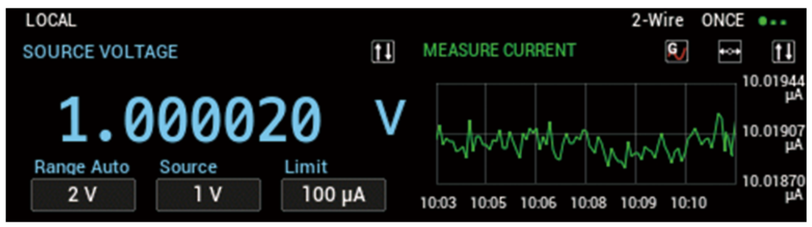
MOTiV 520 IV Analyzer

Crucial Experiments
www.mcscience.com

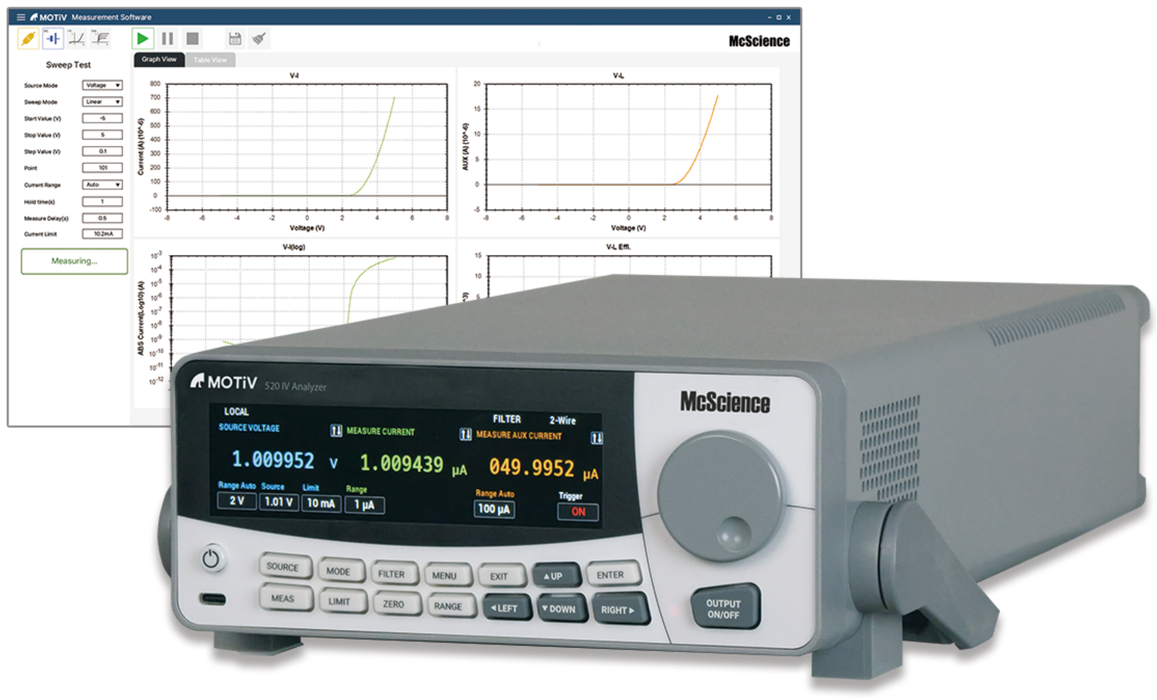
The 520 IV Analyzer is a versatile source measure unit (SMU) that delivers precise, 4-quadrant operation for simultaneous, real-time sourcing and sinking. Featuring a multi-range architecture and automatic compliance protection, it ensures stable I-V characterization for advanced electronic devices and materials. Additionally, an integrated AUX channel seamlessly supports optical testing alongside electrical evaluation.

