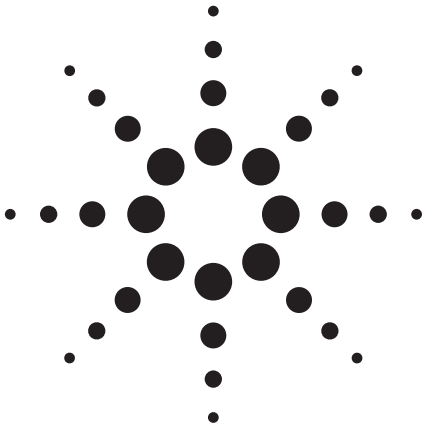


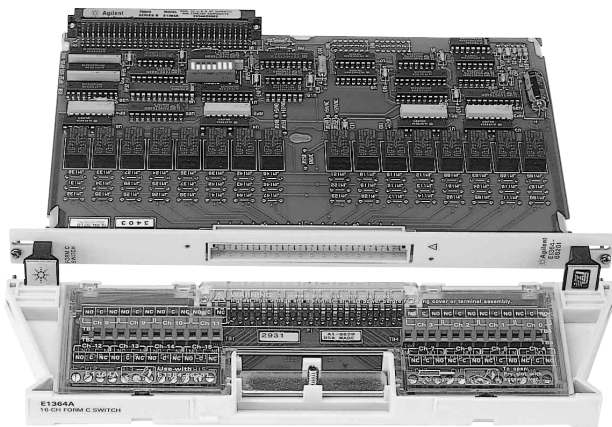
Agilent E1364A

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

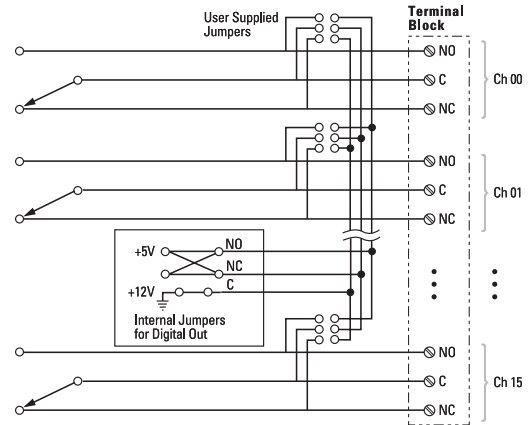
Maximum power:

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 μ V

Closed channel resistance:

Initial:	<1.5 Ω typ
End of life:	<3.5 Ω

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 Ω
$\leq 25^\circ\text{C}$, $\leq 40\%$ RH:	>10E8 Ω

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 ≥ 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) 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
ΔP mm H ₂ 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

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
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Agilent Technologies Instrument Driver Downloads
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