

**Aumictech**

Test & measurement • bought, sold, repaired, calibrated

Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight MP4361A

Keysight MP4361A Modular Solar Array Simulator Module 160 V 10 A 1000 W The Keysight MP4361A is a 1 kW auto-ranging solar-array simulator module for MP4301A/MP4302A 2U mainframes. OEM MP4300A Series data sheet 3122-1387EN rates 1000 W, 160 V Voc/Vmp, 10 A Isc/Imp, 0.25 ohm minimum impedance, 80 nF output capacitance, and voltage programming accuracy 0.05 percent plus 25 mV at 23 plus or minus 5 C. Satellite power-system test, PV-segment emulation under eclipse/spin, and six-channel 6 kW SAS racks. The Keysight MP4361A is a 1 kW auto-ranging solar-array simulator module for MP4301A/MP4302A 2U mainframes. OEM MP4300A Series data sheet 3122-1387EN rates 1000 W, 160 V Voc/Vmp, 10 A Isc/Imp, 0.25 ohm minimum impedance, 80 nF output capacitance, and voltage programming accuracy 0.05 percent plus 25 mV at 23 plus or minus 5 C. Satellite power-system test, PV-segment emulation under eclipse/spin, and six-channel 6 kW SAS racks. 1024-point I-V table with 8 ms curve change Instrument Type: Auto ranging solar array simulator module



MODEL

**Agilent / Keysight
MP4361A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

MP4361A

LISTING

<https://aumictechlabs.com/products/mp4361a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The Agilent/Keysight MP4361A is a 1 kW solar array simulator (SAS) DC power module that replicates solar array output characteristics with current-source behavior and minimal output capacitance. Rapid I-V curve alterations enable accurate simulation of various solar arrays under

different environmental conditions - temperature, age, eclipse, and spin - without field replacement. The module operates as part of the MP4300A Series and requires a compatible mainframe (sold separately).

Technical Specifications

Output Ratings: Maximum power: 1000 W
Maximum voltage: 160 V
Maximum current: 10 A

Programming Accuracy (23°C ±5°C): Voltage (fixed mode): 0.05% + 25 mV
Current (fixed mode): 0.1% + 7 mA
Output Ripple and Noise: Voltage (fixed mode): 500 mV peak-to-peak, 50 mV RMS
Current (simulator/table mode): 48 mA peak-to-peak, 6 mA RMS

Key Features

Operating Modes: Simulator/Table Mode generates smooth I-V curves from a 1024-point table per output within 8 ms of command receipt. Fixed Mode operates as a source or load with standard rectangular I-V characteristics. Auto-ranging capability optimizes output impedance across the voltage and current range.

Power Management: Bidirectional operation supports both sourcing and sinking. Load operation mode enables multi-module configurations. Built-in over-voltage, over-current, and over-temperature protection.

System Architecture: Modular design rear-loads into MP4300A Series mainframes for minimal installation and service time. A single 2U mainframe accommodates up to six SAS modules at high power density. Mainframe fault detection resolves module failures within 10 microseconds and triggers coordinated shutdown to prevent hazardous conditions.

Typical Applications Spacecraft power subsystem testing, solar array characterization under eclipse and thermal cycling, satellite attitude control and spin simulation, power distribution unit (PDU) qualification, and battery charge regulator validation.

Compatibility & Integration The MP4361A integrates with MP4300A Series mainframes: MP4301A accepts 200/208 VAC input; MP4302A accommodates 380/400/480 VAC input. Mainframes are sold separately.

Features & description

From manufacturer datasheet

Built-in voltage and current measurement

Quick-disconnect rear-loading module Technical Specifications Model: MP4361A Instrument Type: Auto ranging solar array simulator module Maximum Power: 1000 W Maximum Open Circuit Voltage: 160 V Maximum Voltage Point: 160 V Maximum Short Circuit Current: 10 A Maximum Current Point: 10 A Minimum Impedance: 0.25 ohm Fixed Mode Maximum Voltage: 160 V Fixed Mode Maximum Current: 10 A Voltage Noise Peak Peak Fixed: 500 mV from 20 Hz to 20 MHz Voltage Noise Rms Fixed: 50 mV from 20 Hz to 10 MHz Voltage Programming Accuracy: 0.05 percent plus 25 mV at 23 plus or minus 5 C Current Programming Accuracy: 0.1 percent plus 7 mA at 23 plus or minus 5 C Voltage Measurement Accuracy: 0.05 percent plus 25 mV at 23 plus or minus 5 C Current Measurement Accuracy: 0.1 percent plus 7 mA at 23 plus or minus 5 C Programming Resolution Voltage: 1.8 mV Programming Resolution Current: 120 uA Overvoltage Protection Range: 0 to 172.5 V Overcurrent Protection Range: 0 to 12.5 A Output Capacitance: 80 nF Output Current Settling Time: less than 12.5 us Maximum Capacitive Load: 2000 uF Current Sinking Fixed Mode: 10 A Voltage Programming Rise Fall: less than 30 ms Modules Per Mainframe: 6 Mainframe Power: 6 kW Mainframe Height: 2U 88.1 mm

