	
	Blue	468-474nm			50lm	15lm	<3nm	
	White	3985±275K	<5SDCM	80	260lm	79lm	<2,3SDCM	82~87

Optical Parameter

Item Code	Finished Product						LED	
	Color/CCT	Wavelength/CCT Tolerance	Color Tolerance	CRI	Lumen/m	Lumen/ft	Color Tolerance	CRI
C-SFR-F22S12-VB-24CC-R-WM-84-12W-83.3	Red	618-624nm			150lm	46lm	< 3nm	
C-SFR-F22S12-VB-24CC-G-WM-84-12W-83.3	Green	522-530nm			440lm	134lm	< 3nm	
C-SFR-F22S12-VB-24CC-B-WM-84-12W-83.3	Blue	468-474nm			100lm	30lm	< 3nm	
C-SFR-F22S12-VB-24CC-A-WM-84-12W-83.3	Amber	588-594nm			150lm	46lm	< 3nm	
C-SFR-F22S12-HB-24CC-R-WM-84-12W-83.3	Red	618-624nm			130lm	40lm	< 3nm	
C-SFR-F22S12-HB-24CC-G-WM-84-12W-83.3	Green	522-530nm			360lm	110lm	< 3nm	
C-SFR-F22S12-HB-24CC-B-WM-84-12W-83.3	Blue	468-474nm			90lm	27lm	< 3nm	
C-SFR-F22S12-HB-24CC-A-WM-84-12W-83.3	Amber	588-594nm			130lm	40lm	< 3nm	
C-SFR-F22S12-VB-24CC-22K-WM-84-80-12W-83.3	2200K	2238±66K	<5SDCM	80	360lm	110lm	<2.3SDCM	82~87
C-SFR-F22S12-VB-24CC-27K-WM-84-80-12W-83.3	2700K	2725±85K	<5SDCM	80	440lm	134lm	<2.3SDCM	82~87
C-SFR-F22S12-VB-24CC-30K-WM-84-80-12W-83.3	3000K	3045±105K	<5SDCM	80	440lm	134lm	<2.3SDCM	82~87
C-SFR-F22S12-VB-24CC-35K-WM-84-80-12W-83.3	3500K	3465±245K	<5SDCM	80	440lm	134lm	<2.3SDCM	82~87
C-SFR-F22S12-VB-24CC-40K-WM-84-80-12W-83.3	4000K	3985±150K	<5SDCM	80	440lm	134lm	<2.3SDCM	82~87
C-SFR-F22S12-VB-24CC-57K-WM-84-80-12W-83.3	5700K	5669±305K	<5SDCM	80	440lm	134lm	<2.3SDCM	82~87
C-SFR-F22S12-HB-24CC-22K-WM-84-80-12W-83.3	2200K	2238±66K	<5SDCM	80	320lm	98lm	<2.3SDCM	82~87
C-SFR-F22S12-HB-24CC-27K-WM-84-80-12W-83.3	2700K	2725±85K	<5SDCM	80	400lm	122lm	<2.3SDCM	82~87
C-SFR-F22S12-HB-24CC-30K-WM-84-80-12W-83.3	3000K	3045±105K	<5SDCM	80	400lm	122lm	<2.3SDCM	82~87
C-SFR-F22S12-HB-24CC-35K-WM-84-80-12W-83.3	3500K	3465±245K	<5SDCM	80	400lm	122lm	<2.3SDCM	82~87
C-SFR-F22S12-HB-24CC-40K-WM-84-80-12W-83.3	4000K	3985±150K	<5SDCM	80	400lm	122lm	<2.3SDCM	82~87
C-SFR-F22S12-HB-24CC-57K-WM-84-80-12W-83.3	5700K	5669±305K	<5SDCM	80	400lm	122lm	<2.3SDCM	82~87
C-SFR-F22S10-VB-24CC-22~57K-WM-120-80-10W-100	2200K	2238±66K	<5SDCM	80	170lm	52lm	<2.3SDCM	82~87
	5700K	5669±305K	<5SDCM	80	220lm	67lm	<2.3SDCM	82~87
C-SFR-F22S10-HB-24CC-22~57K-WM-120-80-10W-100	2200K	2238±66K	<5SDCM	80	170lm	52lm	<2.3SDCM	82~87
	5700K	5669±305K	<5SDCM	80	220lm	67lm	<2.3SDCM	82~87

Note:

1. CCT Tolerance refers to target CCT and tolerance (ANSI C78.377).
2. Color Tolerance refers to CLEAR standard for finished product and LED.
























