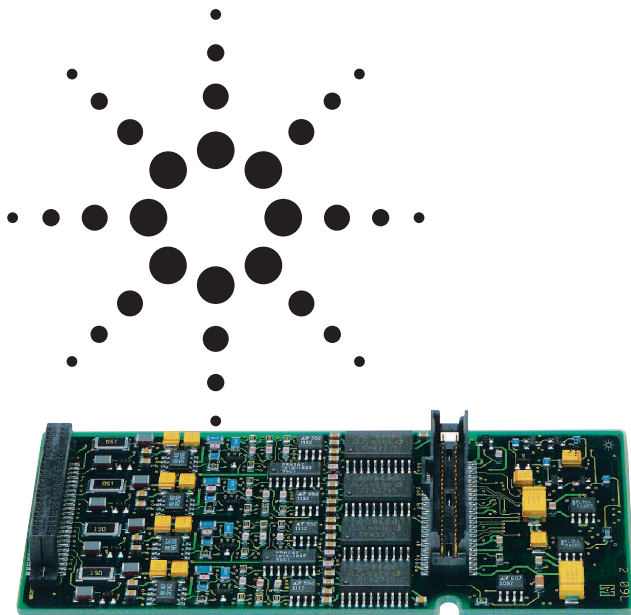


## Agilent E1532A

# 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      |



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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  
[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)

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