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Data Sheet
August 13, 2026

IET / GENERAL RADIO

IET / General Radio 1433-20 Decade Resistor

IET Labs / GenRad 1433-20 Precision Decade Resistor 11.1111 kohm The GenRad/IET 1433-20 isasix-dial precision decade resistor with total resistance 11,111.10 ohm and 0.01 ohm resolution (0.01 ohm/step). Overall accuracy is indicated value plus/minus (0.01 percent + 2 mOhm) relative to the zero setting. Gold-plated low-thermal-EMF binding posts andashield terminal support metrology and bridge work. Resistance standard for verifying ohmmeters and bridges; DC and audio-frequency impedance bridge component; RTD simulation; precision bench resistance substitution. The GenRad/IET 1433-20 isasix-dial precision decade resistor with total resistance 11,111.10 ohm and 0.01 ohm resolution (0.01 ohm/step). Overall accuracy is indicated value plus/minus (0.01 percent + 2 mOhm) relative to the zero setting. Gold-plated low-thermal-EMF binding posts andashield terminal support metrology and bridge work. Resistance standard for verifying ohmmeters and bridges; DC and audio-frequency impedance bridge component; RTD simulation; precision bench resistance substitution.

MODEL **IET / General Radio 1433-20**	CALIBRATION **Available on request**
CONDITION **Used**	STATUS **In stock**
RFQ / SKU **1433-20**	LISTING **https://aumictechlabs.com/products/1433-20-2/**

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

NAICS 423690 · 811210 · 541380

This unit

The IET/General Radio 1433-20 is a precision decade resistor providing stable, highly accurate resistance values from 1 mΩ to 111.11111111 MΩ. Engineered for laboratory and industrial calibration, testing, and circuit design applications, the 1433-20 delivers 0.01% accuracy with six selectable

dials and 0.01 Ω/step resolution. Its gold-plated tellurium-copper binding posts, low zero resistance, and excellent frequency characteristics make it suitable for DC through RF measurements. Technical Specifications Resistance Range: 1 mΩ to 111.11111111 MΩ Total Resistance (1433-20): 11.1111 kΩ Resolution: 0.01 Ω/step Accuracy: 0.01% (up to 10 MΩ) Number of Dials: 6 Temperature Coefficient: <10 ppm/°C (values above 100 Ω); 20 ppm/°C (100 Ω and below, room temperature) Zero Resistance: <0.001 Ω/decade DC; ~0.04 Ω/dial at 1 MHz Inductance (Lo): 0.1 µH/decade + 0.2 µH Shunt Capacitance: 15–20 pF/decade (low terminal to shield); 0–20 pF greater when shield tied to switch or zero end Maximum Current: 8 A per decade (1 mΩ and 10 mΩ decades) Voltage to Case: Maximum 2000 V Switch Capacitance: <1 pF Key Features Three-terminal configuration: high (H), low (L), and guard/shield (G) Gold-plated binding posts, 3/4 inch spacing Shorting link included Low, stable zero resistance across frequency Minimal residual reactance Long-term stability Typical Applications Precision impedance measurement and calibration RF circuit characterization Bridge and meter calibration AC and DC resistance standards Compatibility & Integration Rear outputs and Kelvin connections available as options [-K Option]. Two-terminal or three-terminal operation supported via guard terminal configuration.

Features & description

From manufacturer datasheet

Features

• Six decades; total 11,111.10 ohm; 0.01 ohm/step • Accuracy plus/minus (0.01 percent + 2 mOhm) • Low zero resistance about 0.001 ohm/decade at DC • Continuous dial rotation with overlap 10 position • Shielded aluminum cabinet; separate shield terminal

1433 Characteristics / Specifications

PARAMETER	VALUE
Model	1433-20
Manufacturer	IET Labs / GenRad / General Radio
Instrument Type	Precision decade resistor
Catalog Number	1433-9720
Total Resistance	11111.10 ohm
Resolution	0.01 ohm
Number Of Dials	6
Overall Accuracy	indicated value plus/minus (0.01 percent + 2 mOhm) vs zero setting
Zero Resistance At DC	0.001 ohm per decade typical
Zero Resistance At 1 MHz	0.04 ohm per dial typical
Zero Inductance	0.1 uH per dial + 0.2 uH typical
Effective Shunt Capacitance	15 to 20 pF per decade class
Switch Contact Resistance	less than 1 mOhm
Switch Capacitance Between Contacts	less than 1 pF
Switch Lifetime	greater than 1 million cycles
Maximum Voltage To Case	2000 V peak
Temperature Coefficient 100 Ohm And Over	less than 10 ppm/C
Temperature Coefficient 10 Ohm And Under	+20 ppm/C class
Stability 1 Ohm Decade Class	10 ppm/year; 25 ppm/3 years
Max Current 0.01 Ohm Decade Class	see panel (family 4 A at 0.01 ohm/step table)
Max Current 0.1 Ohm Decade Class	1.6 A family table
Max Current 1 Ohm Decade Class	0.8 A family table
Max Current 10 Ohm Decade Class	0.25 A family table
Max Current 100 Ohm Decade Class	80 mA family table

PARAMETER	VALUE
Max Current 1 kohm Decade Class	23 mA family table
Size Six Dial Cabinet	43.9 cmWx 8.9 cmHx 10.2 cmDNet Weight Six Dial: 2.2 kg (4.8 lb)
Terminals	gold plated binding posts on 0.75 inch spacing plus shield
Alias	1433-20; GenRad 1433-20; IET 1433-20

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

Technical Specifications

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Notes
Model identity and accuracy from IET/GenRad 1433 series datasheet (1433-20 row). Per-decade current limits follow the published family decade table; read the front-panel markings for the exact dial ratings.

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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