

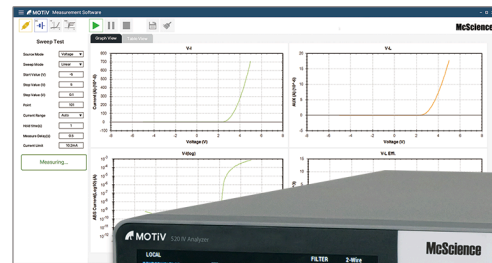
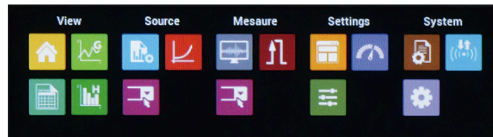
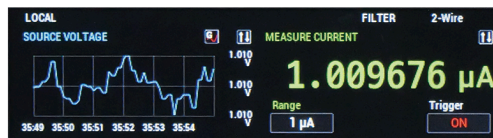
# MOTiV 520 IV Analyzer

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 Channel



$\pm 200$ V Voltage Range,  $\pm 1$ A Current Range

Max. 20W Output

100 $\mu$ V Voltage Resolution, 100fA Current Resolution

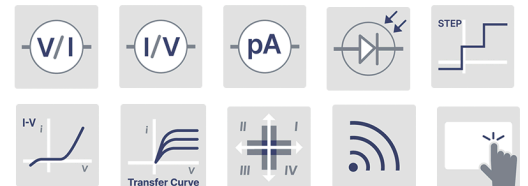
Setting and Control of Compliance

Selectable 2-Wire or 4-Wire Signal Connection

Max. 1V / 10mA AUX Channel

Various Touch Panel Interface

LAN / USB Communication Control (Wireless Optional)



 **McScience**

## 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/CSCM
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, $\Phi$ 1, 50/60Hz, Max. 150VA
Accessories	Triaxial to Crocodial Cable, Bundle Software, LAN Communication Cable, Power Cable, User Manual

Source Specification			
	Range( $\pm$ )	Resolution	Accuracy $\pm$ (% setting + volts)
Voltage	200 mV	5 $\mu$ V	0.02% + 400 $\mu$ V
	2 V	50 $\mu$ V	0.02% + 600 $\mu$ V
	20 V	500 $\mu$ V	0.02% + 5 mV
	200 V	5 mV	0.02% + 50 mV
Current		Resolution	Accuracy $\pm$ (% setting + amps)
	20 nA	1 pA	0.15% + 10 pA
	100 nA	5 pA	0.06% + 50 pA
	1 $\mu$ A	50 pA	0.03% + 700 pA
	10 $\mu$ A	500 pA	0.03% + 5 nA
	100 $\mu$ A	5 nA	0.03% + 60 nA
	1 mA	50 nA	0.03% + 300 nA
	10 mA	500 nA	0.03% + 6 $\mu$ A
	100 mA	5 $\mu$ A	0.03% + 30 $\mu$ A
	1 A	50 $\mu$ A	0.05% + 1.5 mA

Measurement Specification			
	Range( $\pm$ )	Resolution	Accuracy $\pm$ (% setting + volts)
Voltage	200 mV	100 nV	0.015% + 200 $\mu$ V
	2 V	1 $\mu$ V	0.015% + 300 $\mu$ V
	20 V	10 $\mu$ V	0.015% + 5 mV
	200 V	100 $\mu$ V	0.015% + 50 mV
Current		Resolution	Accuracy $\pm$ (% setting + amps)
	20 nA	20 fA	0.15% + 6 pA
	100 nA	100 fA	0.06% + 40 pA
	1 $\mu$ A	1 pA	0.025% + 400 pA
	10 $\mu$ A	10 pA	0.025% + 1.5 nA
	100 $\mu$ A	100 pA	0.02% + 25 nA
	1 mA	1 nA	0.02% + 200 nA
	10 mA	10 nA	0.02% + 2.5 $\mu$ A
	100 mA	100 nA	0.02% + 20 $\mu$ A
	1 A	1 $\mu$ A	0.03% + 1.5 mA

## Option



<Triaxial Cable>



<I-V-L JIG>



<Probe Station>



<Shield Box>

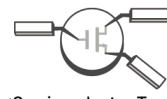


<Switching Unit>



<I-V-L Software>

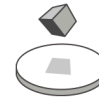
## Application



<Semiconductor Test>



<Display Test>



<Superconductor Test>



<Solar Cell Test>

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