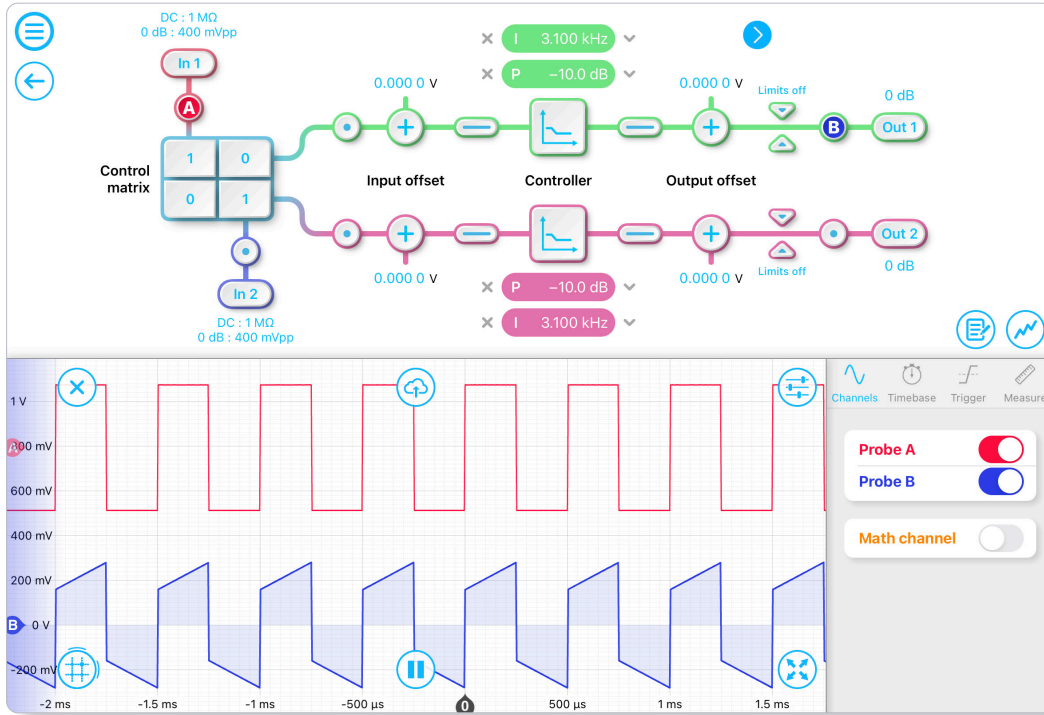


The Moku:Pro PID Controller features four fully configurable PID controllers with sub-microsecond latency. This enables them to be used in applications requiring both low- and high-feedback bandwidths such as laser temperature and current stabilization. The PID Controller can also be used as a lead-lag compensator by saturating the integral and differential controllers with independent gain settings.



Versatile input 4 inputs with MIMO	Proportional Gain - 60 dB to 60 dB	DAC resolution 16-bits	Input-output latency <1 μ s	Gain configuration Real time	Advanced mode Multi-section builder
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Features

- 4 input channels, 4 output channels, and 4 independent PID Controllers with control matrix for MIMO
- Design your control system's frequency response using the interactive Bode plot in real time
- Block diagram view of the digital signal processing with built-in probe points in signal processing chain
- Advanced multi-section PID builder with single or double integrators and differentiators with low- and high-frequency gain saturation

Specifications

- Input voltage range: 400 mVpp, 4 Vpp or 40 Vpp
- Control matrix linear gain: ± 0.1 to ± 20
- Input offset range: ± 1 V
- Output offset range: ± 5 V
- Offset precision: 100 μ V
- Voltage limiter range: - 1 V to 1 V
- Gain profiles: Proportional (P), integral (I), differential (D), double-integral (+), integral saturation (IS), differential saturation (DS)
- Proportional gain: -60 dB to 60 dB
- Integrator crossover frequency: 3.125 Hz to 312.5 kHz
- Differentiator crossover frequency: 31.25 Hz to 3.125 MHz

Applications

- Feedback and control systems design
- Laser frequency stabilization
- Temperature regulation
- Scan heads/sample stage positioning
- Pressure, force, flow rate, and other controls