KEYSIGHT TECHNOLOGIES (AGILENT HP)

E1410A

The Keysight (Agilent/HP) E1410A is a high-accuracy, 6.5-digit C-size VXI digital multimeter designed for precise DC/AC voltage, resistance, and temperature measurements. Operating as a single-slot, message-based VXI module, it features rapid reading rates over 1,450 readings per second in 3.5-digit mode, outstanding noise rejection, and support for automated, software-based calibration.

SPECIFICATIONS

General

Interfaces	VXIbus (Register-based)
Display	None (VXI module)

Physical

Power Supply	VXI backplane powered
Operating Temperature	0 to 55 °C °C
Dimensions (W×H×D)	30.5 mm × 262 mm × 353 mm mm

Measurement Capabilities & Ranges

Measurement Functions	DC Voltage, True RMS AC Voltage, 2-wire Resistance, 4-wire Resistance
AC Measurement Type	True RMS
AC Voltage Frequency Range	20 Hz to 1 MHz
Resistance Measurement Configurations	2-wire and 4-wire
Temperature Sensor Support	Not supported

Resolution & Measurement Speed

Maximum Display Digits	6.5 digits
Maximum Reading Rate (3.5-digit)	> 1,450 readings/s (DCV and Resistance)

Input Characteristics

Guarding & Noise Rejection	Supported (with long integration times)
Input Impedance (DCV)	> 10 GΩ on 100 mV, 1 V, and 10 V ranges; 10 MΩ ± 1% on 100 V and 300 V ranges

VXIbus Interface Specifications

VXI Device Type	Register-based
VXI Slot Size	C-size
Module Width	1-slot

Environmental & Calibration

Calibration Type	Software calibration

Input Protection

Maximum Input Voltage	300 V DC or AC RMS

VXI Interface

VXI Device Class	Register-based

Measurement Ranges

DC Voltage Ranges	100 mV, 1 V, 10 V, 100 V, 300 V
AC Voltage Ranges	100 mV, 1 V, 10 V, 100 V, 300 V
Resistance Ranges	100 Ω, 1 kΩ, 10 kΩ, 100 kΩ, 1 MΩ, 10 MΩ, 100 MΩ

Measurement Resolution

Best DC Voltage Resolution	100 nV
Best Resistance Resolution	100 µΩ

Measurement Technical Specifications

DC Voltage Input Resistance	> 10 GΩ (on 100 mV, 1 V, 10 V ranges); 10 MΩ ± 1% (on 100 V, 300 V ranges)

TECHNOLOGY

VXIbus DMM

APPLICATIONS

Automated Test Systems, Precision Multichannel Measurement