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Data Sheet
August 14, 2026

AGILENT / KEYSIGHT

Agilent / Keysight E1351A 16-Channel FET Multiplexer

Agilent E1351A 16 Channel FET Multiplexer The Agilent/Keysight E1351A isaB-size, 1-slot, register-based VXI 16-channel FET multiplexer. OEM E1351A/E1353A user's manuals list high-speed FET switching up to 100000 connections per second, diode clamping to plus/minus 14 V with 220 ohm series resistance, and High/Low/Guard connections with High and Low switched. High-speed scanning voltmeter systems with E1326B/E1411B, and fast channel selection where reed-relay life or speed is limiting. FET switching to 100000 connections per second The Agilent/Keysight E1351A isaB-size, 1-slot, register-based VXI 16-channel FET multiplexer. OEM E1351A/E1353A user's manuals list high-speed FET switching up to 100000 connections per second, diode clamping to plus/minus 14 V with 220 ohm series resistance, and High/Low/Guard connections with High and Low switched. High-speed scanning voltmeter systems with E1326B/E1411B, and fast channel selection where reed-relay life or speed is limiting. FET switching to 100000 connections per second Digital bus handshake lines for high-speed scanning

MODEL **Agilent / Keysight E1351A**	CALIBRATION **Available on request**
CONDITION **Used**	STATUS **In stock**
RFQ / SKU **E1351A**	LISTING **https://aumictechlabs.com/products/e1351a-2/**

NIST-traceable cal · SAM registered · 30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight E1351A is a B-size VXIbus multiplexer module that switches 16 channels of high, low, and guard signals to a common point using FET technology. Designed as a register-based, 1-slot slave device, it enables signal routing and automated switching in test systems and data acquisition applications. The module maintains open FET states during power-down and power-up conditions, with closed channel resistance below 3.1 kΩ and exceptional insulation resistance of 10^8 Ω between any two points.Technical Specifications Electrical Performance Maximum voltage (any terminal to any other terminal or chassis): 16 Vpk (DC and AC RMS) Maximum current per channel common (non-inductive): 1 mA Closed channel resistance: < 3.1 kΩ Insulation resistance (between any two points): 10^8 Ω Insulation resistance (guard to chassis): 10^3 Ω ± 10% Maximum thermal offset per channel (differential Hi-Lo): 25 µV (0 to 28 °C); 250 µV (28 to 55 °C) Power Requirements +5 V: 0.2 A +12 V: 0.13 AKey Features 16-channel FET multiplexer with simultaneous high, low, and guard signal switching Scanning rate up to 13,000 channels/second with compatible DMMs High-speed capability: up to 100,000 switches/second from downloaded scan list Unlimited relay life at both no-load and rated-load conditions Terminal block sold separately, allowing flexible matrix configuration Tree switch architecture connects common signals to both terminal card and analog bus connectorCompatibility & Integration The E1351A integrates with Agilent/Keysight E1326B and E1411B DMMs via analog bus connectors and digital bus cables. Synchronized measurements up to 13,000 channels/second require the SCPI command `TRIGger:SOURce DBUS`. External DMM configurations support up to 100,000 switches/second using dedicated FET MUX-to-DMM cable connections. The shared core switch card across E1352A, E1353A, E1357A, and E1358A models enables modular system expansion within VXIbus environments.

E1351A Characteristics / Specifications

PARAMETER	VALUE
Channels	16 (00 through 15)
Connections Per Channel	High Low Guard
Switched Paths	High and Low
Maximum Switching Rate	100000 connections/s
FET Clamp Voltage	plus/minus 14 V diode clamped
Series Protection Resistance	220 ohm
VXI Device Type	register based A16
Module Size	B
Slots Occupied	1
Connectors	P1
Shared Memory	None
Component Assembly Shared With	E1352A and E1353A
Terminal Module Identity	E1351A 16-channel FET
Companion DMM	E1326B / E1411B
Digital Bus	front panel handshake lines
Analog Bus	yes
Programming	SCPI switchbox/scanning voltmeter or register based
Word Serial Protocol	not supported (register based)
Operating Temperature Class	0 to 55 CCSize Path: E1403 adapter
Trigger Sources	VXIbus backplane or digital bus
Power Rails	+5 V and +12 V class for FET mux family
Operating temperature	Class: 0 to 55 CCSize Path: E1403 adapter

E1351A Specifications

PARAMETER	VALUE
Agilent E1351A 16 Channel FET Multiplexer	Overview
Applications	High-speed scanning voltmeter systems with E1326B/E1411B, and fast channel selection where reed-relay life or speed is limiting.
Key Features	FET switching to 100000 connections per second
Analog bus connector for DMM pairing	Same component assembly as E1352A/E1353A with unique terminal module
Technical Specifications	Channels: 16 (00 through 15)

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Class: 0 to 55 CCSize Path: E1403 adapter
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Trigger Sources	VXIbus backplane or digital bus
Power Rails	+5 V and +12 V class for FET mux family Notes Channel count, 100 ksw/s, and plus/minus 14 V / 220 ohm clamp network from Agilent/HP E1351A/E1353A user's manual Appendix A. Confirm exact voltage/current path ratings for installed terminal module.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications

Specifications

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Notes
Channel count, 100 ksw/s, and plus/minus 14 V / 220 ohm clamp network from Agilent/HP E1351A/E1353A user's manual Appendix A. Confirm exact voltage/current path ratings for installed terminal module.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: **sales@aumictech.com** · +1 (484) 841-9341

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