Max. Running Length Input: DC24V

Type	Snap Connector		Socket Connector		Silicone Injection-moulded Connector	
	IP67		IP67		IP68	
Item Code	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed
C-SFR-F22S10-10W-Static full loading	15m/49.2t(HB)	30m/98.4ft(HB)	15m/49.2t(HB)	30m/98.4ft(HB)	15m/49.2t	30m/98.4ft
C-SFR-F22S10-10W-Dynamic operating	20m/65.6ft(HB)	40m/131.2ft(HB)	20m/65.6ft(HB)	40m/131.2ft(HB)	20m/65.6ft	40m/131.2ft
C-SFR-F22S12-12W-Static full loading	15m/49.2ft(HB)	30m/98.4ft(HB)	15m/49.2ft(HB)	30m/98.4ft(HB)	15m/49.2ft	30m/98.4ft
C-SFR-F22S12-12W-Dynamic operating	20m/65.6ft(HB)	40m/131.2ft(HB)	20m/65.6ft(HB)	40m/131.2ft(HB)	20m/65.6ft	40m/131.2ft
C-SFR-F22S12-16.5W-Static full loading	10m/32.8ft(HB)	20m/65.5ft(HB)	10m/32.8ft(HB)	20m/65.5ft(HB)	10m/32.8ft	20m/65.5ft
C-SFR-F22S12-16.5W-Dynamic operating	15m/49.2ft(HB)	30m/98.4ft(HB)	15m/49.2ft(HB)	30m/98.4ft(HB)	15m/49.2ft	30m/98.4ft
C-SFR-F22S12-22W-Static full loading	8m/26.2ft(HB)	16m/52.4ft(HB)	8m/26.2ft(HB)	16m/52.4ft(HB)	8m/26.2ft	16m/52.4ft
C-SFR-F22S12-22W-Dynamic operating	12m/39.4ft(HB)	24m/78.8ft(HB)	12m/39.4ft(HB)	24m/78.8ft(HB)	12m/39.4ft	24m/78.8ft
Dimension of Connector	Page F22 161		Page F22 171		Page F22 179	
Max.Packing Length			Page F22 233			

Note:

1. Above conclusion is based on voltage drop testing result of the light with 0.3m (0.98ft) cable only.
2. The maximum running length is based on the light in static full loading status exceptionally stated dynamic operating.
3. Above running length is only the light length excluding lengths of connectors. Please refer to the specific dimension of each connector.
4. The delivery length might be subject to the maximum packing length.











F22S Connector (Silicone)

Type/IP Rating	Bending Direction	Front Connector End	Front Connector Side from Left	Front Connector Side from Right	Front Connector Bottom	Seamless Middle Connector & Power Feed	Middle Connector & Power T-feed	Jumper	End Cap
Snap Connector IP67	HB	 F22S-HB-SN/FC-01/02-E 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	 F22S-HB-SN/FC-01/02-SL 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	 F22S-HB-SN/FC-01/02-SR 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	 F22S-HB-SN/FC-01/02-B 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	N/A	 F22S-HB-SN/MC-PTF-01/02-0.3m/1m/3m 18AWG*3	 F22S-HB-SN/JU-01/02-0.3m/1m 18AWG*3	 F22-HB-SN/EC-01/02
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Socket Connector IP67	HB	 F22S-HB-SO/FC-01/02-E 0.3m/1m/3m/5m 18AWG*3	N/A	N/A	N/A	N/A	N/A	N/A	 F22-SO/EC
Silicone Injection-moulded Connector IP68	HB	 F22S-HB-SJM/FC-01/02-E 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	 F22S-HB-SJM/FC-02-SL 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	 F22S-HB-SJM/FC-01-SR 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	 F22S-HB-SJM/FC-01/02-B 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	N/A	 F22S-HB-SJM/MC-PTF-0.3m/1m/3m 18AWG*3	 F22S-HB-SJM/JU-0.3m/1m 18AWG*3	 F22-SJM/EC
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Silicone Injection-moulded Connector IP68	VB	 F22S-VB-SJM/FC-01/02-E 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	 F22S-VB-SJM/FC-01/02-SL 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	 F22S-VB-SJM/FC-01/02-SR 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	 F22S-VB-SJM/FC-01/02-B 0.3m/1m/3m/5m/ 10m/15m/20m 18AWG*3	N/A	 F22S-VB-SJM/MC-PTF-0.3m/1m/3m 18AWG*3	 F22S-VB-SJM/JU-0.3m/1m 18AWG*3	 F22-SJM/EC
		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Note:

