



Agilent E1531A

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8-Channel Voltage Output SCP

Data Sheet

- 8-channel non-isolated voltage source
- Current limited to protect from short circuits
- Source ± 16 V at up to 5 mA output current

Description

The Agilent E1531A 8-Channel Voltage Output SCP provides eight channels of non-isolated voltage source outputs. Each channel can source ± 16 V at up to 5 mA output current. The output voltage resolution is 16 bits (500 μ V). Each output is current-limited to protect it from short circuits.

Use the E1531A with the following VXI modules:

Model	Description
E1415A	Algorithmic Closed Loop Controller
E1419A	Multifunction Measurement and Control Module

Refer to the Agilent Technologies Website for recent product updates, if applicable.

Product Specifications

Maximum Input Voltage

(non-operating externally applied voltage without damage applied to any output Hi terminal)

Damage level: $>\pm 42$ V peak

Noise

20 Hz to 250 kHz: <1.2 mV rms

Voltage Output

Range: ± 16 V (Full Scale at up to 5 mA)
Resolution: 16 bits = 500 μ V (monotonic to 16 bits)
Accuracy: * ($\pm 0.02\%$ of expected output) \pm (3.6 mV offset error)

Temperature coefficient:

Accuracy: $\pm 0.004\%/^{\circ}\text{C}$

Offset error: 0.2 mV/ $^{\circ}\text{C}$

Settling time: 300 μ s

Output impedance: 50 Ω , 15 Ω through Common Mode Choke

* 23 $^{\circ}\text{C} \pm 1^{\circ}\text{C}$ (90 days)

Power Required

± 5 V:

Typical: 11 mA

Maximum: 15 mA

± 24 V:

0 mA output typical: 60 mA

0 mA output maximum: 75 mA

5 mA output typical: 100 mA

5 mA output maximum: 115 mA

Current Requirements (Amps)

5 V max	24 V max	-24 V max
0.015	0.075	0.075

Ordering Information

Description	Product No.
8-Channel Voltage Output SCP	E1531A



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Related Literature

2000 Test System and VXI Catalog CD-ROM,
Agilent Pub. No. 5980-0308E (detailed specifications for VXI products)

2000 Test System and VXI Catalog,
Agilent Pub. No. 5980-0307E (overview of VXI products)

1998 Test System and VXI Products Data Book,
Agilent Pub. No. 5966-2812E

Online

Internet access for Agilent product information, services and support
www.agilent.com/find/tmdir

VXI product information
www.agilent.com/find/vxi

Defense Electronics Applications
www.agilent.com/find/defense_ATE

Agilent Technologies VXI Channel Partners
www.agilent.com/find/vxichanpart

Agilent Technologies' HP VEE Application Website
www.agilent.com/find/vee

Agilent Technologies Data Acquisition and Control Website
www.agilent.com/find/data_acq

Agilent Technologies Instrument Driver Downloads
www.agilent.com/find/inst_drivers

Agilent Technologies Electronics Manufacturing Test Solutions
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Get assistance with all your test and measurement needs at
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