

**Aumictech**

Test & measurement · bought, sold, repaired, calibrated

Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight SL1002A High Voltage DAQ Module

Agilent Keysight SL1002A Scienlab Battery Test System Cell Level 600 A The Keysight SL1002A isaScienlab cell-level battery test system. OEM data sheet 5992-3513EN lists systems up to 6 V, 600 A, and 3.6 kW per channel with 0.05 percent accuracy and bidirectional energy recovery greater than 90 percent efficiency. Cell characterization of internal resistance, efficiency, capacity, cycle life, and calendar life with optional EIS on-channel. Bidirectional power stage returns energy to the mains The Keysight SL1002A isaScienlab cell-level battery test system. OEM data sheet 5992-3513EN lists systems up to 6 V, 600 A, and 3.6 kW per channel with 0.05 percent accuracy and bidirectional energy recovery greater than 90 percent efficiency. Cell characterization of internal resistance, efficiency, capacity, cycle life, and calendar life with optional EIS on-channel. Bidirectional power stage returns energy to the mains Optional integrated EIS without changing DUT contact



MODEL

**Agilent / Keysight
SL1002A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

SL1002A

LISTING

<https://aumictechlabs.com/products/sl1002a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight SL1002A is a solid battery test system designed for cell-level analysis, providing sink and source capabilities for automotive and industrial applications. This system is

engineered to deliver reliable, precise, and reproducible measurement results, focusing on characterizing various aspects of battery cells. Technical Specifications General Capabilities: Product Type: Battery Test System – Cell Level Application Focus: Characterization of battery cells, including internal resistance, mechanical resistance, efficiency, capacity, cyclical life, and calendar life spans. System Architecture: Standalone unit with a Measurement and Control Unit (MCU) running on a real-time Linux PC. Efficiency: Greater than 90% efficiency, with a bidirectional power supply that returns energy to the power mains. Configuration: Modular design allowing adaptation of the number of channels to changing requirements. Environmental Operation: * Ambient Temperature: 10 to 40 °C * Air Humidity: 30 to 75% relative humidity * Sound Pressure Level: < 70 dB(A) measured at 1 meter distance from the front, according to DIN EN 3744. Protection Rating: IP 54 Electrical Characteristics: Voltage Range: 0 to 6 V Output Current Options: ±100 A, ±300 A, ±600 A per channel. Power Class per Channel: 0.6 kW, 1.8 kW, 3.6 kW Measurement Accuracy: * Overall system accuracy: 0.05% * Voltage measurement: Four-wire measurement. * Current measurement: Offset accuracy is multiplied by two when connecting two channels in parallel. Sample Rate (Data Acquisition): Maximum of 20 kS/s internally (625 kS/s). Temperature Input: Up to three temperature inputs per channel (Pt100, 4-wire), with a range of -50 to +130 °C and an accuracy of ±1 K per test channel. Functional Capabilities: Sink and Source Emulation: Emulates sink and source for battery cells. Autonomous Sequence Control: Enables independent control of test sequences. Data Acquisition: Captures and stores measurement data. Safety Features: * Inherent safety against overheating, overcapacity, short circuit, and idling. * Protection against reverse polarity is verified before output contactors close. (Note: No hardware protection against reverse polarity is present). * Monitoring of all internal voltages, currents, and temperatures. * DC output contactors capable of disconnecting the DUT at full load current. Electrochemical Impedance Spectroscopy (EIS): Optional integrated EIS measurement capability without changing the DUT contact. Connectivity and Interfaces: Communication Interface: Ethernet. Control of External Components: Capable of controlling external components such as temperature chambers and conditioning units via Ethernet protocol. Physical Characteristics: Dimensions and Weight: Specific dimensions and weight vary depending on the configuration. The system can be placed on a 15 cm high base stand or high rollers for flexible mobility. Software and Control: Primary Control Software: Scienlab Energy Storage Discover (ESD) for individual test system control and monitoring. Laboratory Management Software: PathWave Lab Operations for Battery Test for managing and coordinating entire battery testing laboratories with multiple systems. Operating System: Windows 10 support for the control software. Scalability and Configuration Options: Channel Flexibility: Perform the same or different tests on each channel. Manual Parallel Operation: Up to six output stages can be manually paralleled. The output contacts and sense circuit require customer interconnection. Automated Parallel Connection: Option SL1079A-CM2 for automated parallel connection of two channels, including monitoring of current and voltage limits. Director/Follower Definition: Configurable via the ESD software. Compatibility * Software Integration: Compatible with Keysight Scienlab Energy Storage Discover (ESD) software and PathWave Lab Operations for Battery Test. External Component Control: Supports integration with external components like t

