

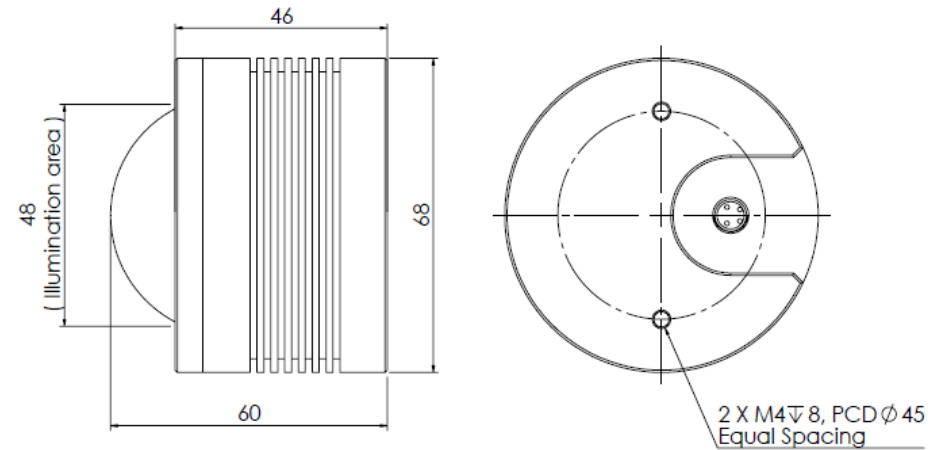
High Brightness Spot Light

 **FHSP-Si60**

Lighting Picture



Lighting Dimension



Mechanical Information	
Casing Material	Aluminium + Glass lens
Storage Temperature Range	Temp 0-35°C, Humidity 20-85%
Weight	412 g
Lighting Dimension, ϕ xH	ϕ 68.0 x 60.0mm
IP Rating	IP 55


Unit in mm

Optical Information					
Led Color	RED (R24)	InfraRed (IR/IR24)	GREEN (G)	BLUE (B)	WHITE(W)
Wavelength, CIE coordinate	626nm	850nm	525nm	470nm	xy=(0.31,0.32)
Illumination (number of LED)	10	7 / 7	7	7	7
Illumination Area, Ø	Ø48mm				
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	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			
Lighting Forward voltage (for zero internal resistor value)	9.8 V	22.0 V	9.8 V	21.0 V
Continuous Current	0.35A (MAX)	0.35A (MAX)	0.35A (MAX)	0.35A (MAX)
Power Consumption (constant voltage mode)	4.20 W	8.40 W	8.40 W	8.40 W
Lighting casing temperature, Operating after 60 minutes in continuous mode	38°C	55°C	60°C	55°C
Strobe Mode Specification	IR	R24	IR24	G/B/W
Max. Lighting Supply Voltage (Constant voltage power supply)	Pulsing at 12VDC to 24VDC, 0-10% Duty Cycle Recommended at 18VDC	Pulsing at 24VDC to 48VDC, 0-10% Duty Cycle Recommended at 36VDC		
Pulse Current, (Max. 10msec) (Constant current power supply)	0.88A (MAX) (PULSE ONLY)	0.88A (MAX) (PULSE ONLY)	0.88A (MAX) (PULSE ONLY)	0.88A (MAX) (PULSE ONLY)
Constant Current Power Supply Voltage Level	10.8V (1.0V higher than the lighting Vf)	23.0V (1.0V higher than the lighting Vf)	10.8V (1.0V higher than the lighting Vf)	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 (FHSP-Si60-xxxx-0)			
Constant Current Power Supply Voltage Level	10.8V (1.0V higher than the lighting Vf)	23.0V (1.0V higher than the lighting Vf)	11.8V (1.0V higher than the lighting Vf)	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 (FHSP-Si60-xxxx-2)
Ordering Option	
FHSP-Si60-IR/IR24/R24/G/B/W	With resistor to limit the current (Use in both constant voltage/ current power supply)
FHSP-Si60-IR/IR24/R24/G/B/W-0	Internal resistor value= zero ohms (only use in constant current power supply)
FHSP-Si60-IR/IR24/R24/G/B/W-2	Driving in 2x current with build in internal resistor (Use in both constant voltage/ current power supply)

Connection		IR/IR24/R24/G/B/W	
Connector Type:	Pico M8 (Male)		
Cable Length out from lighting:	N/A		
Pin Configuration: Pico M8 (Male)		Pin	Light Segment
		1	LED 1 +
		2	N.C.
		3	LED 1 -
		4	N.C.
			Börsig /Binder P/N: 79-3382-52-04
			Wire Color
			Brown

			Blue

Additional Information		IR/IR24/R24/G/B/W
Additional Cooling Method	1.	
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	10-3000mm
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.

Disclaimer

IMPORTANT NOTICE:

ALL PRODUCT, PRODUCT DATA SHEET AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE QUALITY, RELIABILITY, FUNCTION, DESIGN OR OTHERWISE.

Other disclaimers:

- 1) FALCON ILLUMINATION (M) SDN.BHD (termed as FALCON), its affiliates, agents, distributors and employees, and all persons acting on its or their behalf (FALCON collectively), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.
- 2) FALCON makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, FALCON disclaims:
 - (i) any and all liability arising out of the application or use of any product,
 - (ii) any and all liability, including without limitation special, consequential or incidental damages, and
 - (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- 3) Information and statements regarding the suitability of products for certain types of applications are based on FALCON's knowledge of typical requirements that are often placed on our products datasheet for generic applications. Such statements or information are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to verify and/or validate that a particular product with the properties described in our product data sheet is suitable for use in a particular application.
- 4) Parameters provided in product datasheets and/or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be verified and/or validated for each customer application by the customer's technical experts.
- 5) Except as expressly indicated in writing, FALCON I's products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the product could result in personal injury or death. Customers using or selling our products not expressly indicated for use in such applications do so at their own risk and agree to fully indemnify and hold FALCON and its distributors harmless from and against any and all claims, liabilities, expenses and damages arising or resulting in connection with such use or sale, including attorneys fees, even if such claim alleges that FALCON or its distributor was negligent regarding the design or manufacture of the part. Please contact authorized FALCON personnel to obtain written terms and conditions regarding products designed for such applications.

