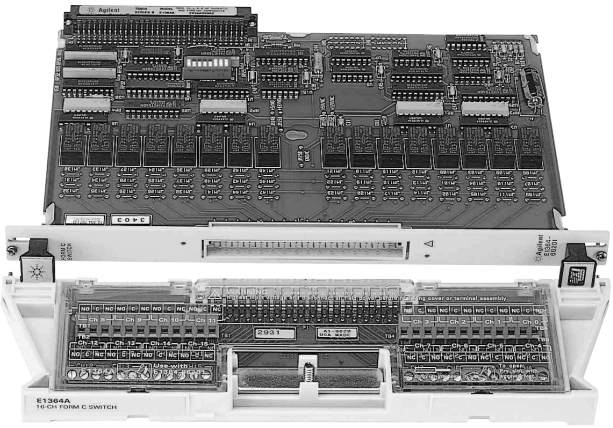
Agilent E1364A

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 Adc 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.

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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

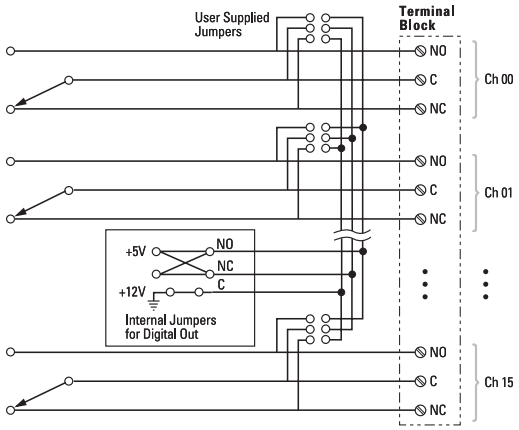
Maximum power:

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 μV
Closed channel resistance:	
Initial:	<1.5 Ω typ
End of life:	<3.5 Ω

Insulation resistance (between any two points):

≤40°C, ≤65% RH:	n/a
≤40°C, ≤95% RH:	>10E7 Ω
≤25°C, ≤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
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	0.01
+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_2O:	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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Data Subject to Change

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