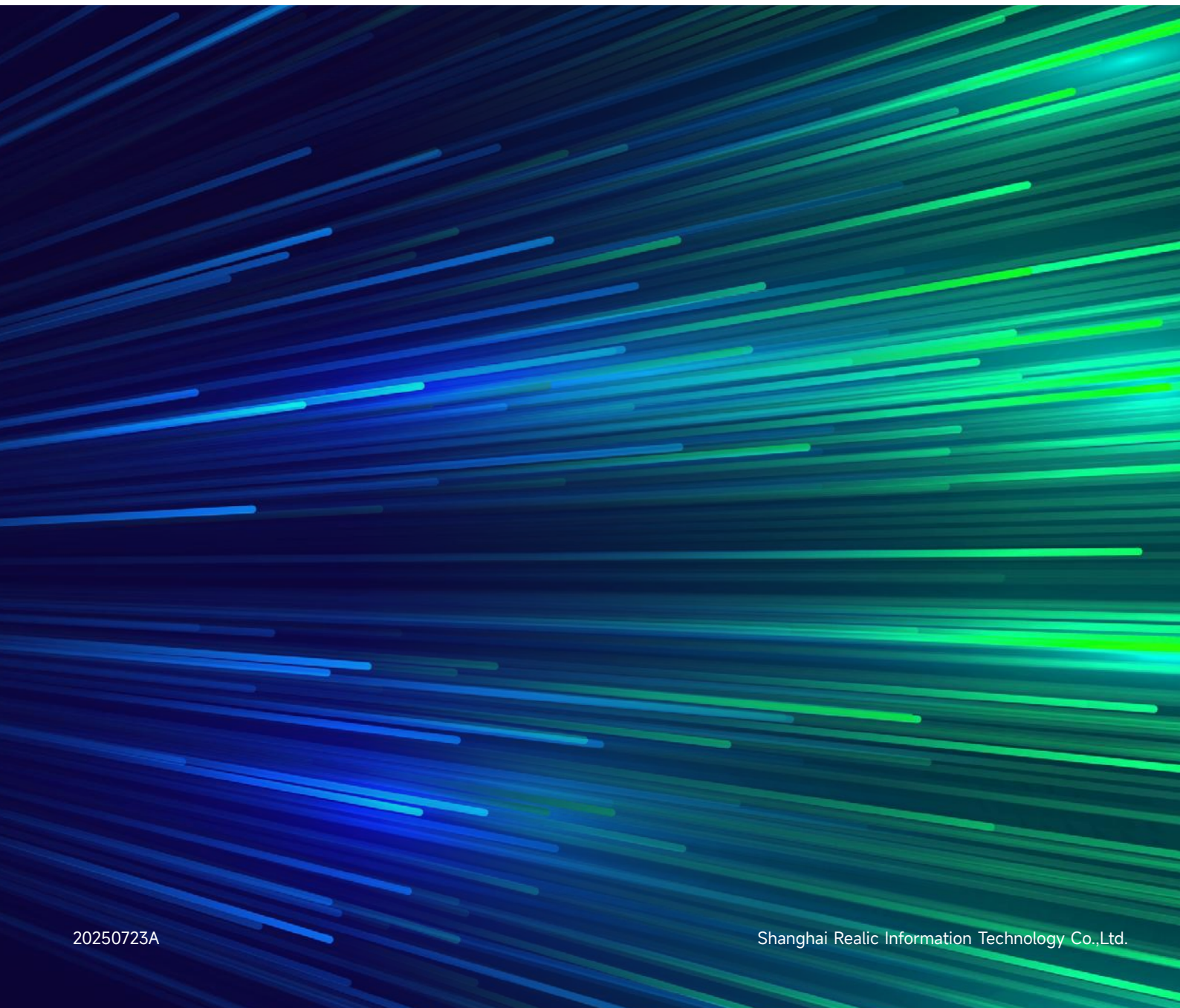


Frequency-locking

Single-frequency Semiconductor Laser

Type: PhaseOptics-0852-00030-L-PM



Frequency-locking Single-frequency Semiconductor Laser

PhaseOptics-0852-00030-L-PM

The Frequency-locking Single-frequency Semiconductor Laser uses a gas reference cell with good long-term stabilization as its frequency reference, the Laser provides long-term Laser frequency stabilization. Models are available as control light sources for Rb/Cs atoms or as frequency references for atomic interferometers.

Characteristics and Application Fields

Characteristics

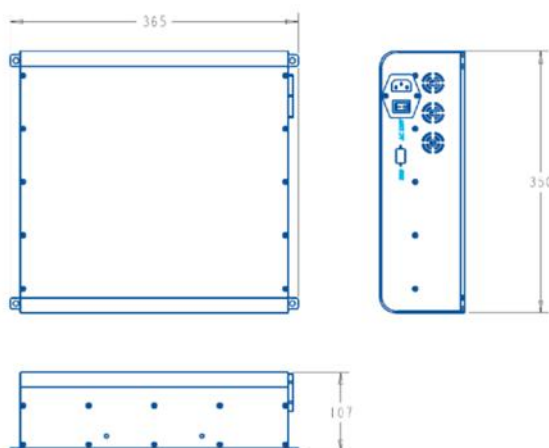
- Narrow Linewidth
- Compact Structure
- Long-Term Frequency Locking

