

LCR Meters 4310 4320 4350 43100



- New model range introduced for 2007
- Measurements from 20Hz to 1MHz (43100)
- 20ms measurement time
- Parameters Z Φ Rac C D L Q B G X Y Rdc*
- Drive level 10mV to 2Vrms
- RS232 & GPIB Interfaces
- +2V internal / ± 40 Vdc external bias
- Protection against charged capacitors
- Small size & light weight
- Unbeatable price

Product Description

The 4300 series is the entry level range of Wayne Kerr component analyzers. They provide a wide range of features and offer high performance and very competitive prices. They have been developed using the experience gained by Wayne Kerr during their 60 year history.

Technical Specification

Frequency

4310	20Hz to 100kHz
4320	20Hz to 200kHz
4350	20Hz to 500kHz
43100	20Hz to 1MHz

Frequency Steps

20Hz to 1kHz	5Hz
1kHz to 10kHz	50Hz
10kHz to 100kHz	500Hz
100kHz to 1MHz	5kHz

AC Drive Level

Open circuit:	10mV to 2V rms
Current step size:	10mV
Short circuit:	100 μ A to 20mA rms
Current step size:	100 μ A
Signal source impedance:	100Ohm

Measurement parameters

Impedance (Z)	Phase Angle (Θ)
Capacitance (C)	Dissipation Factor (D)
Inductance (L)	Quality Factor (Q)
AC Resistance (Rac)	Reactance (X)
DC Resistance (Rdc)*	Admittance (Y)
Susceptance (B)	Conductance (G)

Series/parallel equivalent circuit

Any combination

Polar Form

Z + Θ , Y + Θ

DC Bias Internal

2Vdc

DC Bias External

± 40 Vdc

* Option



Technical Specification (continued)

Measurement speeds

Four selectable measurement speeds for all functions. Up to 50 measurements per second, depending on frequency and set up conditions.

Measurement Connections

4 front panel BNC sockets with screens at ground potential.

Binning (optional)

10 bins with absolute and percentage limits.
25 way D-type interface connector.

Option /B1 (non-isolated)

Common 0V. Bin outputs 0 to 5V (nominal) with >10mA current sink capability.

Option /B2 (isolated)

Common 24V input. Outputs 0 to 24V with >10mA current source capability.

General

Power requirements

90VAC to 264VAC (Autoranging); 47Hz to 63Hz

Display

¼ VGA (320 x 240) Black & White

Remote control

RS232

GPIB (IEEE-488.2)

*Either interface can be ordered as standard. The other can also be ordered in addition as an option.

Mechanical

Height 104mm (4.1") Width 322mm (12.7")
Depth 285mm (11.1") Weight 2.7kg (5.9lb)

Environmental conditions

Temperature range

Storage -40°C to +70°C
Operating 0°C to 40°C
Full Accuracy 23°C ±5°C

Relative humidity

Up to 80% non-condensing

Order codes

Description	Order code
4310 20Hz to 100kHz LCR Meter	1J4310
4320 20Hz to 200kHz LCR Meter	1J4320
4350 20Hz to 500kHz LCR Meter	1J4350
43100 20Hz to 1MHz LCR Meter	1J43100

Supplied with user manual, Kelvin clips and AC power cable

Options

Description	Order code
Bin handler (non-isolated)	/B1
Bin handler (isolated 24V)	/B2
IEEE488 (GPIB) Interface	/G
RS232 interface	/F
DC Resistance	/R

UK

Wayne Kerr Electronics
Vinnetrow Business Park
Vinnetrow Road, Runcion
Chichester, West Sussex
PO20 1QH, UK
Tel: +44 1243 792200
Fax: +44 1243 792201

EUROPE

Wayne Kerr Europe GMBH
Märkische Str. 38-40
58675 Hemer
Germany
Tel: +49 2372 557870
Fax: +49 2372 5578790

Please consult our website for details of our other companies and distributors around the world.

www.waynekerrtest.com

sales@waynekerr.info

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