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OPTOELECTRONICS

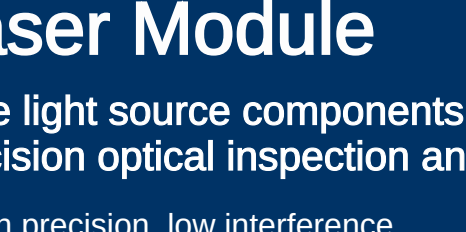
Precision
Meets
Simplicity

Laser Modules

VLFL-SF-N Split-Type Single-Mode Laser Module

Core light source components in the field of medium and high-precision optical inspection and measurement

- High precision, low interference
- Separate and flexible
- Long lifespan and wide adaptability



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VLFL-SF-N Split-Type Single-Mode Laser Module

2025 Ver1

Overview

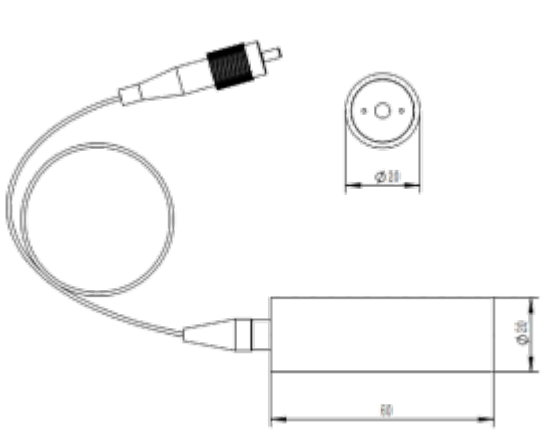
Introduction:

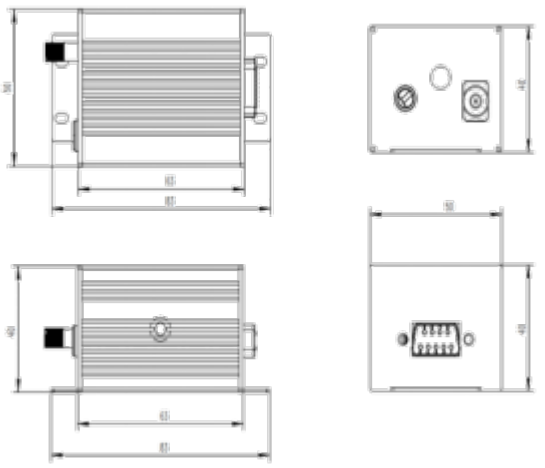
The VLFL-SF-N series covers multiple wavelengths (such as 638nm, etc.) and different power models. Its core feature is "physical separation of the laser body and the driver power supply", making it suitable for medium and high-precision optical application scenarios such as fluorescence spectroscopy, photoelectric detection, and optical measurement. The entire series shares the technical foundation of "single-mode fiber output + high beam quality + long service life".
The laser body has a compact size (for example, a typical model is only 60mm×?20mm), and the driver power supply is independent (83mm×50mm×40mm). It supports optional FC-PC/FC-APC fiber interfaces, with output power covering the low-to-medium range (typical value 20mW), narrow spectral linewidth (1-2nm), operating temperature of 0-40℃, and service life of up to 10,000 hours. It has the dual advantages of "miniaturized integration" and "precision optical output".

Features:

- Excellent beam quality
- Precise wavelength and narrow linewidth
- Low noise and high stability
- Separate module layout
- Strong optical fiber compatibility

Dimension:





Specifications

Common Parameter Specification Table

Parameter Category	Specific Parameters
Output Power (CW)	Typical value: 20mW
Central Wavelength Range	Taking the 638nm series as an example, covering 633 - 643nm (different sub - models correspond to specific central wavelength intervals)
Spectral Linewidth (FWHM)	1 - 2nm
Fiber Type	Single - mode Fiber (SM Fiber)
Fiber Numerical Aperture	0.12
Typical Fiber Length	1.0m
Fiber Connector Options	FC - PC / FC - APC
Mean Time To Failure (MTTF)	10000 hours
Operating Temperature Range	0 - 40℃
Storage Temperature Range	- 20 - 65℃

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Explore Series

Model	Typical Central Wavelength	Min Central Wavelength	Max Central Wavelength	Fiber Type
VLFL-638-SF-N	638 nm	633 nm	643 nm	SM Fiber
VLFL-660-SF-N	660 nm	652 nm	666 nm	SM Fiber
VLFL-670-SF-N	670 nm	665 nm	675 nm	SM Fiber
VLFL-685-SF-N	685 nm	680 nm	690 nm	SM Fiber
VLFL-785-SF-N	785 nm	780 nm	790 nm	SM Fiber
VLFL-808-SF-N	808 nm	803 nm	813 nm	SM Fiber
VLFL-830-SF-N	830 nm	825 nm	835 nm	SM Fiber
VLFL-850-SF-N	850 nm	845 nm	855 nm	SM Fiber
VLFL-905-SF-N	905 nm	900 nm	910 nm	SM Fiber
VLFL-940-SF-N	940 nm	935 nm	945 nm	SM Fiber
VLFL-980-SF-N	980 nm	975 nm	985 nm	SM Fiber
VLFL-1064-SF-N	1064 nm	1059 nm	1069 nm	SM Fiber

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