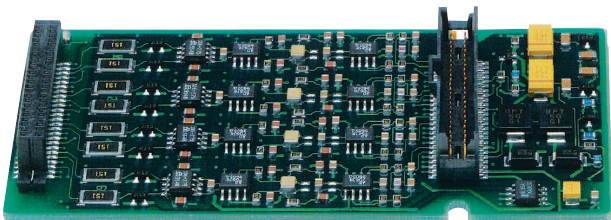


Agilent E1513A

8-Channel Fixed Attenuator/Fixed Filter SCP

Data Sheet

- Use with Agilent E1413C/E1415A/E1419A
- Divide-by-16 input attenuator per channel
- Fixed 7 Hz filter per channel
- ± 60 V input with over-voltage protection



Agilent E1513A

Description

The Agilent E1513A 8-Channel Divide-by-16 Fixed Attenuator & 7 Hz Fixed Filter SCP provides eight fixed low-pass filters with a 3 dB cutoff frequency of 7 Hz and eight divide-by-16 attenuators. It also provides input over-voltage protection.

Use the E1513A with the following VXI modules:

Model	Description
E1413C	64-Channel Scanning A/D Converter
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

These specifications for the E1513A reflect the combined performance of the scanning A/D and the E1513A SCP.

Measurement Ranges

DC Volts: ± 1 V to ± 60 V Full Scale

Input Characteristics

Maximum input voltage (normal mode plus common mode):

Operating: ± 60 Vdc
Damage: ± 60 Vdc *

Maximum common mode voltage:

Operating: ± 60 Vdc
Damage: ± 60 Vdc *

Common mode rejection:

0 to 60 Hz: -60 dB

Normal Mode Rejection:

7 Hz: -3 dB

50 Hz: > -24 dB

60 Hz: > -27 dB

Input impedance: >1 MΩ differential

* 60 Vdc is the maximum voltage allowed by Agilent safety guidelines for the SCP connector pin spacing. This is determined at the maximum temperature and humidity operating point.

Maximum Tare Cal Offset

Maximum tare cal offset depends on A/D range and SCP gain.

A/D Range ±V F. Scale	Maximum Offset
16	49.95
4	13.13
1	3.689
0.25	1.212
0.0625	0.606

Measurement Accuracy DC Volts

If autoranging is ON, add ± .05% of reading for input voltages >± 4 Vdc.

A/D Range ±V F. Scale	Linearity % of Reading	Common Mode Error % of Vcm	Offset Error	Noise 3σ	Noise* 3σ
.0625** (1 V)	0.02%	0.1%	100 μV	700 μV	280 μV
.25** (4 V)	0.02%	0.1%	175 μV	860 μV	430 μV
1 (16 V)	0.02%	0.1%	500 μV	1.8 mV	1.4 mV
4 (60 V)	0.02%	0.1%	1.95 mV	7.0 mV	5.8 mV

* A/D filter ON (min sample period ≥145 μs: ≤100 Hz scan rate 64 ch).

** These ranges are not recommended.

Temperature Coefficients	
Temp Range	Tempco
Gain:	0.001/°C
Offset:	0.14 μV/°C
	0.8 μV + 0.38 μV/°C

Current Requirements (Amps)

5 V max	24 V max	-24 V max
0.0054	0.02	0.02

Ordering Information

Description	Product No.
8-Channel Divide-by-16 Fixed Attenuator & 7 Hz Fixed Filter SCP	E1513A

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
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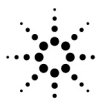
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