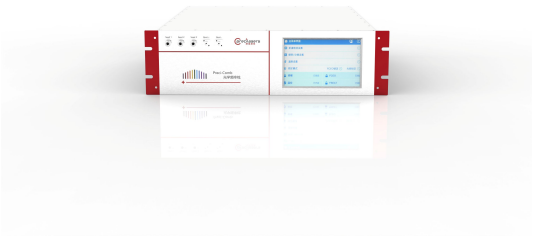
High-Performance Optical Frequency Comb

FREQUENCY COMBS & SUPERCONTINUUM



High-Performance Optical Frequency Comb Precilasers'compact optical frequency comb achieves high precision, high stability,one-button fully automated optical frequency comb in the volume of a 3U standard 19"cabinet.Based on highly customized optional optical modules,it supports up to 2W optical power output,can achieve any optical frequency measurement and optical reference between 500nm-2200nm,and can be widely used in optical precision measurement,cold atomic optical clock,time frequency transfer,quantum precision measurement and other fields.

- High Stability Wide Wavelength
- Range Small Size Photoelectric
- Integrated
- Optical Precision Measurement Cold
- Atomic Optical Clock Time
- Frequency Transfer Quantum Precision
- Measurement

Specifications

Parameter	Specification
Common Wavelengths	1560±30nm
Output Power	Multi-channel output, total power ≥ 50mW
Optical Frequency Range	>30nm, (Optional: 1000nm-2200nm, 650nm-1300nm)
Optional Repetition Rate Range	50-250MHz
Frequency Stability	In-loop Control Stability: <5E-18@1s, <2E-20@100s Out-of-loop Stability: <2e-17@1s (1) , <2e-18@1000s (1) , <2e-13@1s (2)
Output Mode	Single-mode Polarization-Maintaining Fiber Output, FC/APC
Integrated Phase Noise	<100mrad[100Hz-2MHz]
Repetition Rate Tuning Range	>3 MHz@ 250MHz repetition rate >500kHz@ 100MHz repetition rate
Repetition Rate Control Bandwidth (Open Loop)	> 1MHz
Carrier-Envelope Offset (CEO) Frequency SNR	> 40 dB at 100 kHz RBW
CEO Frequency Tuning Range	>250 MHz@ 250MHz repetition rate >100MHz@ 100MHz repetition rate
CEO Frequency Control Bandwidth (Open Loop)	> 1MHz
Pulse Width	<80fs
Reference Source	10 MHz reference frequency, power level +7 dBm, or built-in atomic clock
Chassis Dimensions	438mm*526mm*130mm
Weight	<40kg
Power Supply	100-240V, AC, 50/60Hz
Power Consumption	<300W
Cooling Method	Air Cooling
Spectral Expansion Module	Single-point output at any wavelength in 500nm-2200nm, power > 0.5mW, spectral width 2-3nm; Option A: Continuous spectrum output in 1000-2100nm, power > 50mW; Option B: Continuous spectrum output in 650-1300nm, power > 100mW;
Power Amplification Module	Wavelength: 1.5μm, output power > 2W

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