

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

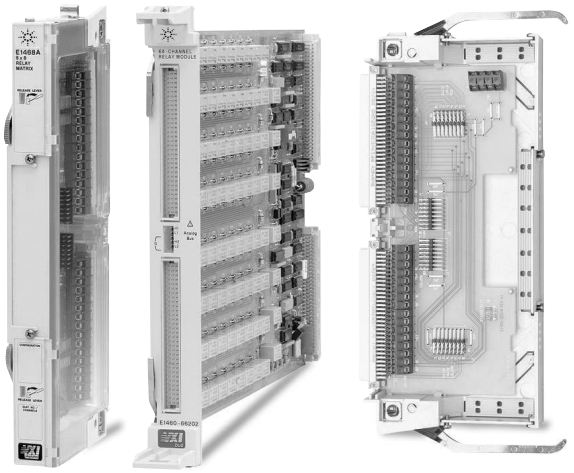
Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *Keysight / Agilent E1468A* at our website: ***Click HERE***

Agilent E1468A
8x8 Relay Matrix Switch
Data Sheet

- **1-Slot, C-size, register based**
- **Connect multiple inputs to multiple outputs**
- **8x8 and 4x16 two-wire switching**
- **Guard or shield available for each row and column**
- **Includes QUIC easy-to-use terminal block**
- **Latching relays**



Agilent E1468A

Description

The Agilent E1468A matrix module is a **C-size, 1-slot, register-based VXI module.** This module consists of a 64-channel, two-wire relay component card (uses the same component card as the E1460A). A terminal block, that provides 8x8 matrix topology, is included. The E1468A matrix switches both high and low on each crosspoint.

Multiple modules can easily be interconnected with the E1468-80002 daisy-chain cable. The E1468-80002 daisy-chain cable allows quick connect and disconnect of one module from another and is easily attached to expansion connectors on the E1468A terminal blocks. For applications requiring more than 64 crosspoints, the E1465/66/67A relay matrixes are recommended unless your application requires the high voltage/power capability and superior crosstalk performance of the E1468A matrix.

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

Configuration

The E1468-80002 daisy-chain cable allows quick connect and disconnect of one module from another and is easily attached to expansion connectors on the E1468/69A terminal blocks. For a 4x48 matrix, order three daisy-chain cables to interconnect three E1469As. For a 16x16 matrix, order eight daisy-chain cables to interconnect four E1468As. Similarly, to interconnect three E1468As into an 8x24 matrix, order four daisy-chain cables. Check to see whether the high density E1465/66/67A family is a better fit for your application.

Agilent Technologies
Innovating the HP Way

STEP Dionysos Job: 210%XXX5370-0001 5965-5594E Comp: 04-28-00 Time: 10:53 OP: NN

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Product Specifications

Input

Maximum voltage (any terminal to any other terminal or chassis):

DC:	220 V
AC rms:	250 V
Peak:	n/a

Maximum current (per channel common, non-inductive):
1 Adc or ac rms (V<30 Vdc/rms), 0.3 Adc or ac rms (V<220 Vdc/rms)

Maximum power:

Per channel:	n/a
Per module:	40 VA

DC

Maximum thermal offset per channel, differential Hi-Lo:	7 µV

Closed channel resistance (per channel):

Initial:	<1.5 Ω (initially)
End of life:	<3.5 Ω

Insulation resistance (between any two points):

≤40 °C, 95% RH:	5 x 10E8 Ω
≤40 °C, ≤40% RH:	5 x 10E8 Ω

AC

Minimum bandwidth (–3 dB, $Z_L = Z_X = 50$ Ω):	10 MHz, 25 MHz (typical)

Crosstalk (dB, channel-to-channel typical):

<10 kHz:	<–90
<100 kHz:	n/a
<1 MHz:	n/a
<10 MHz:	n/a

Closed channel capacitance:

Hi-Lo:	650 pF
Lo-Chassis:	700 pF

Note: *Crosstalk, insulation resistance, and bandwidth specifications are for a single matrix module only. Matrix expansion will degrade these specifications.*

General

Minimum relay life:	
No Load:	4x10E6 operations
Screw terminal wire size:	18 to 26 AWG (1.2, 0.9, 0.75, 0.6, 0.5 mm)
Bias current:	<0.5 nA/Volt *(at 25 °C, 25% RH) (From HI or LO to chassis, per group of 16 channels)*