Application Fields

- Rydberg Atom
- Underwater Communication



Structural Dimensions



Parameter	
Type	PhaseOptics-0852-00030-L-PM
Wavelength (nm) *	780/795/852
Max. Output Power (mW) **	≥30, Single-mode Polarization-maintaining Fiber
Linewidth (kHz)	< 600@10μs
Continuous Mode-hop-free range (GHz)	≥100
Power Stability	> 1%@10h (Peak Value)
Polarization Property	Linear polarization, PER≥25dB
Cooled Method	Air cooled
Frequency Lock (FL)	FL Time: > 90 days; Frequency Stability: 6e ⁻¹² @1s
Operating Mode	Continuous
Output Fiber (Type)	PM Fiber, FC/APC
Output Fiber (Length) (m)	1 (Customized available)
Power Supply	AC 220V, 50Hz
Dimensions (W) x (D) x (H) (mm)	365×350×107
Operating Temperature (°C)	10~40
Storage Temperature (°C)	5~45
Operating Humidity (%)	5~70

* Customizable Special Wavelength

** Power Expandable to 800mW

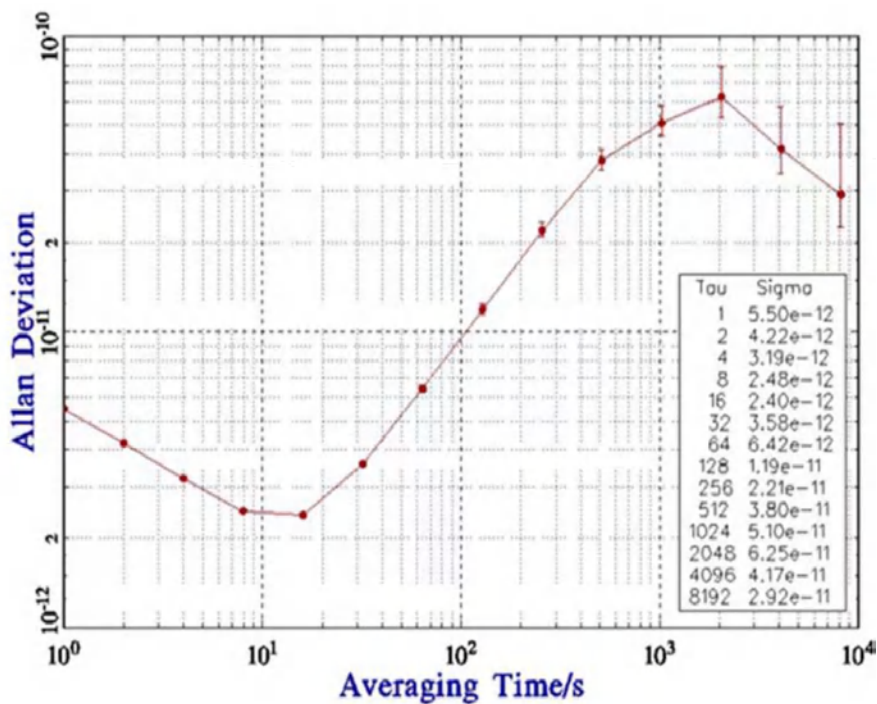


Photo 1-1 Beat Frequency Test for Frequency Stability

Test Data

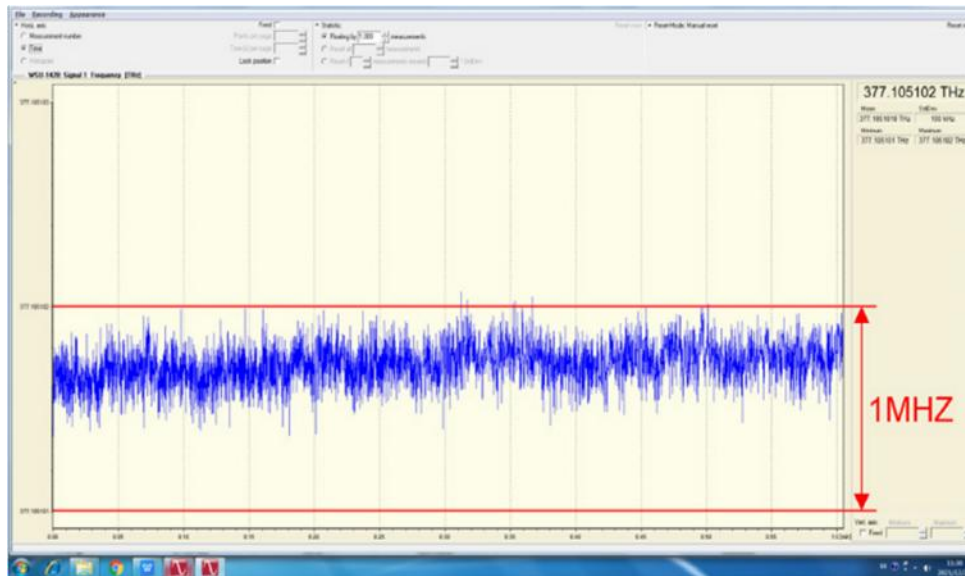


Photo 1-2 Frequency Stabilization Effect Diagram
(Wavelength Meter, Gate Width 1ms)



Photo 1-3 Laser Linewidth Test Diagram

