FocusFiber[®]

Fiber Coupled Single Bar Diode Laser (CW)



Features

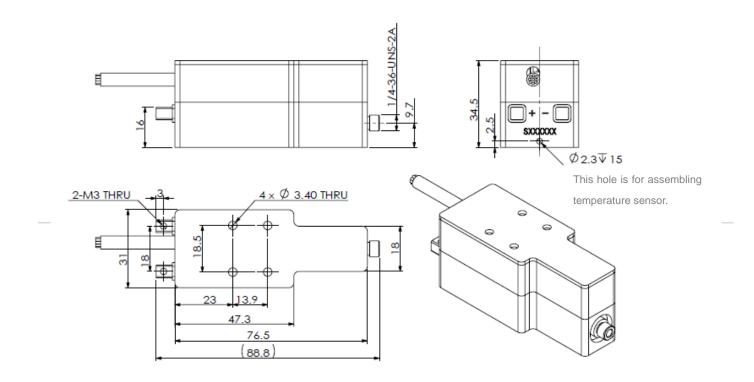
- High power, high brightness
- Small size, low weight

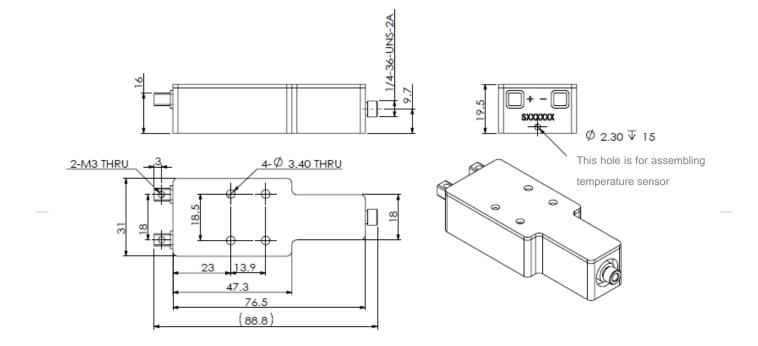
Applications

- Pumping
- IR Illumination

- Gaussian wavelength
 spectrum
- Additional function
- Medical
- Industry manufacture

Device Dimension (mm) (with additional function)





Device Dimension (mm) (without additional function)

This structure drawing is only for reference. For any other special requirement, please feel free to contact us.

