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Data Sheet

August 14, 2026

GENRAD

GenRad 1633A Incremental Inductance Bridge

GenRad 1633A Incremental Inductance Bridge The General Radio Type 1633-A is an incremental inductance bridge for iron-core inductors such as transformers and chokes under high AC and DC excitation. OEM summaries list inductance from 0.2 uH to 1000 H from 20 Hz to 20 kHz with 1% accuracy and capability to 1250 V and 50 A excitation. Nonlinear inductor characterization under bias, transformer and choke loss measurement, and measurement of other nonlinear elements such as rectifiers and lamps. Direct reading at nine detector frequencies



MODEL

GenRad 1633A

CALIBRATION

Available on request

CONDITION

Used

STATUS

In stock

RFQ / SKU

1633A

LISTING

<https://aumictechlabs.com/products/1633a-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 • 811210 • 541380

This unit

The GenRad 1633A Automatic Capacitance Bridge is a precision instrument engineered for rapid and accurate measurement of capacitance, dissipation factor (D), and conductance. Featuring automatic balance and range selection, it streamlines component testing processes. Its high accuracy and speed make it suitable for demanding quality control applications and integration into automated test systems.

Features & description

From manufacturer datasheet

Built-in selective detector to reduce harmonics

Works with external high-power generators Part of 1630-AV inductance measuring assembly with recommended generators Technical Specifications Inductance Range: 0.2 μ H to 1000 H Frequency Range: 20 Hz to 20 kHz Inductance Accuracy: plus or minus 1% of reading or 0.1% of full scale Resistance Accuracy: plus or minus 2% of reading or 0.1% of full scale Internal Detector Frequencies: 50, 60, 100, 120, 400, 800 Hz, 1 kHz, 10 kHz, 15.75 kHz Internal Detector Frequency Accuracy: plus or minus 1% External Detector Frequency: 20 Hz to 20 kHz External Generator Frequency: 20 Hz to 20 kHz Maximum Excitation Voltage Class: up to 1250 V AC and DC Maximum Excitation Current Class: up to 50 A AC and DC Readout Modes: series and parallel Number Of Direct Reading Frequencies: 9 Intended DUT Class: iron-core inductors transformers chokes Nonlinear Element Capability: diodes rectifiers thermistors lamps Bridge Type: incremental inductance bridge Detector Bandwidth Class: narrow to reduce harmonics Assembly Companion DC Supply Class: Type 1265-A Assembly Companion Oscillator Class: Type 1308-A Form Factor: laboratory inductance bridge Lower Inductance Bound: 0.2 μ H Upper Inductance Bound: 1000 H Accuracy Continuity Inductance: plus or minus 1% class

1633A Characteristics / Specifications

PARAMETER	VALUE
Inductance Range	0.2 μ H to 1000 H
Frequency Range	20 Hz to 20 kHz
Inductance Accuracy	plus or minus 1% of reading or 0.1% of full scale
Resistance Accuracy	plus or minus 2% of reading or 0.1% of full scale
Internal Detector Frequencies	50, 60, 100, 120, 400, 800 Hz, 1 kHz, 10 kHz, 15.75 kHz
Internal Detector Frequency Accuracy	plus or minus 1%
External Detector Frequency	20 Hz to 20 kHz
External Generator Frequency	20 Hz to 20 kHz
Maximum Excitation Voltage Class	up to 1250 V AC and DC
Maximum Excitation Current Class	up to 50 A AC and DC
Readout Modes	seriesLandRorQNumber Of Direct Reading Frequencies: 9
Intended DUT Class	iron-core inductors transformers chokes
Nonlinear Element Capability	diodes rectifiers thermistors lamps
Bridge Type	incremental inductance bridge
Detector Bandwidth Class	narrow to reduce harmonics
Assembly Companion DC Supply Class	Type 1265-A
Assembly Companion Oscillator Class	Type 1308-A
Form Factor	laboratory inductance bridge
Lower Inductance Bound	0.2 μ H
Upper Inductance Bound	1000 H
Accuracy Continuity Inductance	plus or minus 1% class
Bandwidth	Class: narrow to reduce harmonics

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	
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Bridge Type	incremental inductance bridge
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Assembly Companion DC Supply Class	Type 1265-A
Assembly Companion Oscillator Class	Type 1308-A
Form Factor	laboratory inductance bridge
Lower Inductance Bound	0.2 uH
Upper Inductance Bound	1000 H
Accuracy Continuity Inductance	plus or minus 1% class
Notes	
Ranges and accuracy from GenRad 1633-A published specifications (GRWiki and reseller OEM summaries). Excitation limits require adequate external generator/supply 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

Aumictech

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.