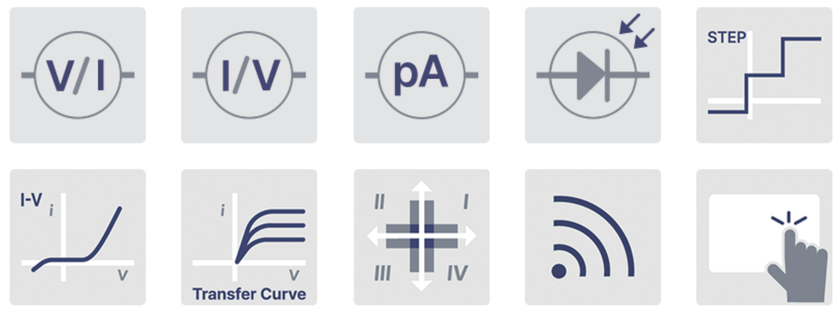
Voltage Source Current Measure (VSCM) + **Current Source Voltage Measure (CSVM)**

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









±200V Voltage Range, ±1A Current Range

Max. 20W Output

Setting and Control of Compliance

Selectable 2-Wire or 4-Wire Signal Connection

Max. 1V / 10mA AUX Channel

Keypad / Touch Panel Interface

LAN / USB Remote Control (Wireless Optional)

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Specification

Item	General Specification
Model Name	MOTiV 520
Port Configuration	Triax 4-Wire, 1ch Aux Input, Digital I/O Trigger
Operation Mode	4-Quadrant Operation, VSCM / VSVM / CSVM / CSCM
Memory Buffer	Set List : Max. 10,000 Points, Measurement Buffer : Max. 450,000 Samples
Control Mode	Manual (Touch Panel and Knob Key) / Remote Control
Remote Interfaces	Ethernet or USB
Size / Weight	213mm(W) x 403mm(D) x 88.1mm(H) / 3.73Kg
Power Requirements	100~240VAC, Φ1, 50/60Hz, Max. 150VA
Accessories	Triaxial to Crocodial Cable 2M, Bundle Software, LAN Cable, Power Cable, User Manual

Source Range		
Voltage	Range (±)	Accuracy ±(% Setting + Volts)
	200 mV	0.02% + 400 µV
	2 V	0.02% + 600 µV
	20 V	0.02% + 5 mV
	200 V	0.02% + 50 mV
Current	Range (±)	Accuracy ±(% Setting + amps)
	2 nA	0.3% + 20 pA
	20 nA	0.15% + 40 pA
	100 nA	0.06% + 120 pA
	1 µA	0.03% + 700 pA
	10 µA	0.03% + 5 nA
	100 µA	0.03% + 60 nA
	1 mA	0.03% + 600 nA
	10 mA	0.03% + 6 µA
	100 mA	0.03% + 30 µA
	1 A	0.05% + 1.5 mA

Measure Range		
Voltage	Range (±)	Accuracy ±(% Setting + Volts)
	200 mV	0.015% + 200 µV
	2 V	0.015% + 350 µV
	20 V	0.015% + 5 mV
	200 V	0.015% + 50 mV
Current	Range (±)	Accuracy ±(% Setting + amps)
	2 nA	0.15% + 4 pA
	20 nA	0.15% + 6 pA
	100 nA	0.06% + 40 pA
	1 µA	0.025% + 400 pA
	10 µA	0.025% + 4 nA
	100 µA	0.02% + 30 nA
	1 mA	0.02% + 400 nA
	10 mA	0.02% + 3 µA
	100 mA	0.02% + 20 µA
	1 A	0.03% + 1.5 mA

AUX		
Voltage	Range (±)	Accuracy ±(% Setting + Volts)
	10 mV	0.015% + 50 µV
	100 mV	0.015% + 100 µV
	1 V	0.015% + 1 mV
Current	Range (±)	Accuracy ±(% Setting + amps)
	100 µA	0.02% + 20 nA
	1 mA	0.02% + 300 nA
	10 mA	0.02% + 2 µA

Option

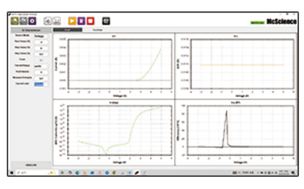

<Triaxial Cable>


<I-V-L JIG>

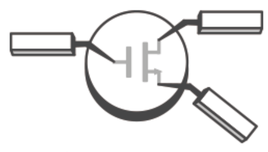

<Probe Station>

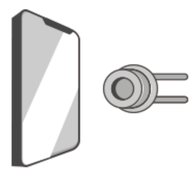

<Shield Box>

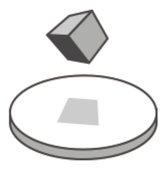

<Switching Unit>


<I-V-L Software>

Application


<Semiconductor Test>


<Display Test>


<Superconductor Test>


<Solar Cell Test>

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