



# Low Angle Square Diffuse Light

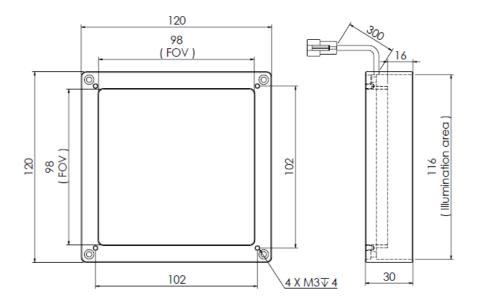
# FFPQ-Si120

## **Lighting Picture**

## **Lighting Dimension**



Mechanical Information	
Casing Material	Aluminum + Acrylic
Storage Temperature Range	Temp 0-35°C, Humidity 20-85%
Weight	270g
Lighting Dimension, WxLxH	120.0 x 120.0 x 30.0 mm
IP Rating	IP 50



Unit in mm







Optical Information					
Led Color	RED (R/R24)	InfraRed (IR/IR24)	GREEN (G)	BLUE (B)	WHITE (W)
Wavelength	626nm	850nm	525nm	470nm	xy=(0.31,0.32)
Illumination (number of LED)	100	112	112	112	112
Illumination Area			116 x 116 mm		
Led Package			SMD		
Eye Safety (EN 62471:2008)			Exempt Group		

Electrical Information	R	IR	R24	IR24	G/B/W	
Lighting Supply Voltage (constant voltage mode)	12V ± 2%		24V ± 2%			
Supply Ripple Voltage			≤ Vs ± 5%			
Reverse Battery Protection			YES			
Typical Lighting Forward voltage, Vf (for zero internal resistor value)	11.0 V	9.8 V	22.0 V	19.6 V	21.0 V	
Continuous Current	0.80 (MAX)	0.40A (MAX)	0.40A (MAX)	0.18A (MAX)	0.32A (MAX)	
Power Consumption	9.60 W	4.80 W	9.60 W	4.20 W	7.68 W	
Lighting casing temperature, Operating after 60 minutes	50°C	40°C	50°C	40°C	45°C	

Strobe Mode Specification	R	IR	R24	IR24	G/B/W	
Max. Lighting Supply Voltage	Pulsing at 12V	DC to 24VDC,	Pulsing at 24VDC to 48VDC,			
(Constant voltage power supply)	0-10% Duty Cycle		0-10% Duty Cycle			
	Recommended at 15VDC		Recommended at 36VDC			
Pulse Current, (Max. 10msec)	2.00A (MAX)	1.00A (MAX)	1.00A (MAX)	0.44A (MAX)	0.80A (MAX)	
(Constant current power supply)	2.00A (IVIAX)	1.00A (WAX)	1.00A (IVIAX)	0.44A (IVIAA)	0.80A (IVIAX)	
Max. Trigger Pulse Duration, msec	10 msec					
Duty Cycle			0 - 10%			

Ordering Option	
FFPQ-Si120-R/R24/IR/IR24/G/B/W	With resistor to limit the current (Use in both constant voltage/ current power supply)
FFPQ-Si120-R/R24/IR/IR24/G/B/W-0	Internal resistor value= zero ohms (only use in constant current power supply)







Connection	R/IR			R24/IR24/G/B/W				
Connector Type (Default):	JST	SMR-02V			JST	SMR-03V	1	7
	Pin	Sigr	nal	Cable Color	Pin	Sig	nal	Cable Color
	1	LED	) +	Black/White	1	LEI	) +	Black/White
	2	LED	) -	Black	2	N.	C.	
					3	LE	D -	Black
Cable Length out from lighting:	300 mm							

Additional Information	R/R24/G/B/W/IR/IR24
Additional Cooling Method	Attached to machine part for better heat dissipation
Life span in continuous mode	20,000 hours
Life span in strobe light mode Lighting drop to 50% intensity (at 25°C ambient temperature)	50,000 hours
Intensity Controller Selection	PSA-Series, PSD-Series, LIC-Series
CE Conformity	YES
RoHS Compliance	YES
ISO 9001:2008	SG11/03751

Application	
Optimal Working Distance	0-20 mm







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