

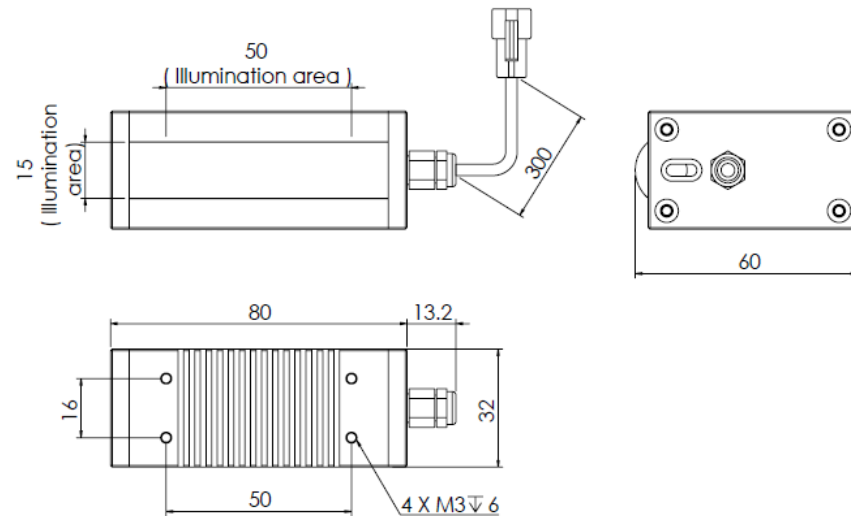
## High Brightness Line Light

# FHLN-Si50S

### Lighting Picture



### Lighting Dimension



Mechanical Information	
Casing Material	Aluminium + Acrylic
Storage Temperature Range	Temp 0-35°C, Humidity 20-85%
Weight	300g
Lighting Dimension, WxLxH	32.0 x 80.0 x 60.0mm
IP Rating	IP 50

Unit in mm



FHLN-Si50S

Asia Office: [www.falcon-illumination.com](http://www.falcon-illumination.com), Europe Office: [www.falcon-illumination.de](http://www.falcon-illumination.de)  
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Optical Information	
Led Color	WHITE (W)
Wavelength	xy=(0.31,0.32)
Illumination (number of LED)	7
Illumination Area	50 x 15 mm
Led Package	SMD
Eye Safety (EN 62471:2008)	RG-2 (Moderate Risk): Caution. Do not stare at exposed lamp in operation. May be harmful to eyes.


Electrical Information	
Lighting Supply Voltage (constant voltage mode)	22V ± 2%
Supply Ripple Voltage	≤ Vs ± 5%
Reverse Battery Protection	YES
Typical Lighting Forward voltage, Vf (for zero internal resistor value)	21.0 V
Continuous Current	0.70A (MAX)
Power Consumption	15.40 W
Lighting casing temperature, Operating after 60 minutes	75°C

Strobe Mode Specification	
Max. Lighting Supply Voltage (Constant voltage power supply)	Pulsing at 22VDC to 44VDC, 0-10% Duty Cycle Recommended at 33VDC
Pulse Current, (Max. 10msec) (Constant current power supply)	1.75A (MAX) (PULSE ONLY)
Constant Current Power Supply Voltage Level	22.0V (1.0V higher than the lighting Vf)
Max. Trigger Pulse Duration, msec	10 msec
Duty Cycle	0 to 10%

Over Driving Mode	
Constraints	Major constraint in over current mode is tremendous heat generated on the lighting and results the led in permanent damage.
Maximum Current, (Constant current power supply)	0.7A (MAX) Ordering Option (FHLN-Si50S-W-0)
Constant Current Power Supply Voltage Level	22.0V (1.0V higher than the lighting Vf)
Max. Turn On Duration, sec	10 Sec
Duty Cycle	50%
Over driving in Constant voltage Mode	Ordering Option (FHLN-Si50S-W-2)



Ordering Option	
FHLN-Si50S-W	With resistor to limit the current (Use in both constant voltage/ current power supply)
FHLN-Si50S-W-0	Internal resistor value= zero ohms (only use in constant current power supply)
FHLN-Si50S-W-2	Driving in 2x current with build in internal resistor (Use in both constant voltage/ current power supply)

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

Additional Information		G/B/W	
Additional Cooling Method	1. Apply compress air onto the lighting 2. Attached to machine part for better heat dissipation		
Life span in continuous mode	20,000 hours (drop to 50% intensity) at 25°C		
Life span in strobe light mode Lighting drop to 50% intensity (at 25°C ambient temperature)	Est. >50,000 hours (drop to 50% intensity) at 25°C		
Intensity Controller Selection	PSA-Series, PSD-Series, LIC-Series		
CE Conformity	YES		
RoHS Compliance	YES		
ISO 9001:2008	SG11/03751		

Application	
Optimal Working Distance	20-100 mm
Optimize the lighting Life Span	1. It is recommended to turn ON the lighting only during image capturing or conjunction with camera exposure time. This will enable the lighting to work with longer life span and prevent overheating and resulting damage to the led.



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