Specification

Optical $^{3.7}$ Center Wavelength Λ nm $\& 008$ $\& 008$ $\& 008$ Wavelength Tolerancenm ± 3 ± 3 ± 3 Output Power ² W 30 40 50 Spectral Width FWHMnm $\ll 3$ $\ll 3$ $\ll 3$ Wavelength Temp. Coefficientnm/°C ~ 0.28 ~ 0.28 ~ 0.28 Fiber Parameters ~ 0.28 ~ 0.22 0.22 0.22 Fiber Core Diameterµm $200 \text{ or } 400$ $200 \text{ or } 400$ 400 Connector Type ⁶ -SMA905SMA905SMA905Fiber Length ⁵ m1.51.51.5Electrical Parameters $^{3.7}$ Doparating Current $ _{0p}$ A ≤ 50 ≤ 60 Operating Voltage V_{op} V ≤ 2 ≤ 2 ≤ 2 Typical Power Conversion Efficiency% ≥ 40 ≥ 40 ≥ 40 Thermal Parameters \sim $15-30$ $15-30$ $15-30$ Operating Temperature \sim $15-30$ $15-30$ $15-30$ Recommended Thermal Dissipation Car, W ≥ 90 ≥ 120 ≥ 150 Additional Feature 1 - Pilot Beam \sim 3 3 Output PowermW ≤ 0.7 ≥ 0.7 ≥ 0.7 Wavelenthnm 650 650 650 Operation VoltageV 3 3 3 Operation CurrentmA ≤ 100 ≤ 100 ≤ 100 Additional Feature 2 - Fiber Detection Sensor 0 <th>Module Type¹</th> <th>Units</th> <th>FL-S30-808</th> <th>FL-S40-808</th> <th>FL-S50-808</th>	Module Type ¹	Units	FL-S30-808	FL-S40-808	FL-S50-808
Wavelength Tolerancenm ± 3 ± 3 ± 3 ± 3 Output Power2W304050Spectral Width FWHMnm $\ll 3$ $\ll 3$ $\ll 3$ Wavelength Temp. Coefficientnm/° ~ 0.28 ~ 0.28 ~ 0.28 Fiber ParametersFiber Parameters $=$ $=$ $=$ Fiber Core Diameter μ m200 or 400200 or 400400Connector Type ⁶ -SMA905SMA905SMA905Fiber Length ⁵ m1.51.51.5Electrical Parameters ^{3,7} -Specifical Parameters ^{3,7} $=$ Operating Current I _{sp} A ≤ 50 ≤ 60 ≤ 65 Operating Voltage V _{op} V ≤ 2 ≤ 2 ≤ 2 Typical Power Conversion Efficiency% ≥ 40 ≥ 40 ≥ 40 Thermal Parameters"C15–3015–3015–30Recommended Thermal Dissipation CarW ≥ 90 ≥ 120 ≥ 150 Additional Feature 1 - Pilot BeamM ≤ 0.7 ≥ 0.7 ≥ 0.7 Output PowermA ≤ 100 ≤ 100 ≤ 100 Operation VoltageV333 3 Operation CurrentmA ≤ 100 ≤ 100 ≤ 100 Additional Feature 2 - Fiber Detection Sensor $=$ $=$ $=$ Operation VoltageV 5 5 5 Operation VoltageV 5 5 5 Operation CurrentmA ≤ 2.5	-				
Output PowerW304050Spectral Width FWHMnm $\ll 3$ $\ll 3$ $\ll 3$ Wavelength Temp. Coefficientnm/°C ~ 0.28 ~ 0.28 ~ 0.28 Fiber ParametersFiber Numerical ApertureNA 0.22 0.22 0.22 Fiber Core Diameter μ m200 or 400200 or 400400Connector Type ⁶ -SMA905SMA905SMA905Fiber Length ⁵ m1.51.51.5Electrical Parameters 3,7 Operating Current I _{op} A ≤ 50 ≤ 60 ≤ 65 Operating Voltage V _{op} V ≤ 2 ≤ 2 ≤ 2 Typical Power Conversion Efficiency% ≥ 40 ≥ 40 Thermal Parameters15-3015-30Operating Temperature°C15-3015-3015-30Recommended Thermal Dissipation CarW ≥ 90 ≥ 120 ≥ 150 Additional Feature 1 - Pilot Beam20.7 ≥ 0.7 ≥ 0.7 Output PowermW ≥ 0.7 ≥ 0.7 ≥ 0.7 ≥ 0.7 Queration VoltageV3333Operation VoltageV10-3010-3010-30Operation VoltageV555Operation VoltageV555Operation VoltageV555Operation VoltageV555Operation Voltage <t< td=""><td>Center Wavelength λ</td><td>nm</td><td>808</td><td>808</td><td>808</td></t<>	Center Wavelength λ	nm	808	808	808
Spectral Width FWHMnm $\leqslant 3$ $\leqslant 3$ $\leqslant 3$ $\leqslant 3$ Wavelength Temp. Coefficientnm/°C ~ 0.28 ~ 0.28 ~ 0.28 Fiber ParametersFiber Core Diameterµm200 or 400200 or 400400Connector Type ⁶ -SMA905SMA905SMA905Fiber Length ⁵ m1.51.51.5Electrical Parameters ^{3,7} Operating Current I _{op} A $\leqslant 50$ $\leqslant 60$ $\leqslant 65$ Operating Voltage V _{op} V ≤ 2 ≤ 2 ≤ 2 Typical Power Conversion Efficiency% ≥ 40 ≥ 40 ≥ 40 Thermal Parameters15-3015-3015-30Querating Temperature°C15-3015-3015-3015-30Recommended Thermal Dissipation CarW ≥ 90 ≥ 120 ≥ 150 Additional Feature 1 - Pilot Beam20.7 ≥ 0.7 ≥ 0.7 Output PowermW ≥ 0.7 ≥ 0.7 ≥ 0.7 ≥ 0.7 Wavelenthnm650650650Operation VoltageV333Operation VoltageV10-3010-3010-30Operation VoltageV555Operation VoltageV555Operation VoltageV555Operation CurrentV ≤ 100 ≤ 100 ≤ 100 Operation VoltageV555 <td>Wavelength Tolerance</td> <td>nm</td> <td>±3</td> <td>±3</td> <td>±3</td>	Wavelength Tolerance	nm	±3	±3	±3
Wavelength Temp. Coefficientnm/°C~0.28~0.28~0.28Fiber ParametersNA0.220.220.22Fiber Numerical ApertureNA0.220.220.22Fiber Core Diameter μ m200 or 400200 or 400400Connector Type ⁶ -SMA905SMA905SMA905Fiber Length ⁵ m1.51.51.5Electrical Parameters ^{3.7} Second Secon	Output Power ²	W	30	40	50
