

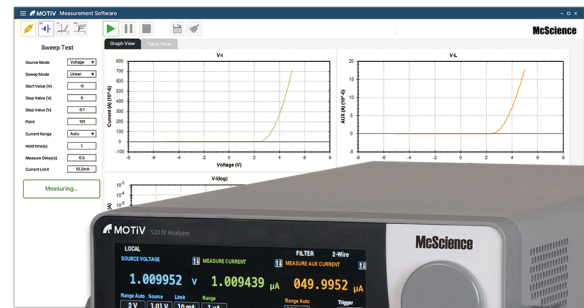
MOTiV 520 IV Analyzer

Crucial Experiments
www.mcscience.com

The 520 IV Analyzer is a general-purpose source meter capable of sourcing voltage(current) and measuring current(voltage) with 4-quadrant operation for simultaneous real-time sourcing, sinking, and measurement. Its multi-range architecture and automatic compliance protection enable stable I-V characterization of advanced electronic devices and materials, while the built-in photocurrent measurement channel supports optical measurements during electrical testing.

Voltage Source Current Measure (VSCM) + Current Source Voltage Measure (CSVM)

4-Quadrant Operation + I-V Characteristics + AUX ZRA Channel



±200V Voltage Range, ±1A Current Range

Max. 20W Output

100uV Voltage Resolution, 100fA Current Resolution

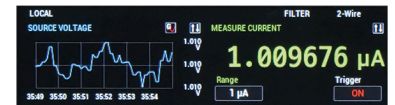
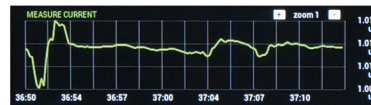
Setting and Control of Compliance

Selectable 2-Wire of 4-Wire Signal Connection

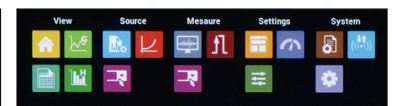
Max. 10mA ZRA Channel

Various Touch Panel Interface

LAN / USB Communication Control (Wireless Optional)



0	05/24 20:47:18.555	999.9745 mV	4.446178 pA
1	05/24 20:47:18.722	999.9754 mV	4.346205 pA
2	05/24 20:47:18.889	999.9761 mV	3.783744 pA
3	05/24 20:47:19.055	999.9749 mV	3.421745 pA
4	05/24 20:47:19.223	999.9802 mV	3.261200 pA
5	05/24 20:47:19.390	999.9794 mV	3.072221 pA
6	05/24 20:47:19.556	999.9790 mV	2.857245 pA



Specification

Item	General Specification
Model Name	MOTIV 520
Port Configuration	Triax 4-wire, 1ch Aux Input, I/O Trigger
Operation Mode	4-Quadrant Operation, VSCM/V SVM/CSVM/CSM
Memory Buffer	Set List : Max. 10,000 Points, Measurement Buffer : > 250,000 Samples
Control Mode	Manual(Touch Panel and Knob Key) / Remote Control
Communication	Ethernet or USB
Size / Weight	213mm(W) x 403mm(D) x 88.1mm(H) / 3.73Kg
Electricity	100~240VAC, ϕ 1, 50/60Hz, Max. 150VA
Accessories	Triaxial to Crocodal Cable, Bundle Software, LAN Communication Cable, Power Cable, User Manual

Source Specification			
	Range(\pm)	Resolution	Accuracy \pm (% Setting + V)
Voltage	200 mV	5 μ V	0.02% + 400 μ V
	2 V	50 μ V	0.02% + 600 μ V
	20 V	500 μ V	0.02% + 5 mV
	200 V	5 mV	0.02% + 50 mV
Current	100 nA	5 pA	0.06% + 50 pA
	1 μ A	50 pA	0.03% + 700 pA
	10 μ A	500 pA	0.03% + 5 nA
	100 μ A	5 nA	0.03% + 60 nA
	1 mA	50 nA	0.03% + 300 nA
	10 mA	500 nA	0.03% + 6 μ A
	100 mA	5 μ A	0.03% + 30 μ A
	1 A	50 μ A	0.05% + 1.5 mA

Measurement Specification			
	Range(\pm)	Resolution	Accuracy \pm (% Setting + V)
Voltage	200 mV	100 nV	0.015% + 200 μ V
	2 V	1 μ V	0.015% + 300 μ V
	20 V	10 μ V	0.015% + 5 mV
	200 V	100 μ V	0.015% + 50 mV
Current	100 nA	100 fA	0.06% + 40 pA
	1 μ A	1 pA	0.025% + 400 pA
	10 μ A	10 pA	0.025% + 1.5 nA
	100 μ A	100 pA	0.02% + 25 nA
	1 mA	1 nA	0.02% + 200 nA
	10 mA	10 nA	0.02% + 2.5 μ A
	100 mA	100 nA	0.02% + 20 μ A
	1 A	1 μ A	0.03% + 1.5 mA

Option



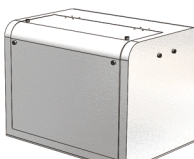
<Triaxial Cable>



<I-V-L JIG>



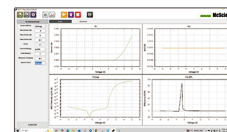
<Probe Station>



<Shield Box>



<Switching Unit>



<I-V-L Software>

Application

