FNIRSI Precision Measurement

Handheld LC1020E LCR Bridge Tester

C / R / L / Z Measurement

100Hz–100kHz Adjustable Freq

Built-in Bias & Voltage Level

Dual-Parameter Display

4.5-Digit Resolution

Auto Recognition

All-in-One LCR Tool Built for Versatile Testing

- Auto Recognition
- Sorting Mode
- Auto Shutdown
- Built-in Bias
- Test Level
- Calibration
- Multi-Level Freq
- 4.5 Digit Resolution
- Type-C & Li-ion Battery
- Series-Parallel Circuits
- Dual-Param Display
- Data Hold & Record

Primary & Secondary Params

4.5-Digit Resolution

10× improved precision, up to ±0.05% basic accuracy, with dual-parameter display in test.

Primary Parameters	L(Inductance) / C(Capacitance) R(Resistance) / Z(Impedance) / Auto
Secondary Parameters	X(Reactance) / D(Dissipation) / ESR θ(Phase Angle) / Q(Quality Factor)

Frequency & RMS Test Level
Multi-Range Selectable

Offers 5 test frequencies and 3 RMS voltage levels for precise and versatile measurements.

Sorting & Comparison Mode

Preset nominal values and tolerance limits to locate abnormal components, perform one-click sorting tests, and enhance efficiency.

Smart Recognition
Auto Measurement

Identifies components (R/L/C) and switches mode automatically — easy & efficient testing

Internal Bias Voltage

Applying internal bias reduces measurement fluctuations and stabilizes readings for precise testing of sensitive components.

Open & Short Calibration

Accurate measurements by eliminating systematic errors caused by test fixtures and cables

Open Calibration
Removes stray capacitance

Short Calibration
Removes lead resistance

Data Hold & Record
Test More Efficiently

Short press to lock readings, long press to start recording mode.
Real-time categorized stats – accurate, clear, and double the efficiency.

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Practical Scenarios

Testing Various Components

Fully functional handheld tester measuring
various components with portable convenience.

