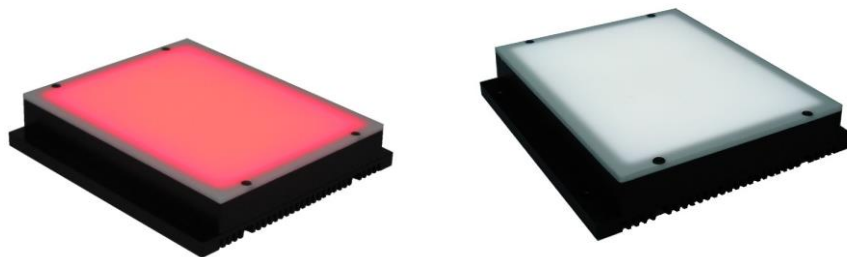


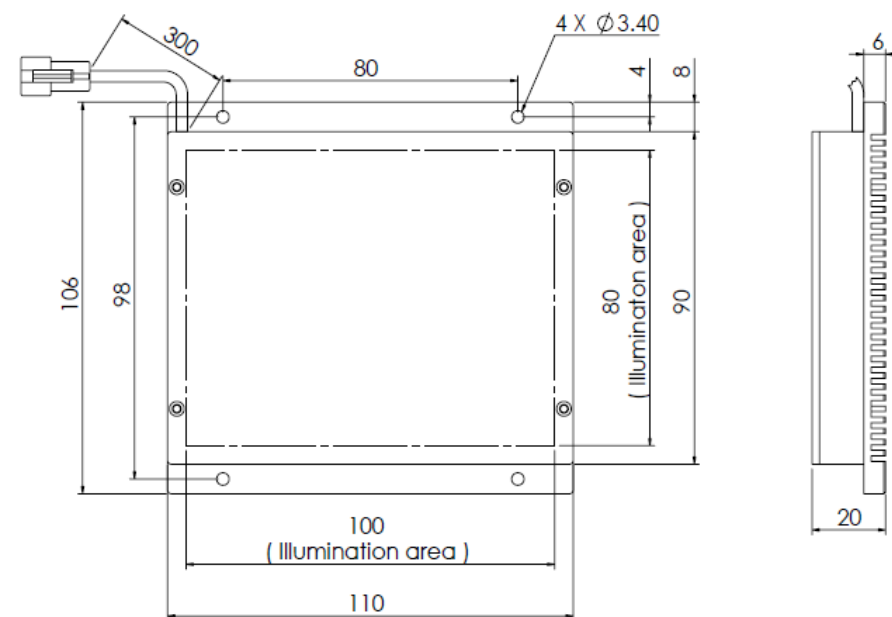
## High Brightness Diffuse Back Light

### [FALCON] FLDL-TP-Si100X80

Lighting Picture



Lighting Dimension



Mechanical Information	
Casing Material	Aluminium + Diffuser
Storage Temperature Range	Temp 0-35°C, Humidity 20-85%
Weight	283g
Lighting Dimension, WxLxH	110.0 x 106.0 x 20.0 mm
IP Rating	IP 50





Optical Information					
Led Color	RED (R24)	InfraRed (IR24)	GREEN (G)	BLUE (B)	WHITE (W)
Wavelength	626nm	850nm	525nm	470nm	xy=(0.31,0.32)
Illumination (number of LED)	180	168	168	168	168
Illumination Area	100 x 80 mm				
Led Package	SMD				
Eye Safety (EN 62471:2008)	Exempt Group				

Electrical Information	IR24	R24	G/B/W
Lighting Supply Voltage (constant voltage mode)	24V ± 2%	24V ± 2%	
Supply Ripple Voltage	≤ Vs ± 5%		
Reverse Battery Protection	YES		
Typical Lighting Forward voltage, Vf (for zero internal resistor value)	24 V	20.0 V	21.0 V
Continuous Current	0.30A (MAX)	0.72A (MAX)	0.48A (MAX)
Power Consumption	7.20 W	17.28 W	11.52 W
Lighting casing temperature, Operating after 60 minutes	50°C	60°C	55°C

Strobe Mode Specification	IR	R24	G/B/W
Max. Lighting Supply Voltage (Constant voltage power supply)	Pulsing at 12VDC to 24VDC, 0-10% Duty Cycle Recommended at 15VDC	Pulsing at 24VDC to 48VDC, 0-10% Duty Cycle Recommended at 36VDC	
Pulse Current, (Max. 10msec) (Constant current power supply)	0.75A (MAX)	1.80A (MAX)	1.20A (MAX)
Max. Trigger Pulse Duration, msec	10 msec		
Duty Cycle	0 - 10%		

Ordering Option	
FLDL-TP-Si100X80- R24/IR24/G/B/W	With resistor to limit the current (Use in both constant voltage/ current power supply)
FLDL-TP-Si100X80- R24/IR24/G/B/W-0	Internal resistor value= zero ohms (only use in constant current power supply)



Connection	IR				R24/G/B/W			
Connector Type (Default):	JST SMR-02V				JST SMR-03V			
	Pin	Signal	Cable Color		Pin	Signal	Cable Color	
	1	LED +	Black/White		1	LED +	Black/White	
	2	LED -	Black		2	N.C.	---	
					3	LED -	Black	
Cable Length out from lighting:	300 mm							

Additional Information	R24/IR/G/B/W
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	50,000 hours
Lighting drop to 50% intensity (at 25°C ambient temperature)	
Intensity Controller Selection	PSA-Series, PSD-Series, LIC-Series
CE Conformity	YES
RoHS Compliance	YES
ISO 9001:2015	MY05916

Application	
Optimal Working Distance	5-100 mm



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