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Data Sheet

August 14, 2026

AGILENT / KEYSIGHT

Agilent/Keysight SL1004A Isolation DAQ Module

Agilent Keysight SL1004A Scienlab Energy Storage Test System The Keysight SL1004A is a member of the Scienlab energy-storage test system family (SL1000A-SL1006A) aimed at higher-power module/pack cycling versus entry SL1000A/SL1001A systems. OEM Scienlab ESTS literature lists regenerative cycling, modular channels, ESD software, synchronized logging, and optional impedance spectroscopy across the SL100xA set. Module and pack-level battery cycling, production QA, and R&D sequences under ESD. SL1004A power-class cabinet in the SL100xA ladder The Keysight SL1004A is a member of the Scienlab energy-storage test system family (SL1000A-SL1006A) aimed at higher-power module/pack cycling versus entry SL1000A/SL1001A systems. OEM Scienlab ESTS literature lists regenerative cycling, modular channels, ESD software, synchronized logging, and optional impedance spectroscopy across the SL100xA set. Module and pack-level battery cycling, production QA, and R&D sequences under ESD. SL1004A power-class cabinet in the SL100xA ladder Instrument Type: Energy storage test system

**MODEL****Agilent / Keysight
SL1004A****CALIBRATION****Available on
request****CONDITION****Used****STATUS****In stock****RFQ / SKU****SL1004A****LISTING**<https://aumictechlabs.com/products/sl1004a-2/>

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NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight SL1004A is a benchtop battery test system designed for researchers and developers of battery cell technology. It enables accurate measurements of capacity, efficiency,

internal resistance, and cell lifespan. The system is capable of performing cyclic voltammetry measurements due to a third reference input. It integrates with Keysight's Energy Storage Discover (ESD) software for automating common compliance, load, and endurance tests. The SL1004A is part of Keysight's Scienlab battery test solutions, which can be coordinated with PathWave Lab Operations for Battery Test software for managing entire battery testing laboratories.

Technical Specifications

- * **Product Type:** Battery Test System – Cell Sample Level
- Model:** SL1004A
- Manufacturer:** Agilent/Keysight
- Status:** Discontinued / Currently Supported

Electrical Specifications

- * **Voltage Range:** -2 V to +8 V (or -6 V to +6 V)
- Current:** Up to ± 5 A
- Current Ranges:** Four ranges: ± 150 μ A to ± 5 A
- Power per Channel:** 0.04 kW
- Number of Channels:** Up to eight cells can be tested simultaneously
- Sink and Source Capability:** 16 channels (sink and source) (Note: This appears to be a potential discrepancy, as other sources indicate up to 8 cells tested simultaneously. Further clarification may be needed based on specific configuration or interpretation of "channels".)
- Measurement Accuracy:** Voltage measurement can be selected between anode/cathode, reference electrode/cathode, or reference electrode/anode.
- Number of Power-Line-Cycles (NPLC):** = 100.

Interfaces and Inputs

- * **Analog Inputs:** One K-type thermocouple input per channel.
- Reference Input:** A third reference input is available for cyclic voltammetry measurements.

Connectors:

- * Anderson Powerpole® connector for load and sense connection (with SL1004A-P01 option).
- * 2 mm laboratory plug for reference electrode connection.
- * Miniature plug for thermocouple connection.

Communication: Ethernet communication with the battery test system. Optional standardized remote interface for integration with external control and monitoring software.

Physical Specifications

- * **Form Factor:** Benchtop
- Dimensions (H x D x W):** 0.37 × 0.45 × 0.5 m (width and depth without accessories).

Software and Compatibility

- * **Control Software:** Keysight Energy Storage Discover (ESD) software. Supports Windows 10. Single software license per workstation. The SL1004A is supported up to bundle version 21.2.0, which includes ESD version 9.3.

Integration: Supports integration of external components such as environmental chambers, cooling and heating equipment, or optional Scienlab-brand Measurement and Control Modules.

Key Features

- * Simultaneous testing of up to eight cells.
- Accurate measurements of capacity, efficiency, internal resistance, and cell lifespan.
- Cyclic voltammetry measurements capability.
- Automated testing with Energy Storage Discover (ESD) software.
- Temperature effects can be correlated using built-in temperature channels.

Why Choose Aumictech for the Agilent/Keysight SL1004A? At Aumictech, we specialize in supplying high-end battery testing equipment. Whether you need precise cell characterization, automated testing workflows, or seamless integration with your existing lab infrastructure, our team ensures the Agilent/Keysight SL1004A delivers maximum performance for your battery development applications.

SL1004A Characteristics / Specifications

PARAMETER	VALUE
Instrument Type	Energy storage test system
Series Family	Keysight Scienlab SL1000A-SL1006A
Model	SL1004A
Software	Scienlab Energy Storage Discover (ESD)
Device Classes	battery modules and packs (family application table)
Energy Recovery	regenerative cycling
Data Logging	synchronized multi-channel recording
Impedance	optional EIS
Related Lower Power	SL1000A, SL1001A, SL1003A
Related Higher Power	SL1005A, SL1006A
Application Domain	HEV/EV energy-storage test
Form Factor	cabinet energy-storage test system
Control	ESD standardized and custom tests
Documentation	Keysight Scienlab ESTS family datasheet set listing SL1004A
Power Path	bidirectional DC cycling channels
Safety	Scienlab safety disconnect class
Remote	ESD PC plus EtherCAT class modules
Calibration	per Scienlab channel calibration procedure
Operating Environment	production/R&D cabinet ambient per SL1004A spec
Thermal	chamber integration class of ESTS
Verification	kW and voltage are on the SL1004A option table; do not invent them

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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Application Domain	HEV/EV energy-storage test
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Power Path	bidirectional DC cycling channels
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Calibration	per Scienlab channel calibration procedure
Operating Environment	production/R&D cabinet ambient per SL1004A spec
Thermal	chamber integration class of ESTS
Verification	kW and voltage are on the SL1004A option table; do not invent them
Notes On Power: configuration codes determine channel ratings	
Use: pack/module cycling	
Notes	
SL1004A asaScienlab ESTS family member from Keysight SL1000A-SL1006A literature. Exact voltage/current/power ratings are option-code specific and are not invented.	

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.