

## High Stability Diode Laser Source



### Product Description:

The VENUS series high stability diode laser source of Connet adopts high-performance LD and has stable wavelength and high output power. The control system based on the advanced microprocessor, together with the high-precision ATC and ACC control circuit can realize the stable output and ensure the simplicity and immediacy of the operation simultaneously. Connet can offer the corresponding communication interface and control software according to the requirement of the user in order to achieve computer control.

The diode laser sources of Connet can adopt different kinds of diode lasers according to the requirement of the user, including F-P, DFB and ECL. The typical operating wavelengths can be selected in 750nm, 808nm, 852nm, 1035nm, 1064nm, 1310nm and 1550nm, etc. The single-mode fiber output or the polarization-maintaining fiber output is optional.

The VENUS series single-mode diode laser source of Connet is a highly integrated system. The benchtop package uses the high-definition LCD which can display the current and the voltage synchronously and the output power also can be continuously tunable. They are suitable for scientific research and manufacture testing. In addition, Connet also can provide the equipment of the user, which is characterized by compact structure, DC supply and convenience for system integration.

### Applications:

- Testing and measurement
- Optical fiber communication
- Optical Fiber sensing
- Spectrum analysis
- Research & Development

### Features:

- High Power, SM output
- Changeable output power
- Wavelength-stabilized with FBG
- High stability, high reliability
- High accuracy ACC & ATC



**Specifications:**

Parameter	Unit	Specification		
		Min	Typ.	Max
Part no.		VLSS-XXXX-B		
Radiation source		FP-LD or DFB-LD		
Output power <sup>1</sup>	mW	>10		
Operating wavelength <sup>2</sup>	nm	600-1650		
Spectral width (FWHM) <sup>3</sup>	/	FP-LD: <1nm; DFB-LD: <3MHZ		
Output power stability (15mins)	%	-	±0.5	±1.0
Output power stability (8h) <sup>4</sup>	%	-	±1.0	±2.0
Output power tunable range	%	0	-	100
Output power tunable mode		Coarse / Fine		
Output fiber type		SM fiber (PM optional)		
Output fiber length	m	> 1		
Optical connector		FC/APC (other options available)		
Power supply	V	100-240		
Power consumption <sup>5</sup>	W	-	-	10
Operating temperature	°C	0	-	+50
Storage temperature	°C	-40	-	+85
Dimension	mm	340(L)×240(W)×100(H)		

**Specifications:**

- The output power is optional;
- The central wavelength can be customized. Typical central wavelength is 650nm,1064nm,1310nm,1550nm;
- The spectral width depends on the radiation source and the wavelength;
- The output power stability is measured under 25°C, after 30 minutes' warm-up;
- The max power consumption is tested under the extreme temperature conditions.

**Ordering information:**

- VLSS-XXXX-P-<PW>
- XXXX: Center wavelength in nm.
- P: Package, B-Benchtop; M-Module
- PW: Output power in mW. Example: 10-10mW、 40-40mW