

6317A Tunable Laser Source

Product overview

6317A is a newly released high performance tunable laser source. Its high-accuracy motion system and precision optical resonator enables high power, narrow linewidth, and mode hopping free continuous sweeping output in full wavelength range with sweeping speed of 1~200nm/s. It can achieve coherent control, fine tuning and remote control. 6317A is an ideal tunable laser source for testing and measurement in fields of optical communication, optical coherence, optical sensing, and precision spectroscopy, etc.

In order to provide complete solutions for testing and measurement in the field of optical communication, 6317A tunable laser source can match with optoelectronic testing instruments, such as 6433 series lightwave component analyzer, 6362 series optical spectrum analyzer or 9951 series lightwave measurement platform, etc.



Main features

- Full-range mode-hopping-free design, which can realize continuous wavelength sweeping in 1500nm~1600nm, with scanning speed up to 200nm/s;
- High-wavelength precision design, which can achieve 0.1 pm tuning resolution and ± 20 pm absolute wavelength accuracy;
- Narrow linewidth design, which can achieve linewidth around 100 kHz, and can be used in DWDM test, coherence test and other fields;
- High power stable output design, with peak output power greater than 13dBm and ± 0.01 dB/15min power stability within $23 \square \pm 2 \square$.

Technical specifications

Parameter		Unit	Performance
Wavelength Tuning Range		nm	1500~1600
Wavelength Setting Resolution		pm	0.1
Absolute Wavelength Accuracy		pm	±20
Wavelength Stability ^[1]		pm/15min	±5
Sweep Speed		nm/s	1~200
Output Power	Peak	dBm	13
	Full Range		10
Power Stability ^[1]		dB/15min	±0.01
Linewidth		kHz	≤200
SMSR		dB	≥45
Signal to Source Spontaneous Emission Ratio ^[2]		dB/nm	≥50(typical ≥60)
Optical Output Connector		/	FC/APC
Communication		/	LAN、BNC、GPIB
Dimensions (W) x(D) x(H)		mm	213×133×451
Weight		kg	≤8
Power Supply		/	220V _{AC} ±10%, 50Hz±5%
Power Consumption		W	≤80
Environmental Conditions		/	Operating temperature : 15℃~35℃ Storage temperature : -10℃~40℃ Humidity : ≤80%

[1]: Within 23℃±2℃.

[2]: The ratio between signal power (within ±1 nm band) and maximum source spontaneous emission power (within ±3 nm band).

Ordering information

- **Host** : 6317A tunable laser source
- **Standard** :

Number	Name	Description
1	Power cord	Standard free-core power cord
2	Operation Manual	
3	Certificate	