Measure Capacitance

Measure Resistance

Measure Inductance

Measure Impedance

Test Electrolytic Capacitors

FNIRSI Precision Measurement

Precision in Every Detail

Automatic Shutdown

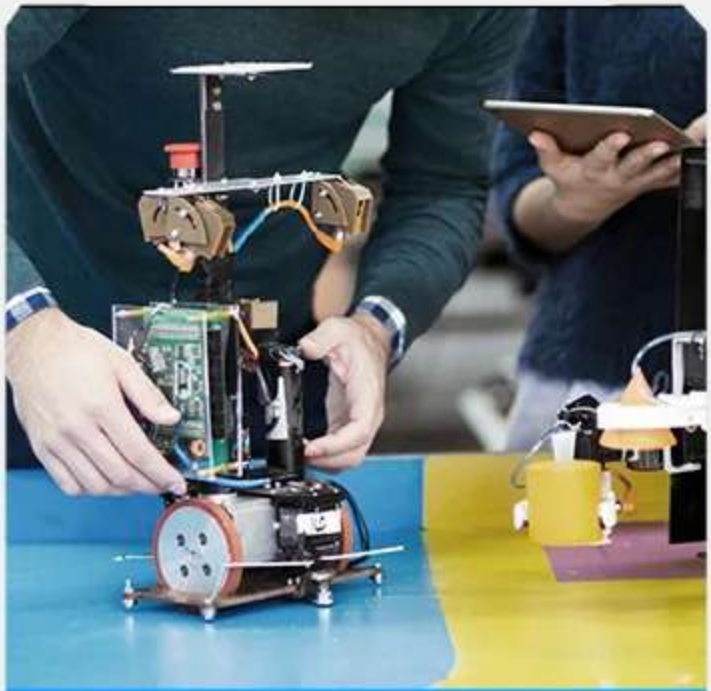
Typre-C Charge

Rechargeable Lithium Battery

2.8" TFT Color Display

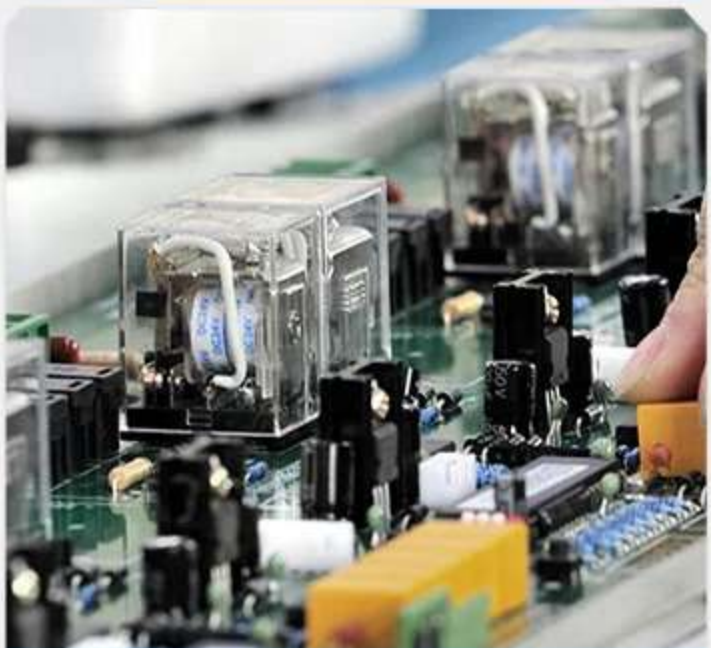
Widely Applicable
Ideal Testing Tool

Ideal for R&D, repair, education, and industrial use.
Powerful and easy to use — the ideal testing tool for engineers.



Electronics R&D

Equipment Maintenance



Production Testing

Scientific Education

FNIRSI Precision Measurement

Product Parameters

Model	LC1020E
Test Frequency	100Hz、120Hz、1KHz、10KHz、100KHz
Basic Accuracy	0.3%
Display	2.8-inch TFT LCD display
Display Digits	Main Parameter: 4.5 digits; Secondary Parameter: 4.5 digits
Measurement Parameters	Main Parameters: AUTO/R/C/L/Z; Secondary Parameters: X/D/Q/θ/ESR
Measurement Range	L: 0-100H C: 0-100mF R: 0-10M
Internal Bias	0.0V、0.5V
Test Level	0.1V、0.3V、0.6V
Calibration Functions	Open circuit calibration, Short circuit calibration
Comparison Function	Used to calculate the relative error between the component measurement value and the nominal value, displayed as a percentage, and provides filtering results. Nominal values and tolerance can be set, with tolerance range adjustable from 0.1% to 99.9%
Record Function	Checks if the measured component data meets the set nominal value and tolerance, recording the number of successful and failed measurements
Test Terminal Configuration	Three-terminal, Five-terminal
Output Impedance	100Ω
Communication Interface	USB-TypeC (Virtual serial port)
Others	Language settings, Screen brightness, Sound settings, Auto power-off, Calibration settings, System information

Capacitance (C)

Range	100Hz	1KHz	10KHz	100KHz
1mF-100mF	5% ± 5 digits	3% ± 5 digits		
1uF-1mF	1% ± 4 digits	0.5% ± 5 digits	2% ± 5 digits	3% ± 4 digits
1nF-1uF		0.3% ± 2 digits	0.4% ± 2 digits	1% ± 4 digits
1pF-1nF		1% ± 2 digits	1.5% ± 2 digits	2% ± 4 digits

Inductance (L)

Range	100Hz	1KHz	10KHz	100KHz
1H-100H	2% ± 5 digits	2% ± 5 digits		
1mH-1H	0.4% ± 5 digits	0.3% ± 2 digits	0.4% ± 3 digits	2.5% ± 5 digits
10uH-1mH	3% ± 5 digits	0.5% ± 4 digits	0.5% ± 3 digits	1.5% ± 5 digits
1uH-10uH		2% ± 5 digits	2% ± 5 digits	4% ± 5 digits

Resistance (R)

Range	100Hz	1KHz	10KHz	100KHz
1MΩ-10MΩ	5% ± 4 digits	3% ± 3 digits		
1KΩ-1MΩ	0.4% ± 4 digits	0.2% ± 2 digits	0.3% ± 3 digits	0.6% ± 5 digits
1Ω-1KΩ	1.5% ± 4 digits	0.3% ± 2 digits	0.3% ± 3 digits	0.6% ± 5 digits
10mΩ-1Ω	4% ± 4 digits	2% ± 5 digits	2% ± 5 digits	5% ± 5 digits

What's Included

1.LC1020E LCR Meter 2.Data Cable 3.Shorting Plate
4.Kelvin Test Clip 5.Test Leads (Black+Red)
6.User Manual