

## Beat Frequency Phase Lock Module

Preci-Beat is a beat frequency phase-locked circuit launched by Precilasers based on customer demand for laser heterodyne frequency locking/phase locking. Preci-Beat integrates a frequency detection and phase detection module and a PID module, integrating digital frequency detection and phase detection and PID servo functions, and can achieve laser heterodyne beat frequency locking and beat frequency phase locking in the range of 50MHz-8GHz. Preci-Beat has no physical knobs and buttons, but is controlled by PC software. Preci-Beat software can realize port control, error and output signal display, PID parameter adjustment and lock control, and communicate with the controller through RS422 protocol.

### Features

- Large Locking Range
- Support Frequency Hopping
- Automatic Lock

### Applications

- Laser Heterodyne Frequency Locking /Phase Locking



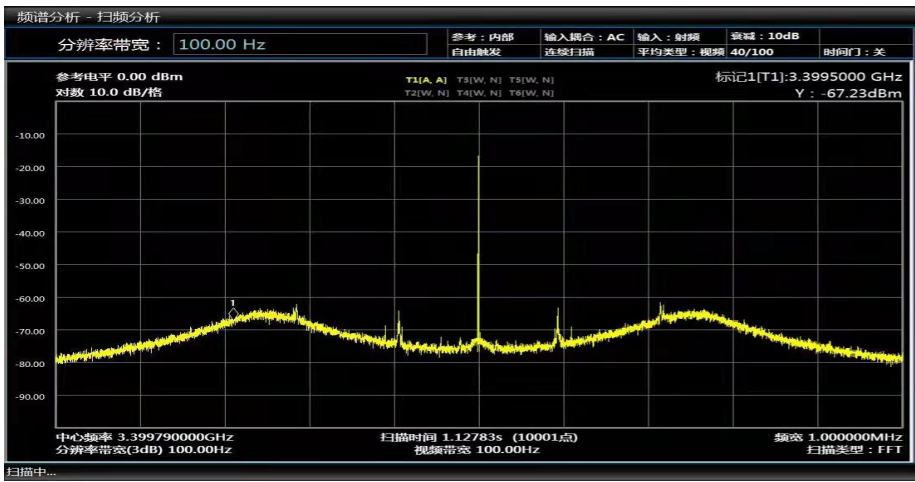
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Specification	
Partnumber	PrecilBeat
Configuration	Frequency and phase detection module + PID module
Lock Frequency Difference	50 MHz-8 GHz
Locking Adjustment Resolution	1kHz
Reference Input Frequency	100MHz
Reference Signal	Switchable internal and external reference
Analog PID Output Range	±5V
Analog PID Output Bandwidth	500kHz
Error Signal Generation	Digital frequency and phase detection
Frequency Hopping and Automatic Locking	support

## ❖ Performance(typical value)



## Phase noise test



### Sweep test chart



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