Please choose 2 wires excluding signal wire for 02 end if double-end feed to avoid signal interference.

F22 Mounting Profile

Picture	Name/Item Code	Installation Way
	Aluminum Profile F22-A/PL-35/500/1000/2000mm	
	Flange Aluminum Profile F22-FA/PL-35/500/1000/2000mm	
	Serrated Aluminum Profile F22-SA/PL-20/500/1000/2000mm	
	Flange Serrated Aluminum Profile F22-FSA/PL-20/500/1000/2000mm	
	Bendable Serrated Aluminum Profile F22-BSA/PL-500/1000mm Note: only horizontal bending is available	

Flexglo™ F22S Wiring Diagram



1. Please use a constant voltage power supply with corresponding output voltage, and rated wattage of the power supply shall be 25% more than the actual power consumption of light to increase its life expectancy.

2. This wiring diagram is using the mains of AC230V with brown and blue wires as an example, and please connect with the corresponding live and neutral wires for other mains electricity;



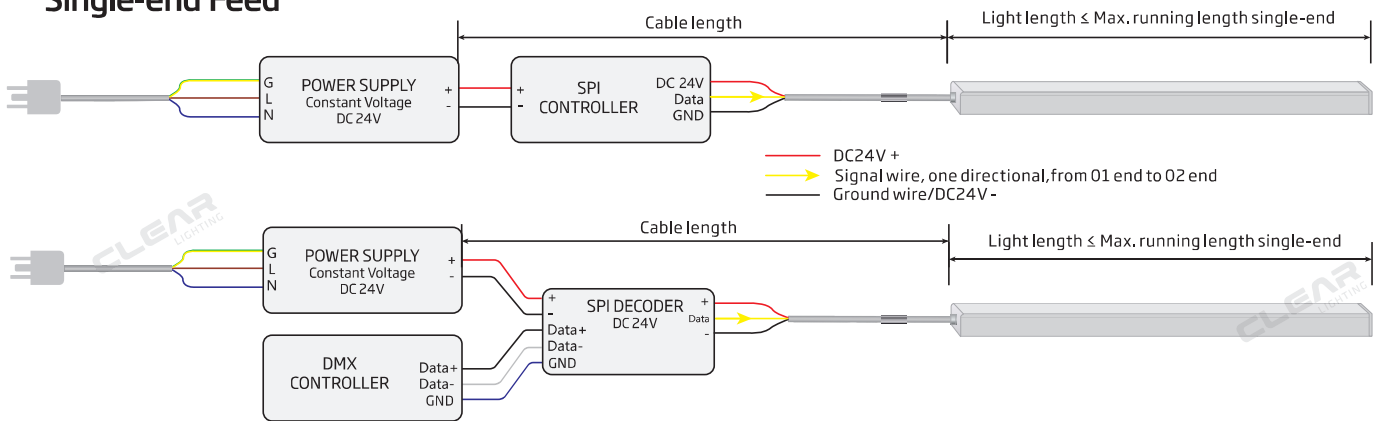
3. Types of standard plugs are optional if power cord is purchased from CLEAR.

