

## C-Band Tunable Light Source

### Product Description:



Connet VENUS series C-Band tunable light source adopts C-band tunable semiconductor laser internally. The wavelength range covers 1528.77nm to 1567.13nm (191.3THz-196.1THz) with the bandwidth exceeding 38nm, the channel interval of 50GHz, the channel numbers around 97 (C13-C61), and the FWHM spectrum width of single ITU wavelength output being less than 5MHz (Typ.: <1MHz). The stability of the output power is guaranteed by the uniquely designed ATC and APC circuits. The high-performance microprocessor makes operation and remote control more convenient and intelligent.

The output power of Connet VENUS series C-Band tunable light source is tunable. The benchtop system can display some key information on the high-definition LCD on the front panel, such as output power, operating current, operating voltage, temperature and operating status, etc. The system adopts the wide range power supply of 100~240VAC with a variety of built-in protection measures. This plug and play system is very suitable for the experimental research application.

Connet VENUS series C-Band tunable light source has a highly stable output with the long-term output power stability being even better than 1‰. The great stability performance is guaranteed by Connet' s unique high stability control circuit and the special thermal control design.

#### Applications:

- Coherent communication system
- Interference sensing system
- Test and measurement
- Other lab applications

#### Features:

- Bandwidth> 38nm
- Single wavelength linewidth <1MHz
- PM fiber output
- High stability and high reliability
- LCD display
- RS-232 communication interface optional
- High precision APC and ATC circuit



### Specifications:

Parameter	Unit	Specification		
		Min	Typ.	Max
Part no.		VLSP-C-B-TL, VLSP-C-M-TL		
Output power <sup>1</sup>	mW	10	-	-
Operating wavelength range	nm	1528.77	-	1567.13
Number of channels		-	97	-
Channel interval	GHz	-	50	-
Tunable frequency range	THz	191.3	-	196.1
Frequency accuracy	GHz	-	±1.5	±2.5
Spectral width (FWHM)	MHz	-	-	5
RIN	dB/Hz	-	-145	-
Wavelength switching time	ms	-	-	10
SMSR	dB	40	-	-
Single channel output power stability (-5 ~ +75 °C)	dB	-	±0.5	-
Output power deviation of different channels (25 °C)	dB	-	±0.5	-
Tunable output power range <sup>2</sup>	dBm	6	-	10
Output isolation	dB	45	55	-
Warm-up time	s	-	30	60
Operating voltage (benchtop)	V	100	-	240
Operating voltage (module)		5	-	12
Storage temperature	°C	-40	-	85
Operating temperature (benchtop)	°C	0	-	50
Operating temperature (module)		-35	-	65
Output fiber type		Panda 8/125um NA=0.13		
PER	dB	>20		
Output fiber length	m	>1		
Optical connector		FC/APC		
Dimension	mm	320(L)×280(W)×150(H) (Benchtop) 90(L)×70(W)×15(H) (Module)		

### Specifications:

- The maximum output power may exceed 10dBm.
- The wavelength (frequency) of the tunable light source is displayed on the LCD. The output wavelength of different channels can be obtained by adjusting the knob.

### Ordering Information:

- VLSP-C-B-TL-xx-FA, VLSP-C-M-TL-xx-FA
- B: Benchtop, M: Module, SF: Single frequency, FA: FC/APC connector
- xx: Output power in mW, Example: 10-10mW