

# Ultra-stable laser system Preci-USL-6U

## FREQUENCY-STABILIZED & ULTRA-STABLE LASERS



Ultra-stable laser system Preci-USL-6U Based on a 5cm high-finesse F-P cavity, Precilasers offers a 6U all-in-one narrow-linewidth ultra-stable laser system. It covers a wavelength range of 400nm-2000nm, with a typical linewidth of <3Hz.

- Vibration insensitivity One
- Automatic re
- Support for built
- Optional active vibration isolation
- Optional sideband frequency shifting
- Applications High
- Resolution Spectroscopy Satellite Payload
- Frequency Reference Mobile Metrology

### Specifications

Parameter	Preci-USL-6U
Optional Wavelengths	400-2000nm
Typical Wavelength	480nm / 580nm / 780nm / 852nm / 1080nm / 1560nm, 1762nm
Features & Advantages	All-in-One, Narrow-Linewidth, High Stability
Linewidth*	<3Hz
Stability**	<5x10 <sup>-15</sup> @1s
Active Vibration Isolation Table	Optional
Cavity Length	5cm
Free Spectral Range	3GHz
Finesse	1000, 10000, 200000
Drift	<0.2Hz/s (<20kHz/day)
Vacuum Degree	<1x10 <sup>-7</sup> mbar
Cavity Mirror Parameters	ULE material, plane-concave cavity; concave mirror curvature radius optional (500mm/1000mm/2000mm)
Operating Temperature	20±7°C
Ambient Temperature Sensitivity	<3mK/°C
Power Supply	100V-240V, AC, 50/60Hz
Weight	40kg
Dimensions	40cmx26cmx45cm
Seed Integration	Seed can be built-in, with output power >20mW
Active Vibration Isolation	Optional active vibration isolation table
Sideband Locking Option	Integratable sideband frequency shifting EOM (bandwidth >1.5GHz)

Source: WaveQuanta product database. For ordering, customization (wavelength, power, package) and quotation, contact sales@wavequanta.com.