4. A compatible decoder or controller that outputs SPI signal is required for this product with UCS2903 or UCS2904 IC inside.

5. The number of pixels light used should not exceed the maximum number of pixels of controller/decoder.

6. To avoid signal attenuation, please ensure the overall cable length is within the maximum signal transmission distance according to the specification of controller/decoder.

Single-end Feed



Light Length:

The length of the longest single light in parallel connection or sum of lights in series connection.

Cable Length:

The length of an electrical cable between power output end and light input end, and the cables for serial interconnection are inclusive.

How to Minimize Voltage Drop and Signal Transmission Attenuation

1. Please ensure the cable length is not more than the table "Max. Cable Length" according to light length and its wire gauge.
2. Please ensure the light length is less than the cable "Max. Running Length Single-end Feed".
3. 2 wires of Shielded Twisted Pair cable is required to be used to connect DMX controller and decoder in the distance of max. 300m, and wire gauge 20AWG or above is more recommended.

Max. Running Length Single-end Feed Input: DC24V

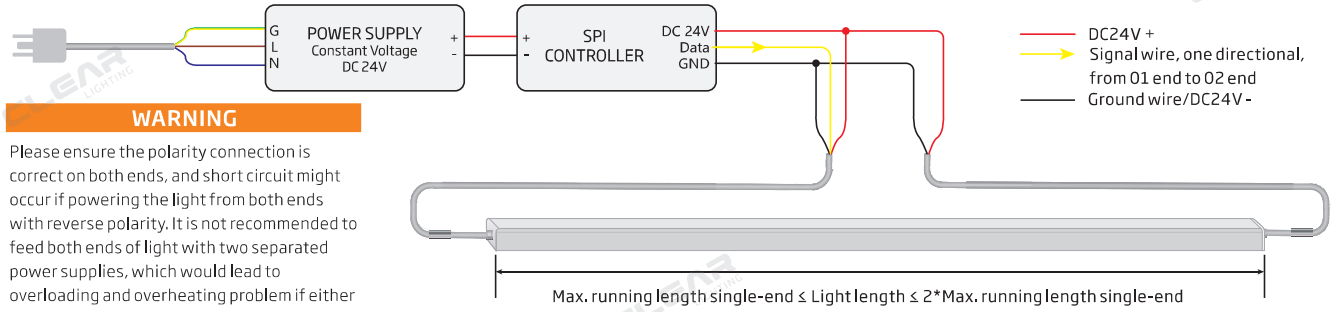
Connector Type	Snap Connector	Socket Connector	Injection-moulded Connector	Dual Injection-moulded Connector
Wire Gauge	18AWG*3	18AWG*3	18AWG*3	18AWG*3
C-FR-F22S-10W/12W-Static full loading	10m/32.8ft(HB)	10m/32.8ft	10m/32.8ft	10m/32.8ft
C-FR-F22S12-10W/12W-Dynamic operating	15m/49.2ft(HB)	15m/49.2ft	15m/49.2ft	15m/49.2ft
C-FR-F22S12-16.5W-Static full loading	5m/16.4ft(HB)	5m/16.4ft	5m/16.4ft	5m/16.4ft
C-FR-F22S12-16.5W-Dynamic operating	8m/26.2ft(HB)	8m/26.2ft	8m/26.2ft	8m/26.2ft
C-FR-F22S12-22W-Static full loading	5m/16.4ft(HB)	5m/16.4ft	5m/16.4ft	5m/16.4ft
C-FR-F22S12-22W-Dynamic operating	8m/26.2ft(HB)	8m/26.2ft	8m/26.2ft	8m/26.2ft
C-SFR-F22S-10W/12W-Static full loading	15m/49.2ft(HB)	15m/49.2ft	15m/49.2ft	/
C-SFR-F22S12-10W/12W-Dynamic operating	20m/65.6ft(HB)	20m/65.6ft	20m/65.6ft	/
C-SFR-F22S12-16.5W-Static full loading	10m/32.8ft(HB)	10m/32.8ft	10m/32.8ft	/
C-SFR-F22S12-16.5W-Dynamic operating	15m/49.2ft(HB)	15m/49.2ft	15m/49.2ft	/
C-SFR-F22S12-22W-Static full loading	8m/26.2ft(HB)	8m/26.2ft	8m/26.2ft	/
C-SFR-F22S12-22W-Dynamic operating	12m/39.4ft(HB)	12m/39.4ft	12m/39.4ft	/

