#### Moku:Go Datasheet

# 2 or 4 Channel Programmable Power Supply



Moku:Go M1 and M2 models are equipped with 2 and 4 channel programmable power supplies. The power supply is an embedded peripheral that can be independently configured and used in tandem with any of Moku:Go's instruments. M1 and M2 both provide -5 to 5 V and 0 to 16 V high-accuracy linear supplies for maximum flexibility in dual-rail and high voltage applications such as op-amp characterization and communications. The M2 adds two 0.6 to 5 V supplies. Each is capable of 1 A output currents for laser and motor applications while also being able to power a wide range of USB peripherals. Paired with eight other test and measurement instruments, Moku:Go is the ultimate undergraduate lab solution.



PPSU 1		<b></b>	PPSU 2		
V -5 - 5 V		 0 - 150 mA	V 0 - 16 V		 0 – 150 mA
5.000 V	Set	150 mA	16.000 V	Set	150 mA
1.501 V	Actual	151 mA	0.000 V	Actual	0.000 A
● cv  ● cc			• cv • cc		
• c\	/	• cc	• <		• cc
• ci PPSU 3	( 	- cc	PPSU 4		• tt
• c PPSU 3 V		• cc	PPSU 4		1
• C PPSU 3 V 0.6 - 5 V		• cc I 0.07 - 1 A	PPSU 4 V 0.6-5 V		I 0.07-1A
PPSU 3 V 0.6 - 5 V 5.000 V	Set	I 0.07-1 A 1.000 A	PPSU 4 V 0.6-5 V 5.000 V	Set	I 0.07-1A 1.000 A
PPSU 3 V 0.6-5 V 5.000 V 0.000 V	5et Actual	I 0.07-1A 1.000 A 0.000 A	PPSU 4 V 0.6-5 V 5.000 V 5.000 V	Set Actual	I 0.07-1A 1.000 A 500 mA

Voltage Output Range -5 V to +16 V Max Power Output 5 W @ 5 V

Operation Mode Constant I or V Minimal Set Resolution 2.5 mV or 10 mA

System Integration Operates with 8 T&M Instruments

### **Features**

- Up to four independently adjustable power supply channels.
- Constant voltage or current mode with auto overvoltage and overcurrent protection.
- Fully embedded with other 8 powerful instruments, such as an oscilloscope, waveform generator, etc.

## **Applications**

- Op-amp characterization
- LED/laser diode power supply
- USB device powering

## **Specifications**

		Ch. 1 (M1 & M2)	Ch. 2 (M1 & M2)	Ch. 3 & 4 (M2)
Output Voltage		-5 V to +5 V	0 V to +16 V	0.6 V to +5 V
Output Current		0 mA to 150 mA	0 mA to 150 mA	0.07 A to 1 A
Set Resolution		2.5 mV / 10 mA	5 mV / 10 mA	5.8 mV / 1 mA (I < 0.5 A) or 15 mA
Readback Resolution		4 mV / 0.1 mA	4 mV / 0.1 mA	4 mV / 0.1 mA
Set Accuracy	Voltage	≤ 1%	≤ 1%	2 %
	Current	±10 mA typical	± 10 mA typical	± 10 mA typical
Readback Accuracy	Voltage	±4 mV ± 1%	±4 mV ± 1%	±4 mV ± 1%
	Current	±100 μA ± 1%	±100 μA ± 1%	±100 μA ± 1%
Effective Output Im- pedance		0.5 R	0.5 R	<0.1 R
Ripple and Noise		20 mVrms	20 mVrms	TBD