

## PDH Frequency Locking Module

Precilasers has launched a full-featured laser locking controller Precilock-PDH. The controller integrates a modulation and demodulation module, a PID module and a high-voltage amplifier module (optional), and integrates error signal generation, PID servo, and PZT drive functions. It can provide locking control for a variety of common frequency stabilization technologies, such as absorption spectroscopy, saturated absorption spectroscopy, modulation spectroscopy, modulation transfer spectroscopy, and PDH technology.

### Features

- High Bandwidth
- Low Noise
- Can Achieve Hz Line Width Ultra-Stable Laser
- Automatic Lock Back

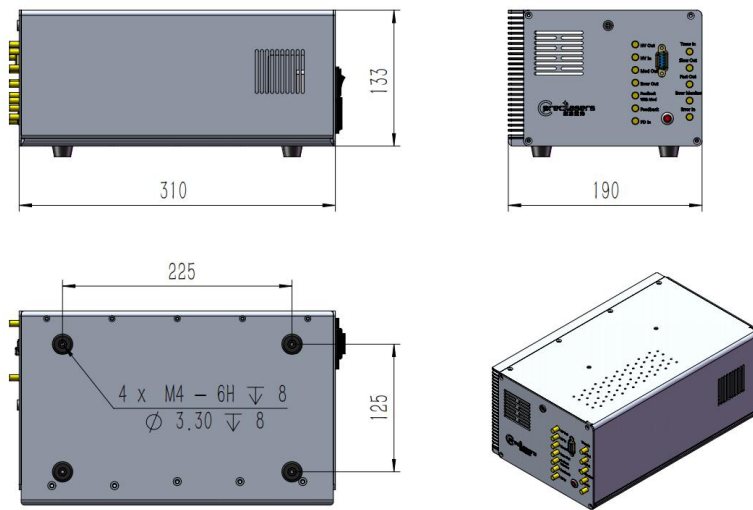
### Applications

- Laser Frequency Stabilization
- Precision Measurement

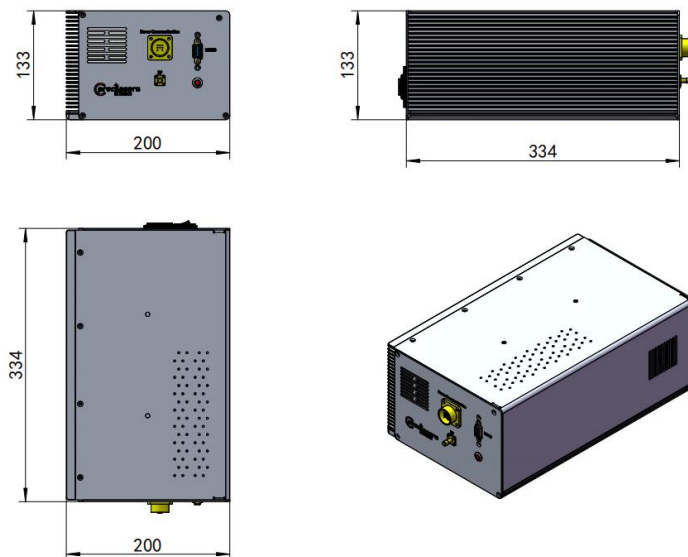


Specification		
Partnumber	PreciLock-L	PreciLock-PDH
Configuration	Modulation & De-modulation module + PID module	
Modulation Frequency Range	10kHz-100kHz	10kHz-30MHz
Modulation Frequency Resolution	1kHz	
Demodulation Phase	0-360°	
Output Modulation Voltage Range	>10dBm	
Fast Analog Pid Bandwidth	>8MHz	
Fast Analog Pid Output Voltage Range	-4 V-4 V	
Low Speed Analog Pid Bandwidth	>3MHz	
Low Speed Analog Pid Output Voltage Range	-5V~+5V	
High Voltage Amplifier Output Voltage Range (optional)	0-110V	
High Voltage Amplifier Gain (optional)	15	
High Voltage Amplifier Bandwidth (optional)	High impedance load bandwidth 50 kHz Capacitive load bandwidth (small signal output 0.1 uF load) 20 kHz	
High Voltage Amplifier Maximum Output Current (optional)	<50 mA	
PD Signal Input Range	<1 Vpp	
PD Signal Input Impedance	50 Ω, AC coupling	
Output Scanning Signal	20Hz, Triangle Wave, -1 V~+5 V	
Power Supply	200-240V, AC, 50/60Hz, Optional 110V	

## ❖ Product Dimensions



Servo controller (multiple interfaces)



Servo controller (single interface)



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### ⚠ Laser Hazard

Visible or invisible laser radiation, avoid eye or skin exposure to direct, reflected or filtered radiation.  
**CLASS 4 Laser Products**