Note:

1. Above conclusion is based on voltage drop testing result of the light with 0.3m (0.98ft) cable only.
2. The maximum running length is based on the light in static full loading status exceptionally stated dynamic operating.
3. Above running length is only the light length excluding lengths of connectors.
4. The delivery length might be subject to the maximum packing length.

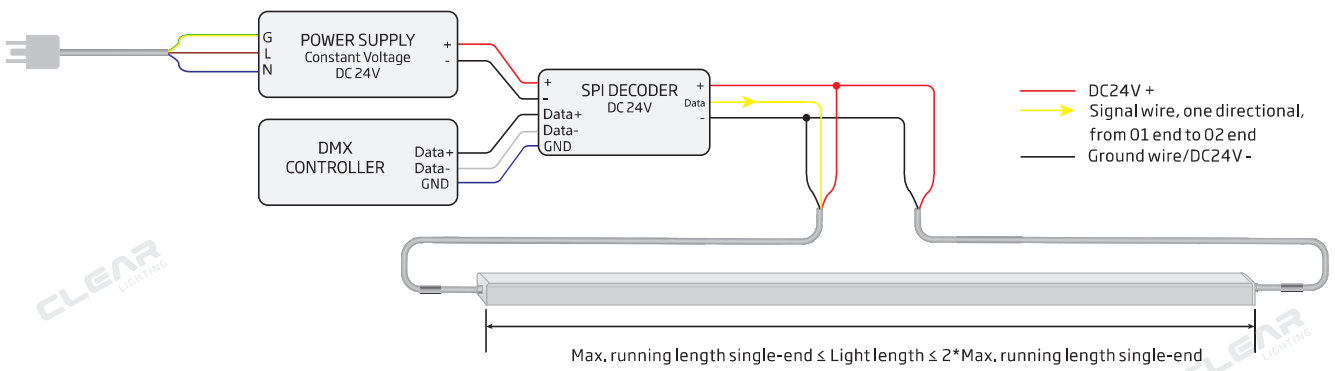
Double-end Feed

Please refer to the following wiring diagram with double-end feed to run length that is longer than max, running length for single-end feed but less than twice the value.



WARNING

Please ensure the polarity connection is correct on both ends, and short circuit might occur if powering the light from both ends with reverse polarity. It is not recommended to feed both ends of light with two separated power supplies, which would lead to overloading and overheating problem if either power supply is failed.



Light Length:

The length of the longest single light in parallel connection or sum of lights in series connection.

Cable Length:

The length of an electrical cable between power output end and light input end, and the cables for serial interconnection are inclusive.