Fiber ParametersFiber Numerical ApertureNA0.220.220.22Fiber Core Diameter μ m200 or 400200 or 400400Connector Type ⁶ -SMA905SMA905SMA905Fiber Length ⁵ m1.51.51.5Electrical Parameters ^{3.7} -Derating Current I _{op} A\$50\$60\$65Operating Voltage V _{op} V\$2\$2\$2\$2Typical Power Conversion Efficiency%\$40\$40\$40Thermal ParametersOperating Temperature°C15~3015~3015~30Recommended Thermal Dissipation CapW\$90\$120\$150Additional Feature 1 - Pilot BeamOutput PowermW\$20.7\$0.7\$0.7Wavelenthnm650650650Operation VoltageV333Operation CurrentmA\$100\$100\$100Additional Feature 2 - Fiber Detection SensorOperation VoltageV555Operation CurrentmA\$100\$100\$100Additional Feature 3 - Power Monitor Diode\$2.5\$2.5\$2.5Operation VoltageV\$5\$5\$5\$0Operation CurrentV\$100\$100\$100\$100Additional Feature 3 - Power Monitor Diode\$2.5\$2.5\$2.5Operation CurrentV<	Spectral Width FWHM	nm	$\leqslant 3$	$\leqslant 3$	$\leqslant 3$
Fiber Numerical ApertureNA 0.22 0.22 0.22 0.22 Fiber Core Diameter μ m $200 \text{ or } 400$ $200 \text{ or } 400$ 400 Connector Type ⁶ -SMA905SMA905SMA905Fiber Length ⁶ m 1.5 1.5 1.5 Electrical Parameters ^{3.7} Operating Current I_{op} A ≤ 50 ≤ 60 ≤ 65 Operating Voltage V_{op} V ≤ 2 ≤ 2 ≤ 2 Typical Power Conversion Efficiency $\%$ ≥ 40 ≥ 40 Thermal ParametersOperating Temperature \degree C $15 \text{ -} 30$ $15 \text{ -} 30$ Recommended Thermal Dissipation CarW ≥ 90 ≥ 120 ≥ 150 Additional Feature 1 - Pilot BeamOutput PowermW ≥ 0.7 ≥ 0.7 ≥ 0.7 Wavelenthnm 650 650 650 Operation VoltageV 3 3 3 Operation VoltageV $10 \text{ -} 30$ $10 \text{ -} 30$ $10 \text{ -} 30$ Operation VoltageV $10 \text{ -} 30$ $10 \text{ -} 30$ $10 \text{ -} 30$ Operation VoltageV 5 5 5 Ope	Wavelength Temp. Coefficient	nm/°C	\sim 0.28	\sim 0.28	\sim 0.28
Fiber Core Diameter μ m $200 \text{ or } 400$ $200 \text{ or } 400$ 400 Connector Type ⁶ -SMA905SMA905SMA905Fiber Length ⁵ m1.51.51.5Electrical Parameters 3,7 Operating Current I_{op} A ≤ 50 ≤ 60 ≤ 65 Operating Voltage V_{op} V ≤ 2 ≤ 2 ≤ 2 Typical Power Conversion Efficiency% ≥ 40 ≥ 40 ≥ 40 Thermal ParametersOperating Temperature°C15~3015~3015~30Recommended Thermal Dissipation CarW ≥ 90 ≥ 120 ≥ 150 Additional Feature 1 - Pilot BeamOutput PowermW ≥ 0.7 ≥ 0.7 ≥ 0.7 ≥ 0.7 Wavelenthnm 650 650 650 650 Operation VoltageV333 3 Operation CurrentmA ≤ 100 ≤ 100 ≤ 100 Additional Feature 2 - Fiber Detection Sensor $10-30$ $10-30$ Operation VoltageV 5 5 5 5 Operation VoltageV 5 5 5 5 Operation CurrentMA ≤ 100 ≤ 100 ≤ 100 Additional Feature 3 - Power Monitor Diode- $10-30$ ≤ 100 ≤ 100 Operation VoltageV 5 5 5 5 Operatio	Fiber Parameters				
Connector Type-SMA905SMA905SMA905Fiber Lengthm1.51.51.5Electrical Parameters 3.7 Operating Current I _{op} A ≤ 50 ≤ 60 ≤ 65 Operating Voltage V _{op} V ≤ 2 ≤ 2 ≤ 2 Typical Power Conversion Efficiency% ≥ 40 ≥ 40 ≥ 40 Thermal ParametersOperating Temperature C $15 \sim 30$ $15 \sim 30$ $15 \sim 30$ Recommended Thermal Dissipation Car,W ≥ 90 ≥ 120 ≥ 150 Additional Feature 1 - Pilot BeamOutput PowermW ≥ 0.7 ≥ 0.7 ≥ 0.7 ≥ 0.7 Wavelenthnm 650 650 650 650 Operation VoltageV 3 3 3 3 Operation CurrentmA ≤ 100 ≤ 100 ≤ 100 Additional Feature 2 - Fiber Detection Sensor 100 Operation VoltageV $10 \sim 30$ $10 \sim 30$ $10 \sim 30$ Operation VoltageV 5 5 5 Operation CurrentmA ≤ 2.5 ≤ 2.5 ≤ 2.5 Additional Feature 3- Power Monitor Diode- 100 ≤ 100 ≤ 100 Output signalmA ≤ 2.5 ≤ 2.5 ≤ 2.5 ≤ 2.5 Additional Feature 4- Temperature Sensor- V ≤ 5 ≤ 5 ≤ 2.5 Additional	Fiber Numerical Aperture	NA	0.22	0.22	0.22
Fiber Length 3 m1.51.51.5Electrical Parameters $^{3.7}$ Operating Current I_{op} A ≤ 50 ≤ 60 ≤ 65 Operating Voltage V_{op} V ≤ 2 ≤ 2 ≤ 2 Typical Power Conversion Efficiency% ≥ 40 ≥ 40 ≥ 40 Thermal ParametersOperating Temperature°C $15 - 30$ $15 - 30$ $15 - 30$ Recommended Thermal Dissipation Car.W ≥ 90 ≥ 120 ≥ 150 Additional Feature 1 - Pilot BeamOutput PowermW ≥ 0.7 ≥ 0.7 ≥ 0.7 Output PowermW ≥ 0.7 ≥ 0.7 ≥ 0.7 V333Operation VoltageV333Operation CurrentmA ≤ 100 ≤ 100 ≤ 100 Additional Feature 2 - Fiber Detection SensorOutput SignalmA ≤ 100 ≤ 100 ≤ 100 Additional Feature 3 - Power Monitor DiodeOperation VoltageV 5 5 5 Operation VoltageV ≤ 100 ≤ 100 ≤ 100 Additional Feature 4 - Temperature Sensor ⁸ Temperature Sensor Y ≤ 2.5 ≤ 2.5 ≤ 2.5 ≤ 2.5 Additional Feature 4 - Temperature Sensor ⁸ Temperature	Fiber Core Diameter	μm	200 or 400	200 or 400	400
