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 E1474A* at our website: *Click HERE*

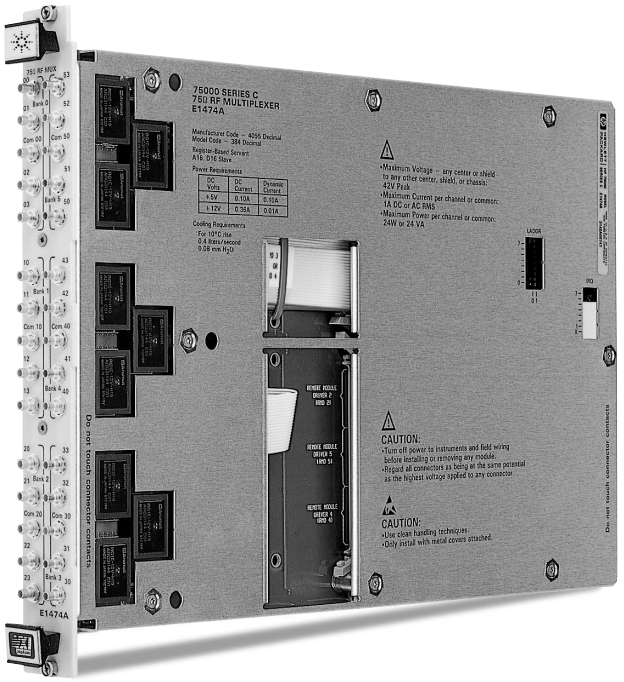
STEP Dionysos Job: 210%XXXX5489-0001 5965-9666E Comp: 04-28-00 Time: 11:16 OP: NN

Agilent E1474A

Six 1x4, 75 Ω RF Multiplexer

Data Sheet

- **1-Slot, C-size, register based**
- **Six 1x4 multiplexers**
- **Switch signals up to 1.3 GHz**
- **SMB male connectors for high performance**
- **Controls the E1475A/E1473A RF expanders**
- **Tree switching for high isolation, low VSWR**



Agilent E1474A

Description

The Agilent E1474A 75 Ω RF Multiplexer is a **C-size, 1-slot, register-based VXI module.** It is the ideal choice for video and telecommunications applications. The E1474A is functionally identical to the E1472A except for output impedance.

The RF multiplexer can be used as six multiplexers or combined with others to form a larger tree-switched multiplexer or a limited stubless matrix. You can easily and inexpensively expand the E1474A via the E1475A 75Ω RF multiplexer expander or via the E1473A 50Ω RF multiplexer expander.

The E1474A can easily be programmed with SCPI commands to scan multiple channels, where each channel is switched to its common, one at a time. This module is arranged as six independent banks of channels (Bank 0 through Bank 5), each acting as a 1x4 one-wire multiplexer. Only one channel in each bank can be connected to its common at any time. The multiplexer relays are arranged in a tree-switched configuration, providing high isolation and low VSWR. Each channel consists of a non-latching armature relay.

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

Agilent Technologies
Innovating the HP Way

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

Configuration

Each channel consists of a non-latching armature relay. At power-on or reset, channels 00, 10, ... 50 are connected to COM 00, 10, ... 50, respectively, and all other channels are open (unterminated).

The RF multiplexer can be used as six multiplexers or combined with others to form a larger tree-switched multiplexer or a limited stubless matrix as shown in the accompanying diagram.

To expand the E1474A refer to the E1475A 75Ω RF multiplexer expander or the E1473A 50Ω RF multiplexer expander. The E1474A can control other external relays requiring 5V, 12V, or 24V drive.

