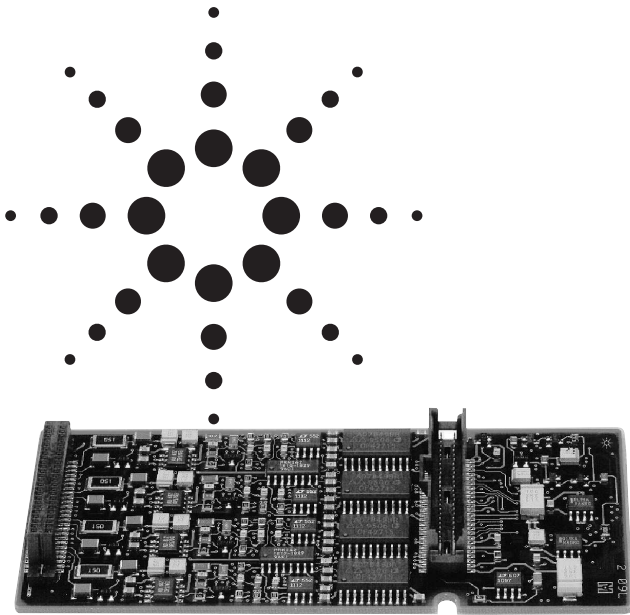


# Agilent E1532A

## 8-Channel Current Output SCP

### Data Sheet



Agilent E1532A

### Description

The Agilent E1532A 8-Channel Current Output SCP provides eight channels of non-isolated current source outputs. Each output can source  $\pm 10$  mA with up to 15 V compliance.

Each channel has over-voltage protection to protect the SCP and A/D from damaging voltage levels ( $>21$  V) applied to its outputs. You can connect two channels in parallel to use with 4-20 mA control loops. Power limitations will allow only seven (7) E1532A SCPs to be installed in an E1415A or E1419A.

Use the E1532A 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,  
into 250  $\Omega$ :  $<2$   $\mu$ A rms

- 8-channel non-isolated current source
- Over-voltage protection
- Source  $\pm 10$  mA with up to 15 V compliance

#### Current Output

Range:	$\pm 10$ mA (Full Scale at $>\pm 15$ V compliance)
Resolution:	16 bits = 316 nA (monotonic to 16 bits)
Accuracy: *	( $\pm 0.06\%$ of expected output) $\pm (3.3$ $\mu$ A offset error)
Temperature coefficient:	
Accuracy:	$\pm 0.004\%/^{\circ}\text{C}$
Offset error:	0.3 $\mu$ A/ $^{\circ}\text{C}$
Settling time:	350 $\mu$ s with 250 $\Omega$ load
Output impedance:	$>\pm 600$ k $\Omega$

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

#### Power Required

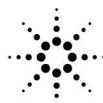
$\pm 5$ V:	
Typical:	11 mA
Maximum:	15 mA
$\pm 24$ V:	
0 mA output typical:	60 mA
0 mA output maximum:	75 mA
10 mA output typical:	135 mA
10 mA output maximum:	150 mA

#### Current Requirements (Amps)

5 V max	24 V max	-24 V max
0.011	0.065	0.065

#### Ordering Information

Description	Product No.
8-Channel Current Output SCP	E1532A



**Agilent Technologies**  
Innovating the HP Way

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

Agilent Technologies' HP VEE Application Website  
[www.agilent.com/find/vee](http://www.agilent.com/find/vee)

Agilent Technologies Data Acquisition and Control Website  
[www.agilent.com/find/data\\_acq](http://www.agilent.com/find/data_acq)

Agilent Technologies Instrument Driver Downloads  
[www.agilent.com/find/inst\\_drivers](http://www.agilent.com/find/inst_drivers)

Agilent Technologies Electronics Manufacturing Test Solutions  
[www.agilent.com/go/manufacturing](http://www.agilent.com/go/manufacturing)

**Get assistance with all your test and measurement needs at  
[www.agilent.com/find/assist](http://www.agilent.com/find/assist)  
or check your local phone book for the Agilent office  
near you.**

## Agilent Technologies' test and measurement service/support commitment

Agilent strives to maximize the value our test and measurement products give you, while minimizing your risk and service/support problems. We work to ensure that each product is realistically described in the literature, meets its stated performance and functionality, has a clearly stated global warranty, and is supported at least five years beyond its production life. Our extensive self-help tools include many online resources ([www.agilent.com](http://www.agilent.com)).

Experienced Agilent test engineers throughout the world offer practical recommendations for product evaluation and selection. After you purchase an Agilent product, they can provide no-charge assistance with operation verification and basic measurement setups for advertised capabilities. To enhance the features, performance, and flexibility of your test and measurement products—and to help you solve application challenges—Agilent offers free or extra-cost product options and upgrades, and sell expert engineering, calibration, and other consulting services.

### Phone and fax

United States:  
Agilent Technologies  
(tel) 1 800 452 4844

Canada:  
Agilent Technologies Canada Inc.  
(tel) 1 877 894 4414

Europe:  
Agilent Technologies  
Test & Measurement  
European Marketing Organisation  
(tel) (31 20) 547 2000

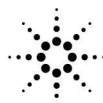
Japan:  
Agilent Technologies Japan Ltd.  
(tel) (81) 426 56 7832  
(fax) (81) 426 56 7840

Latin America:  
Agilent Technologies  
Latin American Region Headquarters, U.S.A.  
(tel) (305) 267 4245  
(fax) (305) 267 4286

Australia/New Zealand:  
Agilent Technologies Australia Pty Ltd.  
(tel) 1 800 629 485 (Australia)  
(fax) (61 3) 9272 0749  
(tel) 0 800 738 378 (New Zealand)  
(fax) (64 4) 802 6881

Asia Pacific:  
Agilent Technologies, Hong Kong  
(tel) (852) 3197-7777  
(fax) (852) 2506-9284

Data Subject to Change  
© Agilent Technologies 2000  
Printed in the U.S.A. 04/2000  
Publication No.: 5966-2414E



**Agilent Technologies**  
Innovating the HP Way