General Specifications

VXI Characteristics

VXI device type:	Register based, A16, slave only
Size:	C
Slots:	1
Connectors:	P1/2
Shared memory:	None
VXI busses:	TTL trigger bus
C-size compatibility:	n/a

Instrument Drivers

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

Command module firmware:	Downloadable
Command module firmware rev:	A.04
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:	0.1	0.1
+12 V:	0	0
–12 V:	0	0
+24 V:	0	0
–24 V:	0	0
–5.2 V:	0	0
–2 V:	0	0

Cooling/Slot

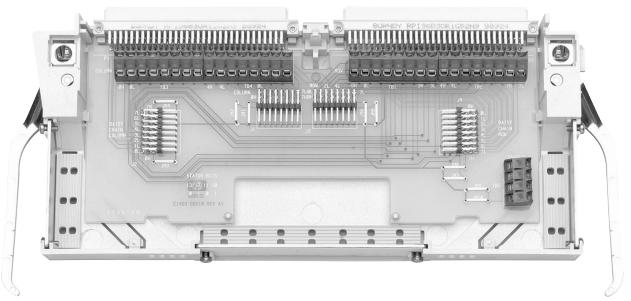
Watts/slot:	5.00
∆P mm H_2O:	0.08
Air Flow liter/s:	0.42

Ordering Information

Description	Product No.
8x8 Relay Matrix Switch	E1468A
Service Manual	E1468A 0B3
3 Yr. Retn. to Agilent to 1 Yr. OnSite Warr.	E1468A W01
Extra Terminal Block	E1468-80011

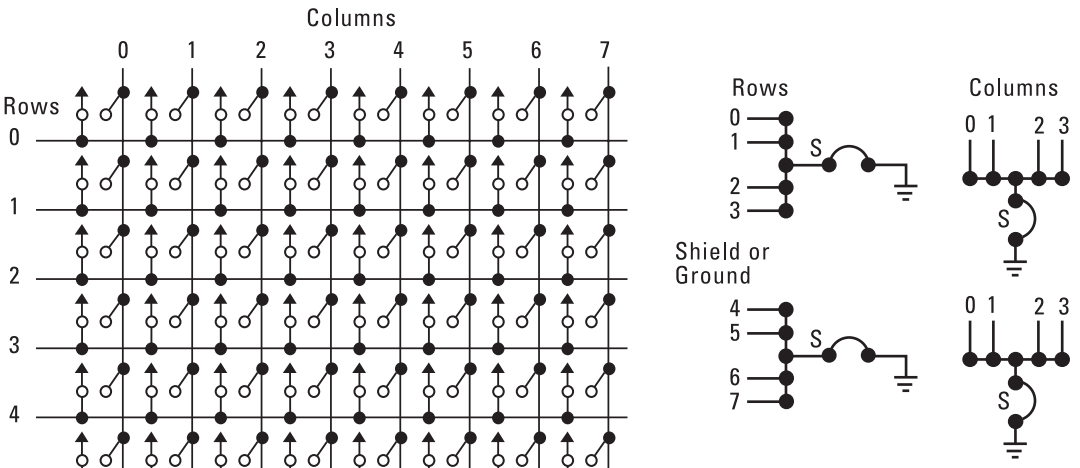
STEP Dionysos Job: 210%XXX5371-0002 5965-5594E Comp: 04-28-00 Time: 10:53 OP: NN

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

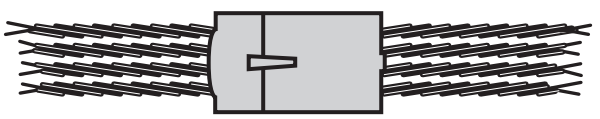


E1468A Terminal Block

E1468A Each Crosspoint Switches 2-Wire Hi and Lo



E1468A Matrix Diagram



Daisy Chain Cable: E1468-80002

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

STEP Dionysos Job: 210%XXX5372-0003 5965-5594E Comp: 04-28-00 Time: 10:53 OP: NN

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
www.agilent.com/go/manufacturing

Get assistance with all your test and measurement needs at
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).

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.: 5965-5594E

Agilent Technologies
Innovating the HP Way

STEP Dionysos Job: 210%XXX5373-0004 5965-5594E Comp: 04-28-00 Time: 10:53 OP: NN

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP