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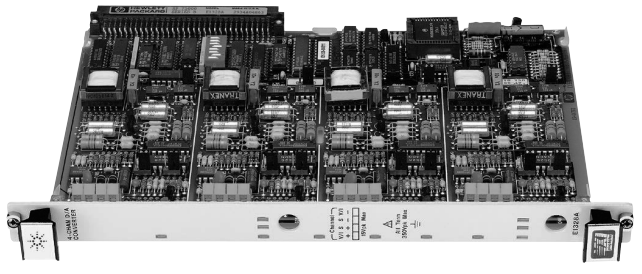
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Find the *Keysight / Agilent E1328A* at our website: ***Click HERE***

Agilent E1328A
4-Channel D/A Converter

Data Sheet

- **1-Slot, B-size, register based**
- **Four isolated voltage or current DACs**
- **± 10.92 V or ± 21.8 mA output**
- **Software calibration**
- **Remote voltage sensing with *no-fault* operation**
- **Multiple channels connected in series/parallel**



Agilent E1328A

Description

The Agilent E1328A 4-Channel D/A Converter is a **B-size, 1-slot, register-based VXI module.** It has four independent, isolated digital-to-analog channels configurable for either dc voltage or dc current output. Remote voltage sensing is available with no-fault operation.

All four channels are independently isolated and may be floated up to 350 Vdc from ground. Multiple channels may be connected in series or in parallel to increase the voltage or current range (to 48 V or 96 mA using a single module). The D/A converter can be calibrated through software commands. You can use this module in a system with a 5.5-digit multimeter (E1326B or equivalent) and multiplexer. Then, the system can be programmed to automatically calibrate the D/A outputs to 24-hour specifications each day. This product may be adapted for use in a C-size mainframe.

Refer to the Agilent Technologies Website for instrument driver availability and downloading instructions, as well as for recent product updates, if applicable.

C-size Adapter

This product may be adapted for use in a C-size mainframe. See the E1403C Adapter description.

Product Specifications

DC Voltage

Amplitude:	± 10.92 Vdc max (cal on), ± 12 Vdc max. (cal off)
Resolution:	16 bits *(cal off)* 333µV programming interval *(cal on)* Monotonic to 2 mV
Amplitude accuracy (dc):	
(cal on, within ± 5 °C of cal temperature and same load as at cal)	
24-hour:	± (0.05% of output + 3.3 mV)
90-day:	± (0.15% of output + 29 mV)
Output current:	
Compliance current:	24 mA
Short circuit current:	≤30 mA
Differential ripple and noise:	<2 mV rms *(20 Hz–250 kHz, 1 kΩ load)*

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DC Current

Range: ± 21.8 mA *(cal on)*
± 24.0 mA *(cal off)*

Resolution: 667 nA programming interval *(cal on)*, 16 bit resolution *(cal off)* Monotonic to 4 µA

Accuracy:
(cal on, within ± 5 °C of cal temperature and same load as at cal)

24-hour: ± (0.05% of output + 7 µA)

90-day: ± (0.15% of output + 59 µA)

Output voltage:

Compliance voltage: 13 V

Max open circuit voltage: ≤19 V

Differential ripple and noise: <4 µA rms *(20 Hz - 250 kHz, into 100 Ω)*

General Specifications

Settling time: 750 µs *(cal on)*, 500 µs *(cal off) (single channel, to rated accuracy)*

Isolation: 250 V rms, 350 Vdc/ac pk *(channel-to-channel or chassis)*

Max wire size: 16 AWG (1.5 mm)

VXI Characteristics

VXI device type: Register based
Data transfer bus: A16, D16 DTB Slave
Size: B
Slots: 1
Connectors: P1
Shared memory: n/a
VXI busses: n/a
C-size compatibility: Yes

Instrument Drivers

See the Agilent Technologies Website (http://www.agilent.com/find/inst_drivers) for driver availability and downloading.

Command module firmware: ROM
Command module firmware rev: A.01
I-SCPI Win 3.1: Yes
I-SCPI Series 700: Yes
C-SCPI LynxOS: Yes
C-SCPI Series 700: Yes
Panel Drivers: Yes
VXI*plug&play* Win Framework: Yes
VXI*plug&play* Win 95/NT Framework: Yes
VXI*plug&play* HP-UX Framework: No

Module Current

	I_{PM}	I_{DM}
+5 V:	0.4	0.02
+12 V:	0.5	0.01
–12 V:	0	0
+24 V:	0	0
–24 V:	0	0
–5.2 V	0	0
–2 V:	0	0

Cooling/Slot

Watts/slot: 6.50
ΔP mm H_2O: 0.11
Air Flow liter/s: 0.52

Ordering Information

Description	Product No.
4-Channel D/A Converter	E1328A
Service Manual	E1328A 0B3
Japan - Japanese Localization	E1328A ABJ
3 yr Retn. to Agilent to 1 yr. OnSite Warr.	E1328A W01

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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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