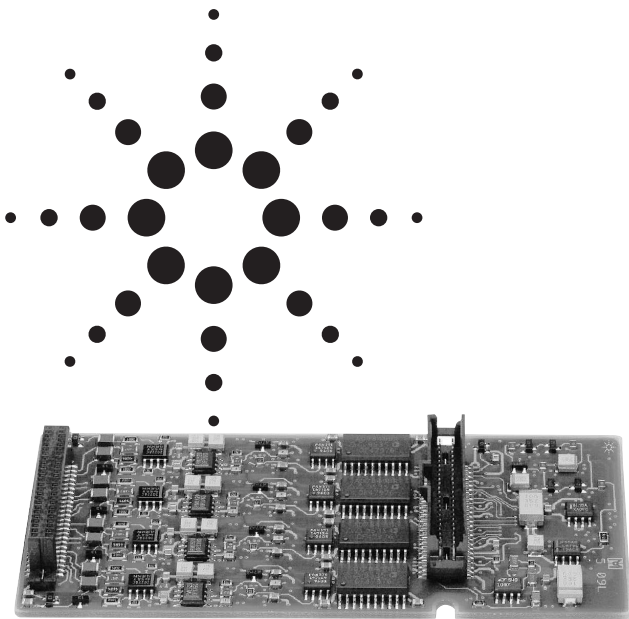


# Agilent E1531A

## 8-Channel Voltage Output SCP

### Data Sheet

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



Agilent E1531A

### Description

The Agilent E1531A 8-Channel Voltage Output SCP provides eight channels of non-isolated voltage source outputs. Each channel can source  $\pm 16$  V at up to 5 mA output current. The output voltage resolution is 16 bits (500  $\mu$ 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:  $\geq \pm 42$  V peak

#### Noise

20 Hz to 250 kHz: <1.2 mV rms

#### Voltage Output

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

#### Temperature coefficient:

Accuracy:  $\pm 0.004\%/^{\circ}$ C  
 Offset error: 0.2 mV/ $^{\circ}$ C  
 Settling time: 300  $\mu$ s  
 Output impedance: 50  $\Omega$ , 15  $\Omega$  through Common Mode Choke

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

#### Power Required

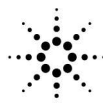
$\pm 5$  V:  
 Typical: 11 mA  
 Maximum: 15 mA  
 $\pm 24$  V:  
 0 mA output typical: 60 mA  
 0 mA output maximum: 75 mA  
 5 mA output typical: 100 mA  
 5 mA output maximum: 115 mA

#### 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](http://www.agilent.com/find/tmdir)

VXI product information  
[www.agilent.com/find/vxi](http://www.agilent.com/find/vxi)

Defense Electronics Applications  
[www.agilent.com/find/defense\\_ATE](http://www.agilent.com/find/defense_ATE)

Agilent Technologies VXI Channel Partners  
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Agilent Technologies' HP VEE Application Website  
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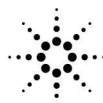
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