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Data Sheet

August 13, 2026

KEYSIGHT / AGILENT / HP

Keysight / Agilent / HP E1539A Strain Measurement SCP Module

HP Agilent E1539A Strain Measurement SCP Module The HP E1539A is a strain-measurement signal-conditioning plug-on (SCP) for HP VXI scanning ADC / algorithmic controllers (E1413/E1415 family). It provides bridge excitation and conditioning for strain gages. Not a complete digitizer. The HP E1539A is a strain-measurement signal-conditioning plug-on (SCP) for HP VXI scanning ADC / algorithmic controllers (E1413/E1415 family). It provides bridge excitation and conditioning for strain gages. Not a complete digitizer.



MODEL

**Keysight / Agilent /
HP E1539A**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

E1539A

LISTING

[https://aumictechlabs.c
om/products/e1539a-2/](https://aumictechlabs.com/products/e1539a-2/)

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight E1539A Strain Measurement SCP Module is a high-precision strain gauge acquisition module for VXI systems, engineered for structural analysis, material testing, and transducer calibration. It supports full, half, and quarter bridge configurations with program-selectable bridge completion resistors and integrated self-calibration. The module delivers measurement rates up to 25 kSa/s via multiplexed output and 196 kSa/s for dynamic measurements, with strain resolution as low as 0.1 $\mu\epsilon$ and RMS noise of 0.4 $\mu\epsilon$. Technical Specifications Strain Measurement Range ($\pm 5V$ excitation, quarter bridge): $\pm 200,000 \mu\epsilon$ $\pm 50,000 \mu\epsilon$ $\pm 12,500 \mu\epsilon$ $\pm 3,125 \mu\epsilon$ Resolution & Noise: Resolution: 0.1 $\mu\epsilon$ minimum RMS Noise: 0.4 $\mu\epsilon$ Bridge Excitation & Completion: Excitation:

User-supplied in 8-channel banks Completion Resistors: $120\Omega/350\Omega \pm 0.05\%$, TC ± 5 ppm/ $^{\circ}\text{C}$
Shunt Calibration Resistor: $50\text{ k}\Omega \pm 0.1\%$, TC ± 25 ppm/ $^{\circ}\text{C}$ Measurement Accuracy: Gain Accuracy:
 $\pm 0.01\%$ of reading Gain Error: $\pm 0.01\%$ of reading Voltage Offset: $<1\text{ mV}$ Quarter Bridge Offset: $3\text{ }\mu\text{e}$
($\pm 2\text{ }\mu\text{V}$), $\pm 4\text{ }^{\circ}\text{C}$ of tare calibration Sampling Performance: Multiplexed Output: Up to 25 kSa/s
Dynamic Measurements: Up to 196 kSa/s Remote Operation: Multiplexed Output: Up to 330
meters (1000 ft) Buffered Outputs: Up to 100 meters (300 ft) Environmental: Operating
Temperature: $-5\text{ }^{\circ}\text{C}$ to $+55\text{ }^{\circ}\text{C}$ Operating Humidity: 5% to 85% RH Key Features Full, half, and
quarter bridge configuration support Internal self-calibration with $50\text{ k}\Omega$ source Program-
selectable shunt calibration resistors "Mx+b" linearization on all channels Low RMS noise with
averaging capability Typical Applications Structural health monitoring and deformation analysis
Material stress and fatigue testing Transducer calibration and validation Long-distance remote
strain data acquisition Compatibility & Integration Integrates with Keysight E1400 family VXI
mainframes. Works with E1422A Remote Channel DAC Module for static measurements and
E1432A/E1433A Digitizers for dynamic measurements.

Features & description

From manufacturer datasheet

Applications

- Strain-gage conditioning on E1413/E1415

E1539A Characteristics / Specifications

PARAMETER	VALUE
Model	E1539A
Manufacturer	Hewlett Packard / Agilent / Keysight
Instrument Type	Strain Measurement SCP Module
Alias	E1539A; HP E1539A
Function	strain gage signal conditioning plug-on
Family	HP VXI SCP
Host Modules	E1413 scanning ADC / E1415A algorithmic controller class
Related E1415A	algorithmic closed loop controller
Related E1355A	8-channel 120 ohm strain relay mux (different)
Sensor	strain gage bridges
Excitation	bridge excitation on SCP
Form	SCP daughter/plug-on
NotADigitizer	conditioning only
VXI	via host scanning ADC/controller
Status	HP E1539A EOL
Documentation	E1539A SCP / E1413 family
Installation	SCP site on host module
Channels	strain channels per E1539A sheet
Resistance Class	gage resistance per config (120/350 ohm class)
Use	bridge conditioning
Calibration	system shunt-cal with host
Cooling	host module airflow
Power	from host module
Compatibility	SCP-capable VXI measurement modules
Identification	E1539A Notes Strain SCP identity from HP E1539A. Channel count excitation volts and gage ohms are on the E1539A SCP sheet. Do not

PARAMETER	VALUE
	copy E1355A 8-channel 120 ohm mux figures blindly.

E1539A Specifications

PARAMETER	VALUE
HP Agilent E1539A Strain Measurement SCP Module	Overview
Applications	- Strain-gage conditioning on E1413/E1415
Key Features	- Strain SCP E1539A
Technical Specifications	Model: E1539A

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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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

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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.