Electrical Parameters 3,7 Operating Current I_{op} A ≤ 50 ≤ 60 ≤ 65 Operating Voltage V_{op} V ≤ 2 ≤ 2 ≤ 2 Typical Power Conversion Efficiency% ≥ 40 ≥ 40 ≥ 40 Thermal ParametersOperating Temperature°C $15-30$ $15-30$ $15-30$ Recommended Thermal Dissipation Car,W ≥ 90 ≥ 120 ≥ 150 Additional Feature 1 - Pilot BeamU 20.7 ≥ 0.7 ≥ 0.7 Output PowermW ≥ 0.7 ≥ 0.7 ≥ 0.7 Wavelenthnm 650 650 650 Operation VoltageV333Operation CurrentmA ≤ 100 ≤ 100 ≤ 100 Additional Feature 2 - Fiber Detection SensorU $10-30$ $10-30$ $10-30$ Operation VoltageV $10-30$ $10-30$ $10-30$ $100-30$ Operation VoltageV $10-30$ $10-30$ 100 Additional Feature 3 - Power Monitor DiodeU 5 5 5 Operation VoltageV 5 5 5 Operation CurrentV ≤ 100 ≤ 100 ≤ 100 Output SignalmA ≤ 2.5 ≤ 2.5 ≤ 2.5 Additional Feature 4 - Temperature Sensor ⁸ T T T Temperature SensorTypeNTCNTCNTCAdditional Feature 5- Reflection Pretection T T T <td>Connector Type⁶</td> <td>-</td> <td>SMA905</td> <td>SMA905</td> <td>SMA905</td>	Connector Type ⁶	-	SMA905	SMA905	SMA905
Operating Current I_{op}A ≤ 50 ≤ 60 ≤ 65 Operating Voltage V_{op}V ≤ 2 ≤ 2 ≤ 2 Typical Power Conversion Efficiency% ≥ 40 ≥ 40 Thermal ParametersOperating Temperature°C $15-30$ $15-30$ $15-30$ Recommended Thermal Dissipation CarW ≥ 90 ≥ 120 ≥ 150 Additional Feature 1 - Pilot Beam 0 0.7 ≥ 0.7 ≥ 0.7 ≥ 0.7 Output PowermW ≥ 0.7 ≥ 0.7 ≥ 0.7 ≥ 0.7 Wavelenthnm 650 650 650 Operation VoltageV333Operation CurrentmA ≤ 100 ≤ 100 ≤ 100 Additional Feature 2 - Fiber Detection Sensor 0 $0-30$ $10-30$ $10-30$ Operation VoltageV $10-30$ $10-30$ $10-30$ $10-30$ Operation CurrentmA ≤ 100 ≤ 100 ≤ 100 Additional Feature 3- Power Monitor Diode 0 0 100 ≤ 100 Operation VoltageV 5 5 5 Operation CurrentV ≤ 100 ≤ 100 ≤ 100 Output signalmA ≤ 2.5 ≤ 2.5 ≤ 2.5 Additional Feature 4- Temperature Sensor ⁸ T T NTC NTC Temperature SensorType NTC NTC NTC NTC Additional Feature 5- Reflection Pretection T 0 0 0	Fiber Length ⁵	m	1.5	1.5	1.5
Operating Voltage V_{op} V ≤ 2 ≤ 2 ≤ 2 ≤ 2 Typical Power Conversion Efficiency% ≥ 40 ≥ 40 ≥ 40 Thermal ParametersOperating Temperature°C $15-30$ $15-30$ $15-30$ Recommended Thermal Dissipation CarW ≥ 90 ≥ 120 ≥ 150 Additional Feature 1 - Pilot Beam W ≥ 0.7 ≥ 0.7 ≥ 0.7 Output PowermW ≥ 0.7 ≥ 0.7 ≥ 0.7 Wavelenthnm650650650Operation VoltageV333Operation CurrentmA ≤ 100 ≤ 100 ≤ 100 Additional Feature 2 - Fiber Detection Sensor U $10-30$ $10-30$ $10-30$ Operation VoltageV $10-30$ $10-30$ $10-30$ $10-30$ Operation VoltageV 5 5 5 Operation CurrentmA ≤ 100 ≤ 100 ≤ 100 Additional Feature 3- Power Monitor Diode U ≤ 100 ≤ 100 ≤ 100 Operation VoltageV 5 5 5 5 Operation CurrentV ≤ 100 ≤ 100 ≤ 100 Output signalmA ≤ 2.5 ≤ 2.5 ≤ 2.5 Additional Feature 4- Temperature Sensor T T T Temperature SensorType T T T Mavelengthnm 10301130 10301130 10301130	Electrical Parameters ^{3,7}				
Typical Power Conversion Efficiency% ≥ 40 ≥ 40 ≥ 40 Thermal ParametersOperating Temperature $^{\circ}$ C15-3015-3015-30Recommended Thermal Dissipation CarW ≥ 90 ≥ 120 ≥ 150 Additional Feature 1 - Pilot BeamW ≥ 90 ≥ 100 ≥ 100 Output PowermW ≥ 0.7 ≥ 0.7 ≥ 0.7 Wavelenthnm650650650Operation VoltageV333Operation CurrentmA ≤ 100 ≤ 100 ≤ 100 Additional Feature 2 - Fiber Detection Sensor $=$ $=$ Operation VoltageV10-3010-3010-30Operation CurrentmA ≤ 100 ≤ 100 ≤ 100 Additional Feature 3- Power Monitor Diode $=$ $=$ $=$ Operation VoltageV 5 5 5 Operation CurrentV ≤ 100 ≤ 100 ≤ 100 Additional Feature 3- Power Monitor Diode $=$ $=$ $=$ Operation CurrentV ≤ 100 ≤ 100 ≤ 100 Output signalmA ≤ 2.5 ≤ 2.5 ≤ 2.5 Additional Feature 4- Temperature Sensor ⁸ $=$ $=$ Temperature SensorTypeNTCNTCNTCAdditional Feature 5- Reflection Pretection $=$ $=$ $=$ Wavelengthnm 10301130 10301130 10301130	Operating Current I _{op}	А	≤50	≤60	≤65