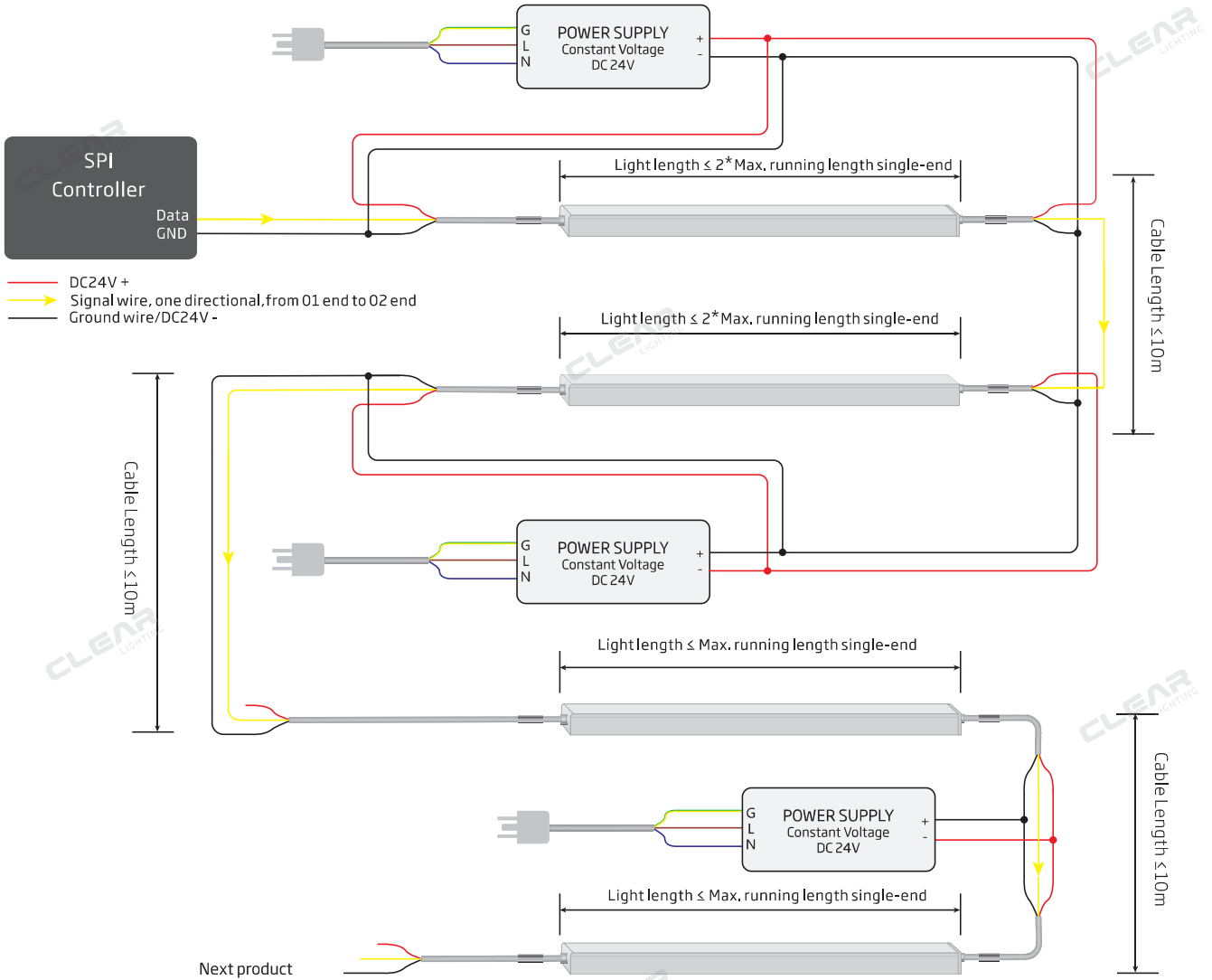
How to Minimize Voltage Drop and Signal Transmission Attenuation

1. It is optimal to position the power supply in the middle of a single light or multiple lines in daisy chain to keep the equivalent cable length on both ends for double-end feed.
2. Please ensure the cable length is not more than the table "Max. Cable Length" according to the half of light length and its wire gauge.
3. Please ensure the light length is less than the table "Max. Running Length Double-end Feed".
4. 2 wires of Shielded Twisted Pair cable is required to be used to connect DMX controller and decoder in the distance of max.300m, and wire gauge 20AWG or above is more recommended.

