

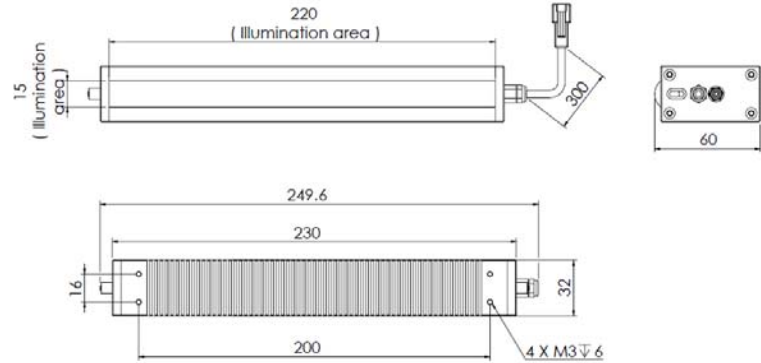
## High Brightness Line Light

# FHLN-Si200

### Lighting Picture



### Lighting Dimension




All unit in mm

| Mechanical Information    |                              |
|---------------------------|------------------------------|
| Casing Material           | Aluminium + Acrylic          |
| Storage Temperature Range | Temp 0-35°C, Humidity 20-85% |
| Weight                    | 900g                         |
| Lighting Dimension, WxLxH | 32.0 x 230 x 60.0mm          |
| IP Rating                 | IP 50                        |

| Optical Information          |   |
|------------------------------|---|
| Led Color                    | WHITE (W)   |
| Wavelength, CIE coordinate   | xy=(0.31,0.32)  |
| Illumination (number of LED) | 28  |
| Illumination Area            | 220 x15 mm  |
| Led Package                  | High Power 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)                            | 24V ± 2%                                   |
| Supply Ripple Voltage  | ≤ Vs ± 5%                                  |
| Reverse Battery Protection   | YES  |
| Lighting Forward voltage (for zero internal resistor value)                | 21.0 V                                     |
| Continuous Current   | 1.4 A (MAX)                                |
| Power Consumption (constant voltage mode)                                  | 33.6 Watts                                 |
| Lighting casing temperature, Operating after 60 minutes in continuous mode | <b>(Without compress air cooling) 75°C</b> |
|  | (With compress air cooling) 55°C           |

| <b>Strobe Mode Specification</b>  |   |        |             |
|---|---|--------|-------------|
| Max. Lighting Supply Voltage<br>(Constant voltage power supply)                     | Pulsing at 24VDC to 40VDC,<br>0-10% Duty Cycle<br>Recommended at 36VDC  |        |             |
| Pulse Current, (Max. 10msec)<br>(Constant current power supply)                     | 3.5 A (MAX) (PULSE ONLY)  |        |             |
| Constant Current Power Supply<br>Voltage Level                                      | 22.0V (1.0V higher than the lighting Vf)  |        |             |
| Max. Trigger Pulse Duration, msec   | 10 msec   |        |             |
| Duty Cycle  | 0 to 10%  |        |             |
| <b>Over Driving Mode</b>  |   |        |             |
| Constraints   | Major constraint in over current mode is tremendous heat generated on the lighting and results the led in permanent damage.   |        |             |
| Maximum Current,<br>(Constant current power supply)                                 | 2.8 A (MAX)<br>Ordering Option (FHLN-Si200-W-0)   |        |             |
| Constant Current Power Supply<br>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<br>Mode  | Ordering Option (FHLN-Si200-W-2)  |        |             |
| <b>Additional Information</b>   |   |        |             |
| Additional Cooling Method   | 1. Apply compress air onto the lighting<br>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  | Est. >50,000 hours (drop to 50% intensity) at 25°C  |        |             |
| Intensity Controller Selection  | PSA-Series, PSA-Series, LIC-Series  |        |             |
| CE Conformity   | YES   |        |             |
| RoHS  | YES   |        |             |
| ISO 9001:2008   | SG11/03751  |        |             |
| <b>Ordering Option</b>  |   |        |             |
| FHLN-Si200-W  | With resistor to limit the current<br>(Use in both constant voltage/ current power supply)  |        |             |
| FHLN-Si200-W-0  | Internal resistor value= zero ohms<br>(only use in constant current power supply)   |        |             |
| FHLN-Si200-W-0-2  | With resistor for lighting to operate in 2x of its normal current<br>(Work in over driving mode only)   |        |             |
| <b>Connection</b>   |   |        |             |
| Connector Type (Default):   | JST SMR-03V   |        |             |
| Cable Length out from lighting:   | 500 mm  |        |             |
| Pin Configuration:  | Pin   | Signal | Cable Color |
|   | 1   | LED +  | Black/White |
|   | 2   | N.C.   | ---         |
|   | 3   | LED -  | Black       |
|  |   |        |             |
| <b>Application</b>  |   |        |             |
| Optimal Working Distance  | 20-100mm  |        |             |
| 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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