Thermal ParametersOperating Temperature°C15~3015~3015~30Recommended Thermal Dissipation CarW ≥ 90 ≥ 120 ≥ 150 Additional Feature 1 - Pilot Beam W ≥ 0.7 ≥ 0.7 ≥ 0.7 Output PowermW ≥ 0.7 ≥ 0.7 ≥ 0.7 Wavelenthnm650650650Operation VoltageV333Operation CurrentmA ≤ 100 ≤ 100 ≤ 100 Additional Feature 2 - Fiber Detection Sensor U $10~30$ $10~30$ $10~30$ Operation VoltageV $10~30$ $10~30$ $10~30$ $0~30$ Operation CurrentmA ≤ 100 ≤ 100 ≤ 100 Additional Feature 3 - Power Monitor Diode U 5 5 5 Operation CurrentV ≤ 100 ≤ 100 ≤ 100 Additional Feature 4 - Temperature Sensor ⁸ U 5 5 5 Additional Feature 4 - Temperature Sensor ⁸ U V V V V Temperature SensorTypeNTCNTCNTCAdditional Feature 5 - Reflection Pretection U 10301130 10301130 10301130	Operating Voltage V _{op}	V	≤2	≤2	≤2
Operating Temperature℃15~3015~3015~30Recommended Thermal Dissipation CarW≥90≥120≥150Additional Feature 1 - Pilot BeamOutput PowermW≥0.7≥0.7≥0.7Wavelenthnm650650650Operation VoltageV333Operation CurrentmA≤100≤100≤100Additional Feature 2 - Fiber Detection Sensor010~3010~30Operation VoltageV10~3010~3010~30Operation CurrentmA121212Output SignalmA<	Typical Power Conversion Efficiency	%	≥40	≥40	≥40
Recommended Thermal Dissipation Car.W≥90≥120≥150Additional Feature 1 - Pilot Beam \sim ≥0.7≥0.7≥0.7≥0.7Output PowermW≥0.7≥0.7≥0.7≥0.7Wavelenthnm650650650Operation VoltageV333Operation CurrentmA≤100≤100≤100Additional Feature 2 - Fiber Detection SensorU10~3010~3010~30Operation VoltageV10~3010~3010~30Operation VoltageV10~3010~30≤100Additional Feature 3 - Power Monitor DiodeU≤100≤100Operation VoltageV555Operation CurrentV≤100≤100≤100Additional Feature 4 - Temperature Sensor ⁸ U5≤2.5≤2.5Additional Feature 5 - Reflection PretectionNTCNTCNTCWavelengthnm103011301030113010301130	Thermal Parameters				
Additional Feature 1 - Pilot BeamOutput PowermW ≥ 0.7 ≥ 0.7 ≥ 0.7 Wavelenthnm 650 650 650 Operation VoltageV333Operation CurrentmA ≤ 100 ≤ 100 ≤ 100 Additional Feature 2 - Fiber Detection Sensor $0peration Voltage$ V $10 \sim 30$ $10 \sim 30$ Operation VoltageV $10 \sim 30$ $10 \sim 30$ $10 \sim 30$ Operation CurrentmA 12 12 12 Output SignalmA ≤ 100 ≤ 100 ≤ 100 Additional Feature 3- Power Monitor Diode V 5 5 5 Operation VoltageV 5 5 5 Operation CurrentV ≤ 100 ≤ 100 ≤ 100 Output signalmA ≤ 2.5 ≤ 2.5 ≤ 2.5 Additional Feature 4- Temperature Sensor ⁸ T NTC NTC Temperature SensorType NTC NTC NTC Mavelengthnm 10301130 10301130 10301130	Operating Temperature	°C	15~30	15~30	15~30
Output PowermW ≥ 0.7 ≥ 0.7 ≥ 0.7 Wavelenthnm650650650Operation VoltageV333Operation CurrentmA ≤ 100 ≤ 100 ≤ 100 Additional Feature 2 - Fiber Detection Sensor 0 $0 \geq 100$ ≤ 100 Operation VoltageV10~3010~3010~30Operation VoltageV10~3010~3010~30Operation CurrentmA121212Output SignalmA ≤ 100 ≤ 100 ≤ 100 Additional Feature 3- Power Monitor Diode V 5 5 5 Operation VoltageV 5 5 5 Operation CurrentV ≤ 100 ≤ 100 ≤ 100 Output signalmA ≤ 2.5 ≤ 2.5 ≤ 2.5 Additional Feature 4- Temperature Sensor ⁸ T NTC NTC Temperature SensorType NTC NTC NTC Wavelengthnm103011301030113010301130	Recommended Thermal Dissipation Ca	ap W	≥90	≥120	≥150
Wavelenthnm650650650Operation VoltageV333Operation CurrentmA ≤ 100 ≤ 100 ≤ 100 Additional Feature 2 - Fiber Detection Sensor V 10~3010~3010~30Operation VoltageV10~3010~3010~30Operation CurrentmA121212Output SignalmA ≤ 100 ≤ 100 ≤ 100 Additional Feature 3- Power Monitor Diode V ≤ 100 ≤ 100 ≤ 100 Operation VoltageV 5 5 5 Operation CurrentV ≤ 100 ≤ 100 ≤ 100 Output signalmA ≤ 2.5 ≤ 2.5 ≤ 2.5 Additional Feature 4- Temperature Sensor ⁸ T NTCNTCTemperature SensorTypeNTCNTCNTCAdditional Feature 5- Reflection Pretection W W W W Wavelengthnm 10301130 10301130 10301130	Additional Feature 1 - Pilot Beam				
Operation VoltageV333Operation CurrentmA ≤ 100 ≤ 100 ≤ 100 Additional Feature 2 - Fiber Detection SensorV $10-30$ $10-30$ $10-30$ Operation VoltageV $10-30$ $10-30$ $10-30$ Operation CurrentmA 12 12 12 Output SignalmA ≤ 100 ≤ 100 ≤ 100 Additional Feature 3- Power Monitor DiodeV 5 5 5 Operation VoltageV 5 5 5 Operation CurrentV ≤ 100 ≤ 100 ≤ 100 Output signalmA ≤ 2.5 ≤ 2.5 ≤ 2.5 Additional Feature 4- Temperature Sensor ⁸ Temperature SensorTypeNTCNTCAdditional Feature 5- Reflection PretectionM 10301130 10301130 10301130	Output Power	mW	≥0.7	≥0.7	≥0.7
