KEYSIGHT TECHNOLOGIES (AGILENT HP)

E1442A

The Keysight (formerly Agilent / HP) E1442A is a C-size, 1-slot, register-based VXI module designed for high-density switching applications. It features 64 independent Single-Pole Double-Throw (SPDT / Form C) armature relays, making it highly versatile for routing signals in automated test environments.

SPECIFICATIONS

General

Interfaces	VXIbus

Physical

Power Supply	VXI backplane (+5 V, +12 V)
Operating Temperature	0 °C to +55 °C °C
Dimensions (W×H×D)	262 mm × 30.5 mm × 340 mm mm
Weight	1.3 kg kg

System & Chassis Architecture

Form Factor	VXI C-size
Number of Slots Required	1
Module Type	Register-based
VXIbus Revision Compatibility	1.4

RF, Electrical & Calibration Performance

Number of Channels	64
Switch Configuration	SPDT (Form C)
Relay Type	Latching armature
Maximum Switching Voltage (DC)	150 V
Maximum Switching Voltage (AC)	150 V rms
Maximum Switching Current per Channel	1 A
Maximum Carry Current per Channel	1 A
Maximum Switching Power per Channel (DC)	30 W
Maximum Switching Power per Channel (AC)	62.5 VA

Connectivity & Host Interfaces

Terminal Block Compatibility	E1442-80001 (Option 010 screw terminal block)

Environmental Specifications

Storage Temperature Range	-40 °C to +75 °C

Electrical Specifications

Closed Channel Resistance	< 1.5 Ω (initial)
Insulation Resistance	> 10^9 Ω
Maximum Common Mode Voltage	150 V DC or AC rms

AC Performance

Bandwidth (-3 dB)	10 MHz (typical into 50 Ω)
Crosstalk (typical, 100 kHz)	< -60 dB (into 50 Ω)
Crosstalk (typical, 1 MHz)	< -40 dB (into 50 Ω)
Crosstalk (typical, 10 MHz)	< -20 dB (into 50 Ω)

Switching Characteristics

Switching Time	< 15 ms

Reliability

Relay Life (no load)	10^7 operations
Relay Life (rated load)	10^5 operations

VXI Characteristics

VXI Device Type	Register-based

Software & Programming

Programming Language Support	SCPI (when used with a VXI Command Module), Register-level commands
Drivers Provided	IVI-COM, IVI-C, Labview, Plug & Play

TECHNOLOGY

VXI Switching

APPLICATIONS

Automated Test Equipment (ATE), Signal Routing, General Purpose Switching

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.