Max. Running Length Double-end Feed Input: DC24V

Connector Type	Snap Connector	Socket Connector	Injection-moulded Connector	Dual Injection-moulded connector
Wire Gauge	18AWG*3	18AWG*3	18AWG*3	18AWG*3
C-FR-F22S-10W/12W-Static full loading	20m/65.6ft(HB)	20m/65.6ft	20m/65.6ft	20m/65.6ft
C-FR-F22S-10W/12W-Dynamic operating	30m/98.4ft(HB)	30m/98.4ft	30m/98.4ft	30m/98.4ft
C-FR-F22S12-16.5W-Static full loading	10m/32.8ft(HB)	10m/32.8ft	10m/32.8ft	10m/32.8ft
C-FR-F22S12-16.5W-Dynamic operating	16m/52.5ft(HB)	16m/52.5ft	16m/52.5ft	16m/52.5ft
C-FR-F22S12-22W-Static full loading	10m/32.8ft(HB)	10m/32.8ft	10m/32.8ft	10m/32.8ft
C-FR-F22S12-22W-Dynamic operating	16m/52.5ft(HB)	16m/52.5ft	16m/52.5ft	16m/52.5ft
C-SFR-F22S-10W/12W-Static full loading	30m/98.4ft(HB)	30m/98.4ft	30m/98.4ft	/
C-SFR-F22S-10W/12W-Dynamic operating	40m/131.2ft(HB)	40m/131.2ft	40m/131.2ft	/
C-SFR-F22S12-16.5W-Static full loading	20m/65.6ft(HB)	20m/65.6ft	20m/65.6ft	/
C-SFR-F22S12-16.5W-Dynamic operating	30m/98.4ft(HB)	30m/98.4ft	30m/98.4ft	/
C-SFR-F22S12-22W-Static full loading	16m/52.5ft(HB)	16m/52.5ft	16m/52.5ft	/
C-SFR-F22S12-22W-Dynamic operating	24m/78.7ft(HB)	24m/78.7ft	24m/78.7ft	/

- Note:
1. Above conclusion is based on voltage drop testing result of the light with 0.3m (0.98ft) cable only.
 2. The maximum running length is based on the light in static full loading status exceptionally stated dynamic operating.
 3. Above running length is only the light length excluding lengths of connectors.
 4. The delivery length might be subject to the maximum packing length.



F22S Max. Cable Length (PVC)

Input: DC24V

Item Code	Light Length (m)	Max. Cable Length									
		0.32 mm ²		0.52 mm ²		0.81 mm ²		1.32 mm ²		2.07 mm ²	
		22AWG		20AWG		18AWG		16AWG		14AWG	
		m	ft	m	ft	m	ft	m	ft	m	ft
C-FR-F22S-10/12W	1	44.7	146.5	72.6	238.1	113.0	370.8	184.2	604.3	288.8	947.6
	2	21.2	69.4	34.4	112.8	53.6	175.7	87.3	286.4	136.9	449.1
	3	13.4	44.1	21.8	71.7	34.0	111.6	55.5	181.9	87.0	285.3
	4	9.7	31.7	15.7	51.5	24.5	80.2	39.8	130.7	62.5	205.0
	5	7.0	22.9	11.3	37.2	17.7	57.9	28.8	94.4	45.1	148.1
	6	5.2	17.1	8.5	27.8	13.2	43.3	21.5	70.6	33.7	110.6
	7			6.4	21.0	10.0	32.7	16.2	53.3	25.5	83.5
	8			4.5	14.7	7.0	22.9	11.4	37.4	17.9	58.6
	9			3.0	9.8	4.7	15.3	7.6	24.9	11.9	39.0
	10			1.8	5.9	2.8	9.2	4.6	14.9	7.1	23.4
C-FR-F22S-16.5W	1	29.1	95.5	47.3	155.3	73.7	241.8	120.1	394.1	188.4	618.0
	2	14.1	46.1	22.8	74.9	35.6	116.7	58.0	190.2	90.9	298.3
	3	8.5	28.0	13.9	45.5	21.6	70.9	35.2	115.5	55.2	181.1
	4	5.8	18.9	9.4	30.7	14.6	47.9	23.8	78.0	37.3	122.3
	5	3.9	12.7	6.3	20.7	9.8	32.2	16.0	52.5	25.1	82.4
C-FR-F22S-22W	1	22.3	73.2	36.3	119.0	56.5	185.4	92.1	302.1	144.4	473.8
	2	10.3	33.9	16.8	55.2	26.2	85.9	42.7	140.0	66.9	219.6
	3	6.2	20.5	10.2	33.3	15.8	51.9	25.8	84.6	40.4	132.6
	4			6.5	21.3	10.1	33.1	16.4	54.0	25.8	84.6
	5			4.2	13.9	6.6	21.7	10.8	35.3	16.9	55.4

