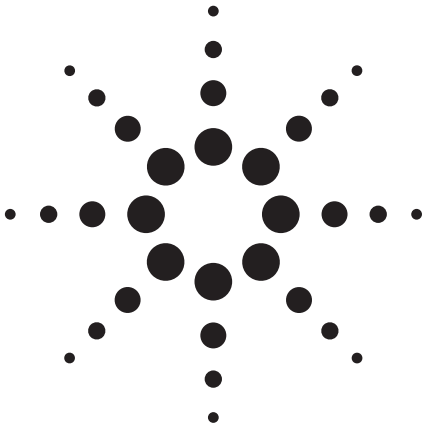


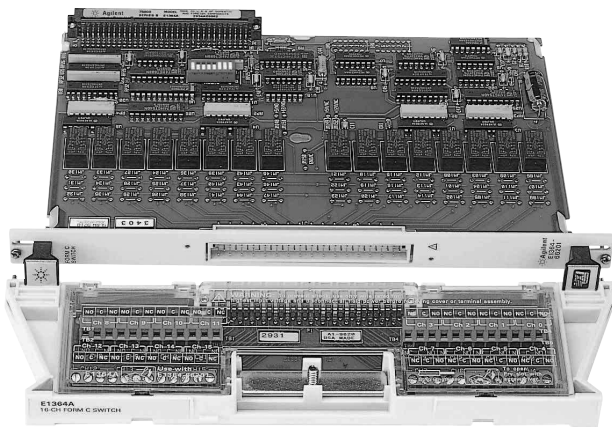
# Agilent E1364A

## 16-Channel Form C Switch

### Data Sheet



- 1-Slot, B-size, register based
- High DC isolation for switching/measurement integrity
- Digital output of 5 V/12 V for actuating external devices
- 250 V, 1 A dc or ac signal latching relays
- Normally closed/open, and common terminals (SPDT)
- Simultaneous channel switching



Agilent E1364A

### Description

The Agilent E1364A 16-Channel Form C Switch is a **B-size, 1-slot, register-based VXI module**. It uses latching armature relays, and is capable of carrying 1 Amp of current on a single channel. This versatile general-purpose switch is suitable for switching, scanning, control, or digital output applications.

This module contains positions for jumpers or resistors, allowing each channel to optionally connect to internal + 5 V

or + 12 V supplies for digital output applications. Current on these supplies should not exceed 1 A and 0.5 A, respectively, per switch. The latching relays ensure all switches will remain in the same position when power is removed. A terminal block is also included.

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

## Product Specifications

### Input

Maximum voltage (C to NC or NO or any terminal-to-chassis):

DC:	250 V
AC rms:	250 V
AC peak:	354 V

Maximum current (noninductive, per switch):

DC:	1 A
AC rms:	1 A

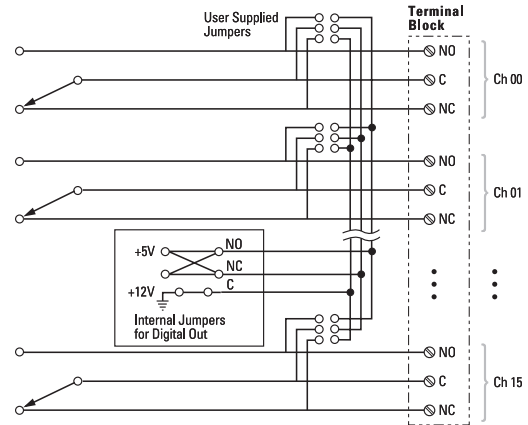
Maximum power:

Per switch:

DC:	40 W
AC:	40 VA

Per module:

DC:	320 W
AC:	320 VA



Agilent E1364A Circuit Diagram

### DC

Maximum thermal offset: 7  $\mu$ V

Closed channel resistance:

Initial:	<1.5 $\Omega$ typ
End of life:	<3.5 $\Omega$

Insulation resistance (between any two points):

$\leq 40^\circ\text{C}$ , $\leq 65\%$ RH:	n/a
$\leq 40^\circ\text{C}$ , $\leq 95\%$ RH:	>10E7 $\Omega$
$\leq 25^\circ\text{C}$ , $\leq 40\%$ RH:	>10E8 $\Omega$

### AC

Typical bandwidth (-3 dB): 10 MHz

Crosstalk (dB, channel-to-channel):

<10 kHz:	n/a
<100 kHz:	<-80
<1 MHz:	n/a
<10 MHz:	<-30

Closed channel capacitance:

Ch-to-ch:	<20 pF
Ch-to-com:	<20 pF

### General

Typical relay life (number of operations):

No load:	>10E6
Rated load:	>10E5

Time to close or open a channel (register programming): 10.7 ms

Power-down state: Relay states are unchanged

Power-up state: Relays open

Connector type, wire size: Screw  $\geq 16$  AWG (1.5 mm)

## General Specifications

### VXI Characteristics

VXI device type:	Register based, A16, slave only
Size:	B
Slots:	1
Connectors:	P1
Shared memory:	None
VXI busses:	None
C-size compatibility:	Requires E1403C

### Instrument Drivers

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

Command module firmware:	Downloadable
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
VXIplug&play Win Framework:	Yes
VXIplug&play Win 95/NT Framework:	Yes
VXIplug&play HP-UX Framework:	No

### Module Current

	$I_{PM}$	$I_{DM}$
+5 V:	0.1	0.01
+12 V:	0.24	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:	1.00
$\Delta P$ mm H <sub>2</sub> O:	0.02
Air flow liter/s:	0.10

### Ordering Information

Description	Product No.
16-Channel Form C Switch	E1364A
Service Manual	E1364A 0B3
Extra Terminal Block for the E1364A	E1364-80001

## 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)

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[www.agilent.com/find/data\\_acq](http://www.agilent.com/find/data_acq)

Agilent Technologies Instrument Driver Downloads  
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(tel) 800 810 0189  
(fax) 800 820 2816

**Europe:**  
(tel) (31 20) 547 2323  
(fax) (31 20) 547 2390

**Japan:**  
(tel) (81) 426 56 7832  
(fax) (81) 426 56 7840

**Korea:**  
(tel) (82 2) 2004 5004  
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**Latin America:**  
(tel) (305) 269 7500  
(fax) (305) 269 7599

**Taiwan:**  
(tel) 0800 047 866  
(fax) 0800 286 331

**Other Asia Pacific Countries:**  
(tel) (65) 6375 8100  
(fax) (65) 6836 0252  
(e-mail) [tm\\_asia@agilent.com](mailto:tm_asia@agilent.com)

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