MP4361A Characteristics / Specifications

PARAMETER	VALUE
Model	MP4361A
Instrument Type	Auto ranging solar array simulator module
Maximum Power	1000 W
Maximum Open Circuit Voltage	160 V
Maximum Voltage Point	160 V
Maximum Short Circuit Current	10 A
Maximum Current Point	10 A
Minimum Impedance	0.25 ohm
Fixed Mode Maximum Voltage	160 V
Fixed Mode Maximum Current	10 A
Voltage Noise Peak Peak Fixed	500 mV from 20 Hz to 20 MHz
Voltage Noise Rms Fixed	50 mV from 20 Hz to 10 MHz
Voltage Programming Accuracy	0.05 percent plus 25 mV at 23 plus or minus 5 C
Current Programming Accuracy	0.1 percent plus 7 mA at 23 plus or minus 5 C
Voltage Measurement Accuracy	0.05 percent plus 25 mV at 23 plus or minus 5 C
Current Measurement Accuracy	0.1 percent plus 7 mA at 23 plus or minus 5 C
Programming Resolution Voltage	1.8 mV
Programming Resolution Current	120 uA
Overvoltage Protection Range	0 to 172.5 V
Overcurrent Protection Range	0 to 12.5 A
Output Capacitance	80 nF
Output Current Settling Time	less than 12.5 us
Maximum Capacitive Load	2000 uF
Current Sinking Fixed Mode	10 A
Voltage Programming Rise Fall	less than 30 ms

PARAMETER	VALUE
Modules Per Mainframe	6
Mainframe Power	6 kW
Mainframe Height	2U 88.1 mm
Output Terminal Isolation	plus or minus 240 Vdc from chassis
Calibration Interval	1 year
Host Mainframes	MP4301A 200/208 Vac and MP4302A 380/400/480 Vac

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	
Specifications	
PARAMETER	VALUE
Model	MP4361A
Instrument Type	Auto ranging solar array simulator module
Maximum Power	1000 W
Maximum Open Circuit Voltage	160 V
Maximum Voltage Point	160 V
Maximum Short Circuit Current	10 A
Maximum Current Point	10 A
Minimum Impedance	0.25 ohm
Fixed Mode Maximum Voltage	160 V
Fixed Mode Maximum Current	10 A
Voltage Noise Peak Peak Fixed	500 mV from 20 Hz to 20 MHz
Voltage Noise Rms Fixed	50 mV from 20 Hz to 10 MHz
Voltage Programming Accuracy	0.05 percent plus 25 mV at 23 plus or minus 5 C
Current Programming Accuracy	0.1 percent plus 7 mA at 23 plus or minus 5 C
Voltage Measurement Accuracy	0.05 percent plus 25 mV at 23 plus or minus 5 C
Current Measurement Accuracy	0.1 percent plus 7 mA at 23 plus or minus 5 C
Programming Resolution Voltage	1.8 mV
Programming Resolution Current	120 uA
Overvoltage Protection Range	0 to 172.5 V
Overcurrent Protection Range	0 to 12.5 A
Output Capacitance	80 nF
Output Current Settling Time	less than 12.5 us
Maximum Capacitive Load	2000 uF
Current Sinking Fixed Mode	10 A
Voltage Programming Rise Fall	less than 30 ms
Modules Per Mainframe	6

PARAMETER	VALUE
Mainframe Power	6 kW
Mainframe Height	2U 88.1 mm
Output Terminal Isolation	plus or minus 240 Vdc from chassis
Calibration Interval	1 year
Host Mainframes	MP4301A 200/208 Vac and MP4302A 380/400/480 Vac

Notes
From Keysight MP4300A Series Modular Solar Array Simulator data sheet 3122-1387EN MP4361A columns. Warranted specs apply 0 to 40 C unless noted; current derates 1 percent perCabove 40 C ambient on the mainframe.

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>

NIST-traceable calibration · SAM registered ·
30-day returns
NAICS 423690 · 811210 · 541380
Generated August 15, 2026

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