



Your next breakthrough,  
faster than ever



PID  
Controller



Digital Filter  
Box



Phasemeter



Laser Lock  
Box



Logic Analyzer /  
Pattern Generator



Oscilloscope



Spectrum  
Analyzer



Lock-in  
Amplifier



FIR Filter  
Builder



Waveform  
Generator



Frequency  
Response  
Analyzer



Arbitrary  
Waveform  
Generator



Data  
Logger



Moku Cloud  
Compile



Multi-  
instrument  
Mode

# Moku:Go

## From backpack to benchtop

Moku:Go is a portable, all-in-one device ideal for actively testing electrical and computer engineering designs and projects. Whether undergraduate student or life-long learner, Moku:Go delivers unmatched convenience and accessibility. Practical yet inspired, Moku:Go is designed to go wherever your ideas take you.

## A user interface that makes sense

Use the intuitive Moku: App for Windows or Mac to configure each of the instruments, or take advantage of API support to integrate with the rest of your experiment.



## 2 analog inputs

- 125 MSa/s, 12-bit ADCs
- 30 MHz bandwidth
- 1 M $\Omega$  impedance
- AC or DC coupling

## DIO

- 16-channel, 62.5 MSa/s

## Programmable power supplies

- Ch 1: +5 V to -5 V @ 150 mA
- Ch 2: 0 to 16 V @ 150 mA
- Ch 3, 4: Dual 0.6 to 5 V @ 1 A

## 2 analog outputs

- 125 MSa/s, 12-bit DACs
- 20 MHz bandwidth
- 50  $\Omega$  impedance
- DC coupled

## Applications

- Control systems
- Power management
- Early prototyping
- Senior design

# Moku:Lab

## Flexible hardware for the next generation of test

Moku:Lab is a complete, cost-effective tool for testing and controlling electronic and optical experiments. Equipped with easy-to-use software and professional-grade hardware, researchers and scientists can spend less time on setup and troubleshooting and more time on their next breakthrough.

## Class-leading user interface

Moku:Lab's software is designed to elevate the user experience, streamline workflows, and maximize productivity. Touch-and-zoom capabilities on the iPad App bring a more dynamic and interactive experience to test and measurement.



## 2 analog inputs

- 500 MSa/s, 12-bit ADCs
- 200 MHz bandwidth
- 50  $\Omega$  / 1 M $\Omega$  impedance
- AC or DC coupling

## Additional I/O

- Dedicated trigger input
- 10 MHz synchronization in and out
- Onboard Wi-Fi, ethernet, USB
- SD card for data storage

## 2 analog outputs

- 1 GSa/s, 16-bit DACs
- 300 MHz bandwidth
- 50  $\Omega$  impedance
- DC coupled

## Highlights

- Better than 30 nV/ $\sqrt{\text{Hz}}$  noise performance above 100 kHz
- 500 ppb stability onboard clock
- < 1  $\mu\text{s}$  input-to-output latency

# Moku:Pro

## Flexible research, faster development, scalable in an instant

Moku:Pro is a scalable, high-performance test solution for developing and validating next-generation devices and systems. From precision measurements to real-time closed-loop control, Moku:Pro enables R&D and test engineers to streamline test complexity and accelerate project timelines.

## Run 4 instruments simultaneously

Configure up to 4 instruments independently or combine them to build sophisticated digital signal processing pipelines with Multi-instrument Mode.

## Code, compile, and deploy custom DSP algorithms

Advanced users can use Moku Cloud Compile to design custom features and deploy them directly on Moku:Pro's FPGA.



### 4 analog inputs

- Up to 5 GSa/s
- 10/18-bit ADCs with frequency-dependent blending
- 600 MHz bandwidth
- 50  $\Omega$  / 1 M $\Omega$  impedance
- AC or DC coupling

### Additional I/O

- Dedicated trigger input
- 10 MHz reference in and out
- Onboard Wi-Fi, ethernet, USB
- 120 GB high-speed SSD

### 4 analog outputs

- 1.25 GSa/s, 16-bit DACs
- 500 MHz bandwidth
- $\pm 5$  V up to 100 MHz,  $\pm 1$  V up to 500 MHz (50  $\Omega$ )

### Highlights

- Exceptional low-frequency noise performance: 500  $\mu$ V RMS at full input bandwidth
- 300 ppb stability onboard clock
- < 650 ns input-to-output latency

Software & APIs for iPad, Windows, macOS, MATLAB, Python, and LabVIEW

Liquid Instruments' test platform with Instrument-on-Chip technology delivers a unique combination of performance and versatility. We help students, scientists, and engineers learn, discover, and create.

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[liquidinstruments.com](https://liquidinstruments.com)