F22S Max. Cable Length (Silicone)

Input: DC24V

Item Code	Light Length (m)	Max. Cable Length									
		0.32 mm ²		0.52 mm ²		0.81 mm ²		1.32 mm ²		2.07 mm ²	
		22AWG		20AWG		18AWG		16AWG		14AWG	
		m	ft	m	ft	m	ft	m	ft	m	ft
C-SFR-F22S-10/12W	1	43.7	143.3	71.0	232.9	110.6	362.8	180.2	591.1	282.6	927.0
	2	22.1	72.4	35.9	117.7	55.9	183.4	91.1	298.8	142.8	468.6
	3	14.6	47.8	23.7	77.6	36.9	120.9	60.1	197.0	94.2	309.0
	4	10.5	34.3	17.0	55.8	26.5	86.9	43.2	141.6	67.7	222.1
	5	8.0	26.3	13.0	42.7	20.3	66.5	33.0	108.4	51.8	170.0
	6	6.5	21.2	10.5	34.5	16.4	53.7	26.7	87.5	41.8	137.2
	7			8.9	29.1	13.8	45.3	22.5	73.9	35.3	115.9
	8			7.6	24.8	11.8	38.6	19.2	62.9	30.1	98.7
	9			6.2	20.5	9.7	31.9	15.8	52.0	24.9	81.5
	10			5.3	17.5	8.3	27.2	13.5	44.3	21.2	69.5
	11			4.3	14.1	6.7	22.0	10.9	35.9	17.2	56.3
	12					5.4	17.7	8.8	28.8	13.8	45.1
	13							7.5	24.7	11.8	38.8
	14							5.9	19.4	9.3	30.4
	15							4.5	14.8	7.1	23.2
C-SFR-F22S-16.5W	1	33.5	109.9	54.4	178.5	84.8	278.1	138.1	453.2	216.6	710.7
	2	16.2	53.1	26.3	86.3	41.0	134.4	66.7	219.0	104.7	343.4
	3	10.8	35.3	17.5	57.4	27.2	89.3	44.4	145.6	69.6	228.3
	4	7.7	25.3	12.5	41.1	19.5	64.0	31.8	104.3	49.9	163.6
	5	5.9	19.3	9.6	31.3	14.9	48.8	24.3	79.6	38.0	124.8
	6			7.6	24.9	11.8	38.8	19.3	63.3	30.3	99.3
	7			5.9	19.2	9.1	29.9	14.9	48.8	23.3	76.5
	8			4.8	15.9	7.5	24.7	12.3	40.3	19.3	63.2
	9					5.9	19.4	9.6	31.6	15.1	49.5
	10					8.5	27.9	13.9	45.5	21.7	71.3
C-SFR-F22S-22W	1	22.6	74.1	36.7	120.4	57.1	187.5	93.1	305.5	146.0	479.1
	2	11.2	36.8	18.2	59.8	28.4	93.2	46.3	151.9	72.6	238.2
	3	7.1	23.4	11.6	38.0	18.1	59.2	29.4	96.5	46.1	151.4
	4			8.3	27.3	13.0	42.5	21.1	69.2	33.1	108.6
	5			6.1	19.9	9.5	31.0	15.4	50.6	24.2	79.3
	6					7.1	23.2	11.5	37.8	18.1	59.2
	7					5.7	18.8	9.3	30.6	14.6	47.9
	8					4.4	14.5	7.2	23.6	11.3	37.1

Note:

1. Please check the wire gauge of your connector in the table "Max. Running Length".

E.g.,

Single-end feed, C-FR-F22S-12W, 5m light length with 18AWG wire, max. cable length should refer to the corresponding value 17.7m for 5m light length;

Double-end feed, C-FR-F22S-12W, 10m light length with 18AWG wire, max. cable length of each end should refer to the corresponding value 17.7m for half of light length 5m;

2. The above cable lengths are calculated based on 10% allowable voltage drop maximum.

3. To avoid signal degradation, please ensure the data cable length is within the maximum signal transmission distance according to the specification of controller/decoder.