



LCR Meter Model 11021

KEY FEATURES

- Test frequencies: 100Hz, 120Hz, 1kHz and 10kHz (9.6kHz)
- Basic accuracy: 0.1%
- 0.1m Ω –99.99 M Ω measurement range, 4 1/2 digits resolution
- Lower harmonic-distortion affection
- Fast measurement speed (75ms)
- Standard RS232 interface
- Optional GPIB & Handler interface
- Programmable trigger delay time is convenient for measurement timing adjustment in automatic production
- Bin-sorting function
- Comparator and pass/fail alarming beeper function
- Text mode 40x4 matrixes LCD display
- Friendly user interface
- Open/short zeroing
- On-line firmware refreshable (via RS232)
- Input protection (1 Joule)

The Chroma 11021 LCR Meter is Chroma's most cost-effective digital LCR Meter, provides 100Hz, 120Hz, 1kHz, and 10kHz test frequencies. Standard RS232 interface, optional GPIB & Handler interface, high speed and stable measurement capabilities enable the Chroma 11021 can be used for both component evaluation on the production line and fundamental impedance testing for bench-top applications. The Chroma 11021 uses lower harmonic-distortion phase-detection technology to reduce affection of measurement accuracy caused by hysteresis distortion in magnetic component or high dielectric-coefficient capacitor measurement, which is not provided in general low-end LCR Meters.

ORDERING INFORMATION

- 11021** : LCR Meter 1kHz
- 11021** : LCR Meter 10kHz
- A110104** : SMD Test Cable #17
- A110211** : Component Test Fixture
- A110212** : Component Remote Test Fixture
- A110242** : Battery ESR Test Kit
- A110232** : 4 BNC Test Cable with Clip#18
- A110234** : High Frequency Test Cable
- A110235** : GPIB & Handler Interface
- A110236** : Rack Mountain Kit
- A133004** : SMD Test Box
- A165009** : 4 BNC Test Cable with Probe

SPECIFICATIONS	
Model	11021
Measurement Parameter	
Primary Display	L, C, R, Z
Secondary Display	Q, D, ESR, X, θ
Test Signals Information	
Test Level	0.25V / 1V, $\pm(10\% + 3\text{ mV})$
Test Frequency	100Hz, 120Hz, 1kHz, 10kHz (9.6kHz)
Frequency Accuracy	$\pm 0.25\%$
Output Impedance (Typical)	Varies as range resistors 25 Ω , 100 Ω , 1K Ω , 10K Ω , 100K Ω
Measurement Display Range	
Primary Parameter	L: 0.01 μ H–9.999kH C: 0.01pF–99.99mF Z: 0.1m Ω –99.99M Ω
Secondary Parameter	Q: 0.1–9999.9 D: 0.0001–9999.9 θ : -180.00° ~ +180.00°
Basic Accuracy (Note1)	$\pm 0.1\%$
Measurement Time (1KHz) (Note2)	
Fast	Freq = 1K/10kHz : 75ms Freq = 100/120Hz : 85ms
Medium	145ms
Slow	325ms
Trigger	Internal, Manual, External, Bus
Display	
L, C, R, Z Q, D, R, θ	40 x 4(Character Module) LCD Display
Function	
Correction	Open/Short zeroing
Equivalent Circuit Mode	Series, Parallel
Interface & Input/Output	
Interface	RS-232 (Standard), Handler, GPIB(Optional)
Output Signal	Bin-sorting & HI/GO/LOW judge
Comparator	Upper/Lower limits in value
Bin Sorting	8 bin limits in %
Trigger Delay	0–9999ms
General	
Operation Environment	Temperature : 10°C–40°C, Humidity : < 90 % R.H.
Power Consumption	50VA max.
Power Requirement	90~ 125Vac or 190 ~250Vac, 48 Hz ~62 Hz
Weight	Approx. 5 kg
Size (W x H x D)	320 x 115 x 206 mm

Note 1: 23 \pm 5°C after OPEN and SHORT correction. Slow measurement speed. Refer to Operation Manual for detail measurement accuracy descriptions.

Note 2: Measurement time includes sampling, calculation and judge test parameter measurement.