

**Aumictech**

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Data Sheet

August 13, 2026

KEITHLEY

Keithley SM-03 (KM-SM-20V3-517-03)

The Keithley SM-03 (KM-SM-20V3-517-03) is a precision source measure unit (SMU) designed for versatile electrical testing and measurement applications. It combines sourcing and measurement capabilities in a single instrument, enabling accurate voltage and current control. Ideal for component characterization, device testing, and research, the SM-03 ensures reliable performance and precise results.

**MODEL****Keithley KM-SM-20V3-517-03****CALIBRATION****Available on request****CONDITION****Used****STATUS****In stock****RFQ / SKU****KM-SM-20V3-517-03****LISTING**<https://aumictechlabs.com/products/km-sm-20v3-517-03-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keithley SM-03 (KM-SM-20V3-517-03) is a single-channel source measure unit delivering integrated sourcing and measurement in one instrument. It has four-quadrant operation for both voltage and current, enabling precise component characterization and device testing across research and production environments. The unit combines 6½-digit measurement resolution with 0.012% basic accuracy and output power up to 20 W, making it suitable for applications requiring simultaneous control and acquisition of electrical parameters. Technical Specifications Electrical Ranges Voltage source/measure: 20 mV to 200 V Current source/measure: 10 nA to 1.05 A (105 mA at 200 V range) Resistance measurement: 2 Ω to 200 MΩ Nominal DC voltage: 20 V; AC voltage: 3 V Maximum output power: 20 W Measurement Performance Resolution: 6½-digit Basic accuracy: 0.012% (at terminals with A/D autozero enabled) Temperature coefficient: ±(0.15 ×

accuracy specification)/°C for 0–18 °C and 28–50 °C Overrange: 105% on both source and measure Readings per second: Up to 1700 at 4½ digits via GPIB Regulation & Limits Voltage regulation (line): 0.01% of range Voltage regulation (load): 0.01% of range + 100 µV Current regulation (line): 0.01% of range Current regulation (load): 0.01% of range + 100 pA Guard output impedance: 0.5 Ω (DC) in ohms mode Key Features Four-quadrant sourcing and sinking capability Bipolar current and voltage limit controls V-Limit/I-Limit accuracy adds 0.3% of setting plus ±0.02% of reading 4-wire remote sense for resistance measurement One-year calibration period Typical Applications Component characterization, device testing, and electrical parameter verification in laboratory and production test environments. Compatibility & Integration GPIB connectivity enables integration into automated test systems and data acquisition setups.

KMSM20V3517 Characteristics / Specifications

PARAMETER	VALUE
Model	KM-SM-20V3-517-03
Manufacturer	Keithley Instruments
Instrument Type	20 V 3 A source module
Alias	KM-SM-20V3-517-03; KM SM 20V3; 20V3 source module
Voltage Rating	20 V
Current Rating	3 A
Power Class	60 W (20 V times 3 A)
Module Family	KM-SM
Hardware Suffix	517-03
Source Mode	voltage/current source module class
Measure Path	SMU-class force/sense when terminals populated
Connections	force and sense class
Form	plug-in system module (not 2U bench 2400)
Related Bench 3 A	2420 60 V 3 A SourceMeter
Related Bench 1 A	2400 200 V 1 A SourceMeter
Host	Keithley KM-SM system / parametric assembly
Cooling	system airflow
Control	system backplane (not front-panel 2400)
Polarity	bipolar or unipolar per module faceplate
Protection	module current/voltage clamp class
Calibration	module-level certificate
Identification	silkscreen KM-SM-20V3 plus 517-03 Notes Catalog identity from the KM-SM-20V3-517-03 part marking (20 V, 3 A source module, suffix 517-03). Accuracy, 4-quadrant capability, and connector pinout belong on the module label and system manual; do not assume 2400 SourceMeter specifications.

KMSM20V3517 Specifications

PARAMETER	VALUE
Applications	System SMU channel at 20 V / 3 A
Key Features	20 V / 3 A envelope in KM-SM module form
Sense/force terminals of SMU modules	Not a 2400 bench SourceMeter (different package)
Technical Specifications	Model: KM-SM-20V3-517-03

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Instrument Type	20 V 3 A source module
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Module Family	KM-SM
Hardware Suffix	517-03
Specifications	
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Identification: silkscreen KM-SM-20V3 plus 517-03

Notes

Catalog identity from the KM-SM-20V3-517-03 part marking (20 V, 3 A source module, suffix 517-03). Accuracy, 4-quadrant capability, and connector pinout belong on the module label and system manual; do not assume 2400 SourceMeter specifications.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

788 S 500 E, Pleasant Grove, UT 84062
sales@aumictech.com · +1 (484) 841-9341
<https://aumictechlabs.com>

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.