SL1002A Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	Scienlab cell-level battery test system
Series Family	Keysight Scienlab SL100x battery test
Voltage Per Channel Maximum	6 V
Current Per Channel Maximum	600 A
Power Per Channel Maximum	3.6 kW
Accuracy Class	0.05 percent
Efficiency	greater than 90 percent
Temperature Inputs Per Channel	up to three
Current Option Count	three maximum-current selections then channel count
Control Software	Scienlab Energy Storage Discover (ESD)
Controller	measurement and control unit Linux real-time PC
Sequence Control	autonomous sequence control with captured data storage
Communication Interface	Ethernet
Protection Type	IP54
Ambient Temperature	10 to 40 C
Air Humidity	30 to 75 percent relative humidity
Sound Pressure	less than 70 dB(A) at 1 m from front per DIN EN 3744
Manual Parallel Channels	up to six output stages
Automated Parallel Option	SL1079A-CM2 two-channel automatic parallel connection
Parallel Voltage Accuracy Note	paralleling two channels does not affect voltage accuracy
Parallel Current Offset Note	current-accuracy offset is multiplied by two; percent-of-reading term unchanged
Polarity Check	reverse-polarity check before output contactors close
Internal Monitoring	all internal voltages, currents, and temperatures
Output Contactors	capable of disconnecting DUT at full load current

PARAMETER	VALUE
Safety Class	inherent protection against overheating, overcapacity, short circuit, and idling
EIS Option	optional integrated electrochemical impedance spectroscopy on any channel
Power Architecture	bidirectional regenerative return to AC mains
Humidity	30 to 75 percent relative humidity

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
Instrument Type	Scienlab cell-level battery test system
Series Family	Keysight Scienlab SL100x battery test
Voltage Per Channel Maximum	6 V
Current Per Channel Maximum	600 A
Power Per Channel Maximum	3.6 kW
Accuracy Class	0.05 percent
Efficiency	greater than 90 percent
Temperature Inputs Per Channel	up to three
Current Option Count	three maximum-current selections then channel count
Control Software	Scienlab Energy Storage Discover (ESD)
Controller	measurement and control unit Linux real-time PC
Sequence Control	autonomous sequence control with captured data storage
Communication Interface	Ethernet
Protection Type	IP54
Ambient Temperature	10 to 40 C
Air Humidity	30 to 75 percent relative humidity
Sound Pressure	less than 70 dB(A) at 1 m from front per DIN EN 3744
Manual Parallel Channels	up to six output stages
Automated Parallel Option	SL1079A-CM2 two-channel automatic parallel connection
Parallel Voltage Accuracy Note	paralleling two channels does not affect voltage accuracy
Parallel Current Offset Note	current-accuracy offset is multiplied by two; percent-of-reading term unchanged
Polarity Check	reverse-polarity check before output contactors close
Internal Monitoring	all internal voltages, currents, and temperatures
Output Contactors	capable of disconnecting DUT at full load current
Safety Class	inherent protection against overheating, overcapacity, short circuit, and idling

PARAMETER	VALUE
EIS Option	optional integrated electrochemical impedance spectroscopy on any channel
Power Architecture	bidirectional regenerative return to AC mains

Notes
Numeric rows from Keysight SL1002A Battery Test System Cell Level 600 A data sheet 5992-3513EN.

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 14, 2026

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