

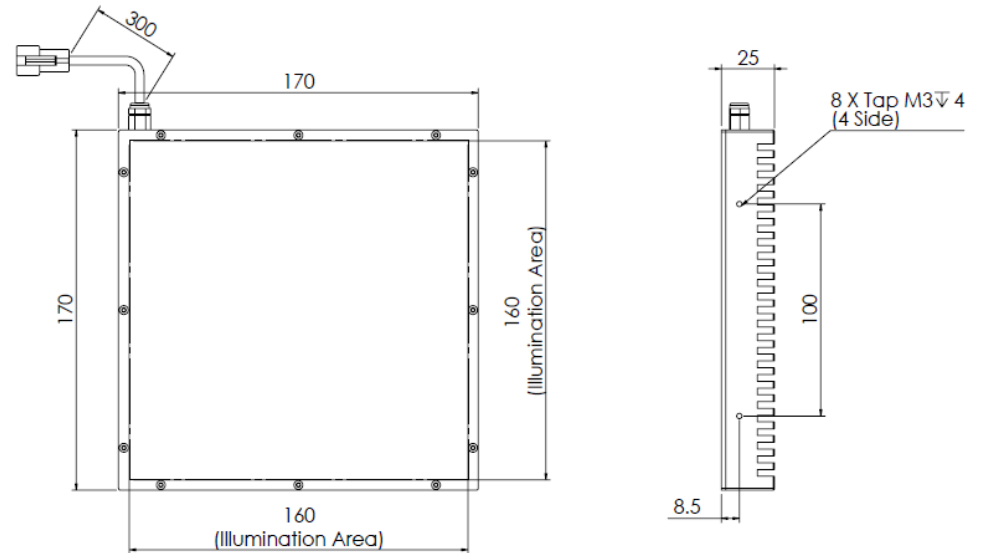
High Brightness Diffuse Back Light

FLDL-TP-Si160

Lighting Picture



Lighting Dimension



Mechanical Information	
Casing Material	Aluminium + Diffuser
Storage Temperature Range	Temp 0-35°C, Humidity 20-85%
Weight	886 g
Lighting Dimension WxLxH	170.0 x 170.0 x 25.0 mm
IP Rating	IP 50

Unit in mm





Optical Information				
Led Color	InfraRed (IR/IR24)	GREEN (G)	BLUE (B)	WHITE (W)
Wavelength	850nm	525nm	470nm	xy=(0.31,0.32)
Illumination (number of LED)	462/480	462	462	462
Illumination Area	160 x 160 mm			
Led Package	SMD			
Eye Safety (EN 62471:2008)	Exempt Group			

Electrical Information		IR	IR24/G/B/W	
Lighting Supply Voltage (constant voltage mode)		12V ± 2%	24V ± 2%	
Supply Ripple Voltage		≤ Vs ± 5%		
Reverse Battery Protection		YES		
Lighting Forward voltage, (for zero internal resistor value)		9.8 V	21.0 V	21.0 V
Continuous Current		1.65A (MAX)	0.80A (MAX)	1.32A (MAX)
Power Consumption		19.80 W	19.20	31.68 W
Lighting casing temperature, Operating after 60 minutes		55°C	47.1°C	60°C

Strobe Mode Specification		IR	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)		4.13A (MAX)	2.00A (MAX)	3.30A (MAX)
Max. Trigger Pulse Duration, msec		10 msec		
Duty Cycle		0 - 10%		

Ordering Option	
FLDL-TP-Si160-IR/IR24/G/B/W	With resistor to limit the current (Use in both constant voltage / current power supply)
FLDL-TP-Si160-IR/IR24/G/B/W-0	Internal resistor value= zero ohms (only use in constant current power supply)



Connection		IR			IR24/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	IR/IR24/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 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	5-100 mm



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