Cables and Connectors

Various 75 Ω cables are available from Agilent for connecting to the SNB connectors on the front panel of the multiplexer. Adapters and other connectors are also available. Connectors are also available from Johnson Components:

U.S.A. Tel.:	1-800-247-8256
Outside U.S.A. Tel.:	(507) 835-6222
Fax.:	(507) 835-8356

Product Specifications

Input

Maximum voltage (center or shield-to-center, shield or chassis):	42 V
Maximum current (per channel or common):	
DC:	1 A
AC rms:	1 A
Maximum power (per channel or common):	
DC:	24 W
AC:	24 VA

DC

Maximum thermal offset:	6 µV
Closed channel resistance (typical):	<1 Ω initial
Insulation resistance (between any two terminals):	>10E8 Ω ≤40 °C, ≤65% RH

AC

Note: For AC performance, ZL=ZS=ZO, ≤40 °C, RH ≤95% for C-size, RH ≤65% for B-size

Characteristic impedance (Zo):	75 Ω
Insertion loss:	
<10 MHz:	<0.3 dB
<100 MHz:	<0.4 dB
<500 MHz:	<0.8 dB
<1.3 GHz:	<1.0 dB
<3 GHz (typ):	n/a
Crosstalk (channel-to-channel):	
<10 MHz:	<–85 dB
<100 MHz:	<–75 dB
Crosstalk (channel-to-channel, one channel closed or channel-to-common) (terminated):	
<200 MHz:	n/a
<500 MHz:	<–60 dB
<1.3 GHz:	<–42 dB
<3 GHz (typ):	n/a
VSWR:	
<10 MHz:	<1.05
<100 MHz:	<1.15
<200 MHz:	n/a
<500 MHz:	<1.35
<1.3 GHz:	<1.5
<3 GHz:	n/a
Risetime:	<300 ps
Signal delay:	<3 ns
Capacitance:	
Center-shield:	n/a
Chassis-shield:	n/a

General Characteristics

Relays:	Non-latching armature
Power up/down state:	All open
Minimum relay life:	
No load:	5x10E6 operations
Rated load:	10E5 operations

General Specifications

VXI Characteristics

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

STEP Dionysos Job: 210%XXX5490-0002 5965-9666E Comp: 04-28-00 Time: 11:16 OP: NN

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

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.02
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* Win95/NT Framework:	Yes
VXI*plug&play* HP-UX Framework:	No

Module Current

	I_{PM}	I_{DM}
+5 V:	0.1	0.1
+12 V:	0.36	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

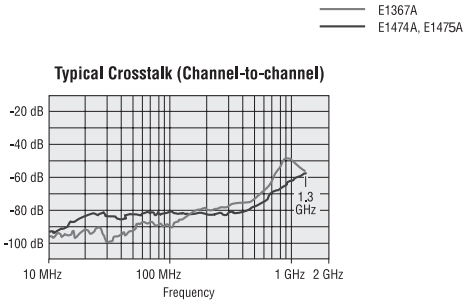
Watts/slot:	6.00
ΔP mm H_2O:	0.10
Air Flow liter/s:	0.50

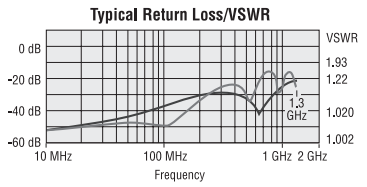
Ordering Information

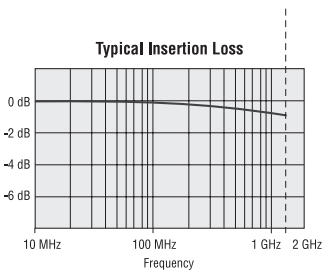
Description	Product No.
Six 1x4 75 Ω RF Multiplexer	E1474A
Service Manual	E1474A 0B3
3 yr. Retn. to Agilent to 1 yr. OnSite Warr.	E1474A W01
Component Lvl Info Pkt	E1472-90033



Agilent E1474A front panel detail







STEP Dionysos Job: 210%XXX5491-0003 5965-9666E Comp: 04-28-00 Time: 11:16 OP: NN

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

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.: 5965-9666E

Agilent Technologies
Innovating the HP Way

STEP Dionysos Job: 210%XXX5493-0004 5965-9666E Comp: 04-28-00 Time: 11:16 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