Operation CurrentmA≤100≤100≤100Additional Feature 2 - Fiber Detection Sensor V 10~3010~3010~30Operation VoltageV10~3010~3010~30Operation CurrentmA121212Output SignalmA<100	Wavelenth	nm	650	650	650
Additional Feature 2 - Fiber Detection SensorOperation VoltageV10~3010~30Operation CurrentmA121212Output SignalmA ≤ 100 ≤ 100 ≤ 100 Additional Feature 3- Power Monitor DiodeOperation VoltageV55Operation VoltageV555Operation CurrentV ≤ 100 ≤ 100 ≤ 100 Output signalmA ≤ 2.5 ≤ 2.5 ≤ 2.5 Additional Feature 4- Temperature Sensor ⁸ Temperature 5- Reflection PretectionNTCNTCWavelengthnm103011301030113010301130	Operation Voltage	V	3	3	3
Operation VoltageV10~3010~3010~30Operation CurrentmA121212Output SignalmA ≤ 100 ≤ 100 ≤ 100 Additional Feature 3- Power Monitor DiodeV555Operation VoltageV555Operation CurrentV ≤ 100 ≤ 100 ≤ 100 Output signalmA ≤ 2.5 ≤ 2.5 ≤ 2.5 Additional Feature 4- Temperature Sensor ⁸ TNTCNTCTemperature SensorTypeNTCNTCNTCAdditional Feature 5- Reflection Pretection103011301030113010301130	Operation Current	mA	≤100	≤100	≤100
Operation CurrentmA121212Output SignalmA ≤ 100 ≤ 100 ≤ 100 Additional Feature 3- Power Monitor DiodeV555Operation VoltageV555Operation CurrentV ≤ 100 ≤ 100 ≤ 100 Output signalmA ≤ 2.5 ≤ 2.5 ≤ 2.5 Additional Feature 4- Temperature SensorTypeNTCNTCNTCAdditional Feature 5- Reflection Pretection103011301030113010301130	Additional Feature 2 - Fiber Detectio	n Senso	r		
Output SignalmA ≤ 100 ≤ 100 ≤ 100 Additional Feature 3- Power Monitor DiodeV555Operation VoltageV555Operation CurrentV ≤ 100 ≤ 100 ≤ 100 Output signalmA ≤ 2.5 ≤ 2.5 ≤ 2.5 Additional Feature 4- Temperature Sensor ⁸ Tremperature SensorTypeNTCNTCNTCAdditional Feature 5- Reflection Pretectionnm103011301030113010301130	Operation Voltage	V	10~30	10~30	10~30
Additional Feature 3- Power Monitor DiodeOperation VoltageV55Operation CurrentV ≤ 100 ≤ 100 Output signalmA ≤ 2.5 ≤ 2.5 Additional Feature 4- Temperature Sensor ⁸ NTCTemperature SensorTypeNTCAdditional Feature 5- Reflection PretectionNTCWavelengthnm103011301030113010301130	Operation Current	mA	12	12	12
$\begin{array}{c cccc} \mbox{Operation Voltage} & V & 5 & 5 & 5 \\ \mbox{Operation Current} & V & \leqslant 100 & \leqslant 100 & \leqslant 100 \\ \mbox{Output signal} & mA & \leqslant 2.5 & \leqslant 2.5 & \leqslant 2.5 \\ \hline \mbox{Additional Feature 4- Temperature Sensor}^8 & & & \\ \hline \mbox{Temperature Sensor} & Type & NTC & NTC & NTC \\ \hline \mbox{Additional Feature 5- Reflection Pretection} & & \\ \hline \mbox{Wavelength} & nm & 10301130 & 10301130 & 10301130 \\ \hline \end{array}$	Output Signal	mA	≤100	≤100	≤100
Operation CurrentV ≤ 100 ≤ 100 ≤ 100 Output signalmA ≤ 2.5 ≤ 2.5 ≤ 2.5 Additional Feature 4- Temperature Sensor ⁸ NTCNTCTemperature SensorTypeNTCNTCAdditional Feature 5- Reflection PretectionImage: Note of the sensorWavelengthnm1030113010301130	Additional Feature 3- Power Monitor	Diode			
Output signalmA<2.5<2.5Additional Feature 4- Temperature Sensor*NTCNTCTemperature SensorTypeNTCNTCAdditional Feature 5- Reflection PretectionNTCNTCWavelengthnm1030113010301130	Operation Voltage	V	5	5	5
Additional Feature 4- Temperature Sensor8Temperature SensorTypeNTCNTCAdditional Feature 5- Reflection PretectionWavelengthnm1030113010301130	Operation Current	V	≤100	≤100	≤100
Temperature SensorTypeNTCNTCNTCAdditional Feature 5- Reflection Pretectionnm1030113010301130Wavelengthnm103011301030113010301130	Output signal	mA	≤2.5	≤2.5	≤2.5
Additional Feature 5- Reflection PretectionWavelengthnm103011301030113010301130	Additional Feature 4- Temperature S	ensor ⁸			
Wavelength nm 10301130 10301130 10301130	Temperature Sensor	Туре	NTC	NTC	NTC
0	Additional Feature 5- Reflection Pret	ection			
Reflection Ratio % ≥99.0 ≥99.0 ≥99.0	Wavelength	nm	10301130	10301130	10301130
	Reflection Ratio	%	≥99.0	≥99.0	≥99.0

Notice: Focuslight keep improving its products to provide our customers with outstanding quality and reliability. We may make changes to specifications and product descriptions at any time, without notice. In addition, we offer a limited warranty to ensure customer satisfaction. For complete details, please contact our sales representative.

Specification

Module Type ¹	Units	FL-S30-792	FL-S40-792	FL-S50-792
Optical ^{3,7}				
Center Wavelength λ	nm	792	792	792
Wavelength Tolerance	nm	±3	±3	±3
Output Power ²	W	30	40	50
Spectral Width FWHM	nm	$\leqslant 4$	$\leqslant 4$	≪4
Wavelength Temp. Coefficient	nm/℃	\sim 0.28	\sim 0.28	\sim 0.28
Fiber Parameters				
Fiber Numerical Aperture	NA	0.22	0.22	0.22
Fiber Core Diameter	μm	200 or 400	200 or 400	400
Connector Type ⁶	-	SMA905	SMA905	SMA905
Fiber Length ⁵	m	1.5	1.5	1.5
Electrical Parameters 3,7				
Operating Current I _{op}	А	≪50	≪60	≪65
Operating Voltage V _{op}	V	≦2	≤2	≪2
Typical Power Conversion Efficiency	%	≥40	≥40	≥40
Thermal Parameters				
Operating Temperature	°C	15~30	15~30	15~30
Recommended Thermal Dissipation Ca	aç W	≥90	≥150	≥90
Additional Feature 1 - Pilot Beam				
Output Power	mW	≥0.7	≥0.7	≥0.7
Wavelenth	nm	650	650	650
Operation Voltage	V	3	3	3
Operation Current	mA	≤100	≤100	≤100
Additional Feature 2 - Fiber Detection	n Sensor	-		
Operation Voltage	V	10~30	10~30	10~30
Operation Current	mA	12	12	12
Output Signal	mA	≤100	≤100	≤100
Additional Feature 3- Power Monitor	Diode			
Operation Voltage	V	5	5	5
Operation Current	V	≤100	≪100	≤100
Output signal	mA	≤2.5	≤2.5	≤2.5
Additional Feature 4- Temperature Se	ensor ⁸			
Temperature Sensor	Туре	NTC	NTC	NTC
Additional Feature 5- Reflection Pret	ection			
Wavelength	nm	10301130	10301130	10301130
Reflection Ratio	%	≥99.0	≥99.0	≥99.0

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Specification

Module Type ¹	Units	FL-S30-9XX	FL-S40-9XX	FL-S50-9XX
Optical ^{3,7}				
Center Wavelength λ	nm	9XX	9XX	9XX
Wavelength Tolerance	nm	±5	±5	±5
Output Power ²	W	30	40	50
Spectral Width FWHM	nm	$\leqslant 4$	≪4	≪4
Wavelength Temp. Coefficient	nm/℃	\sim 0.34	\sim 0.34	\sim 0.34
Fiber Parameters				
Fiber Numerical Aperture	NA	0.22	0.22	0.22
Fiber Core Diameter	μm	200 or 400	200 or 400	400
Connector Type ⁶	-	SMA905	SMA905	SMA905
Fiber Length ⁵	m	1.5	1.5	1.5
Electrical Parameters 3,7				
Operating Current I _{op}	А	≤50	≤60	≤65
Operating Voltage V _{op}	V	≤2	≪2	≤2
Typical Power Conversion Efficiency	%	≥45	≥45	≥45
Thermal Parameters				
Operating Temperature	°C	15~30	15~30	15~30
Recommended Thermal Dissipation Ca	ap W	≥90	≥120	≥150
Additional Feature 1 - Pilot Beam				
Output Power	mW	≥0.7	≥0.7	≥0.7
Wavelenth	nm	650	650	650
Operation Voltage	V	3	3	3
Operation Current	mA	≤100	≤100	≤100
Additional Feature 2 - Fiber Detection	n Sensor			
Operation Voltage	V	10~30	10~30	10~30
Operation Current	mA	12	12	12
Output Signal	mA	≤100	≤100	≤100
Additional Feature 3- Power Monitor	Diode			
Operation Voltage	V	5	5	5
		< 1	< 1.0.0	< 1.0.0
Operation Current	V	≤100	≤100	≪100
Operation Current Output signal	V mA	≤100 ≤2.5	≤100 ≤2.5	≤100 ≤2.5
•	mA			
Output signal	mA			
Output signal Additional Feature 4- Temperature S	mA ensor⁸ Type	≤2.5	≤2.5	≤2.5
Output signal Additional Feature 4- Temperature S Temperature Sensor	mA ensor⁸ Type	≤2.5	≤2.5	≤2.5

Notice: Focuslight keep improving its products to provide our customers with outstanding quality and reliability. We may make changes to specifications and product descriptions at any time, without notice. In addition, we offer a limited warranty to ensure customer satisfaction. For complete details, please contact our sales representative.

Specification

Module Type ¹	Units	FL-S50-1064	FL-S15-1470	FL-S15-1550
Optical ^{3,7}				
Center Wavelength λ	nm	1064	1470	1550
Wavelength Tolerance	nm	±10	±20	±20
Output Power ²	W	50	15	15
Spectral Width FWHM	nm	≤7	≤10	≤ 12
Wavelength Temp. Coefficient	nm/° C	~0.4	~0.5	~0.6
Fiber Parameters				
Fiber Numerical Aperture	NA	0.22	0.22	0.22
Fiber Core Diameter	μm	400	200 or 400	400
Connector Type ⁶	-	SMA905	SMA905	SMA905
Fiber Length ⁵	m	1.5	1.5	1.5
Electrical Parameters ^{3,7}				
Operating Current I _{op}	A	≤75	≪70	≪70
Operating Voltage V _{op}	V	≤2	≤2	≤2
Typical Power Conversion Efficiency	%	≥40	≥17	≥17
Thermal Parameters				
Operating Temperature	°C	15~30	15~30	$15^{\sim}30$
Recommended Thermal Dissipation Ca	ap W	≥150	≥150	≥150
Additional Feature 1 - Pilot Beam				
Output Power	mW	≥0.7	≥0.7	≥0.7
Wavelenth	nm	650	650	650
Operation Voltage	V	3	3	3
Operation Current	mA	≤100	≪100	≪100
Additional Feature 2 - Fiber Detectio	n Sensor			
Operation Voltage	V	10~30	10~30	10~30
Operation Current	mA	12	12	12
Output Signal	mA	≤100	≤100	≤100
Additional Feature 3- Power Monitor	Diode			
Operation Voltage	V	5	5	5
Operation Current	V	≤100	≪100	≤100
Output signal	mA	≤2.5	≤2.5	≤2.5
Additional Feature 4- Temperature S	ensor ⁸			
Temperature Sensor	Туре	NTC	NTC	NTC
Additional Feature 5- Reflection Pret	ection			
Additional Feature 5- Reflection Pret	nm	/	/	/

FOCUSLIGHT

¹Explanation for the name of Module Type: FL(abbreviation of Focuslight) –S(structure code) 50(output power) -9xx(center wavelength).

²Reduced lifetime if used above nominal operating conditions.

³Data under 25°C temperature of heat sink, unless otherwise stated.

⁴A non-condensing environment is required for storage and operation below ambient dew point.

⁵Fiber length can be specified by customer.

⁶Can be with or without fiber connector.

⁷If there are any other requirements, please contact us.

⁸Temperature sensor is not inside the module, we leave one hole for assembling temperature sensor, more details please see the

Device Dimension drawing, so here the type of temperature is ours recommendation .



Focuslight Technologies Inc.

Add: 56 Zhangba 6th Road, High-Tech Zone Xi'an, Shaanxi 710077, P. R. China Tel: +86 29 8956 0050 Fax: +86 29 8177 5810 Email: <u>sales@focuslight.com.cn</u> Website: <u>www.focuslight.com.cn</u>

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