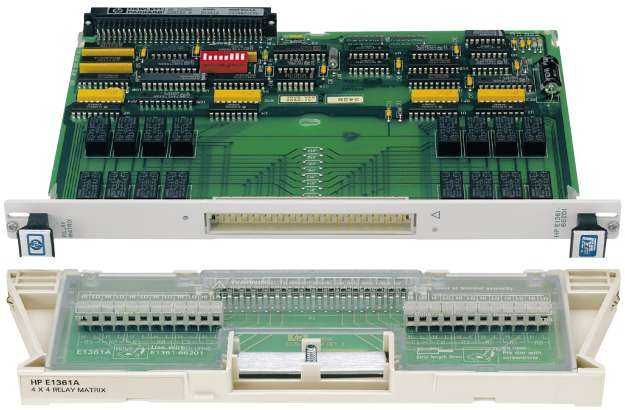
2-wire 4x4 Relay Matrix HP E1361A

Technical Specifications

- **Multiple inputs connect to multiple outputs**
- **Flexible dual 2x4 or single 4x4 2-wire matrix**
- **250 V, 1 Adc or ac signal switching, latching relays**
- **Modules connect for larger matrixes**
- **Each crosspoint switches 2-wire, Hi and Lo**



Description

The HP E1361A relay matrix is a **B-size, 1-slot, register-based VXI module.** It consists of 16 latching relays arranged as a 4x4 matrix. The 4x4 matrix can be reconfigured as a dual 2x4 matrix by removing factory-installed jumpers. Capable of switching voltages up to 250 Vdc and 354 Vpk, the HP E1361A relay matrix switch has the highest voltage rating of any HP matrix module.

All relays remain in their programmed state during power-down and are reset at power-on. After reset, all relays are open. Each crosspoint switches 2-wire, Hi and Lo. The HP E1361A can be reconfigured as an 8:1, 2-wire multiplexer.

Refer to the HP Website for instrument driver availability and downloading instructions.

Specifications

Input

Maximum voltage (any terminal to any other terminal or chassis):

DC:	250 V
AC rms:	250 V
Peak:	354 V
Maximum Current (per channel common, non-inductive):	n/a
Maximum power:	
Per channel:	40 W
Per module:	320 W, 960 VA

DC

Maximum thermal offset per channel, differential Hi-Lo:	14 μV
Closed channel resistance (per channel):	
Initial:	<1.5 Ω (typ)
End of life:	<3.5 Ω
Insulation resistance (between any two points):	
≤40 °C, ≤95% RH:	n/a
≤40 °C, ≤65% RH:	>10E7 Ω
≤25 °C, ≤40% RH:	>10E8 Ω
Minimum bandwidth (−3 dB, Z_t=Z_x= 50 Ω):	10 MHz

AC

Crosstalk (dB, channel-to-channel typical):

Note: *Crosstalk, insulation resistance, and bandwidth specifications are for a single matrix module only. Matrix expansion will degrade these specifications.*

<10 kHz:	n/a
<100 kHz:	<−80
<1 MHz:	n/a
<10 MHz:	<−30
Closed channel capacitance:	
Hi-Lo:	<150 pF (All contacts closed)
Hi-Chassis:	<150 pF
Lo-Chassis:	<150 pF
Hi-Hi:	<20 pF
Insertion loss:	<0.1 dB @ ≤100 kHz <3 dB @ ≤10 MHz

General

Minimum relay life:	
No load:	10E6 operations
Screw terminal wire size:	16 AWG (15 mm) max

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

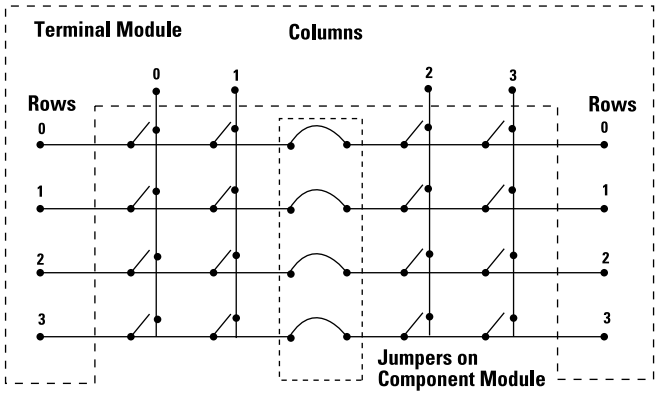
	I_{PM}	I_{DM}
+5 V:	0.1	0.01
+12 V:	0.24	0.01
−12 V:	0	0
+24 V:	0	0
−24 V:	0	0
−5.2 V:	0	0
−2 V:	0	0

Cooling/Slot

Watts/slot:	1.00
ΔP mm H_2O:	0.02
Air Flow liter/s:	0.10

Ordering Information

Description	Product No.
Two Wire 4 x 4 Relay Matrix	HP E1361A
Service manual	HP E1361A 0B3
Japan - Japanese localization	HP E1361A ABJ
3 yr. retn. to HP to 1 yr. OnSite warr.	HP E1361A W01
Extra terminal block for the E1361A	HP E1361-80001



HP E1361A Each crosspoint switches 2-wire, Hi and Lo

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