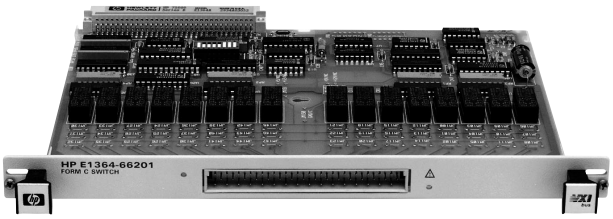
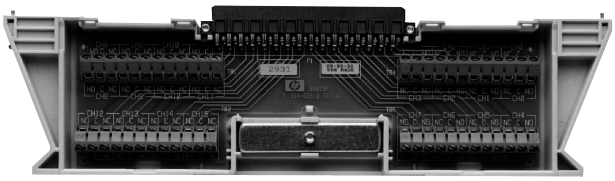
16-Channel Form C Switch
HP E1364A

Technical Specifications

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





Description

The HP 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 HP Website for instrument driver availability and downloading instructions.

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

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, ≤95% RH:	—
≤40 °C, ≤65% RH:	>10E7 Ω
≤25 °C, ≤40% RH:	>10E8 Ω

AC

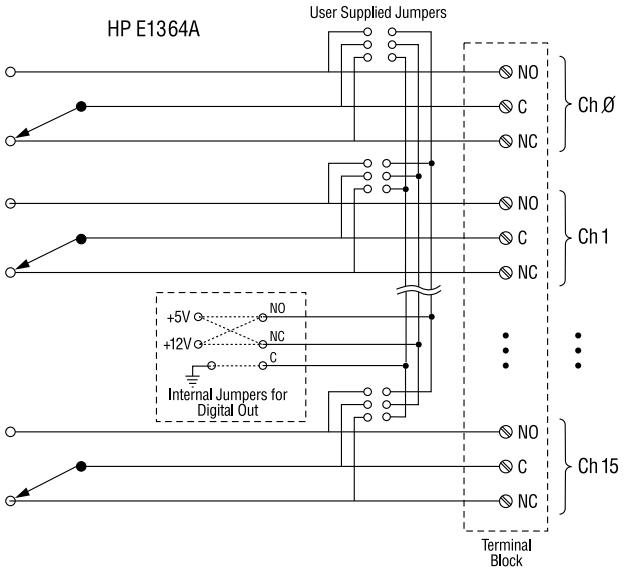
Typical bandwidth (−3 dB):	10 MHz

Crosstalk (dB, channel-to-channel):

<10 kHz:	—
<100 kHz:	<−80
<1 MHz:	—
<10 MHz:	<−30

Closed channel capacitance:

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



HP E1364A Circuit Diagram

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 up/down states:	all open, left in last state
Connector type, wire size:	Screw: ≥16 AWG (1.5 mm)

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 E1403B

Instrument Drivers

See the HP Website (http://www.hp.com/go/inst_drivers) for driver availability and downloading.

Command module firmware:	ROM
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
HP VEE Drivers:	Yes
VXI*plug&play* Win Framework:	Yes
VXI*plug&play* Win95/NT Framework:	Yes
VXI*plug&play* HP-UX Framework:	No (Not available at time of publication)

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	HP E1364A
Service manual	HP E1364A 0B3
3 yr. retn. to HP to 1 yr. OnSite warr.	HP E1364A W01
Extra terminal block for the E1364A	HP E1364-80001

HP Publication No.: 5965-5587E