



R&S®LCX200 (with R&S®LCX-K201 frequency upgrade) versus Keysight E4980AL-102



What sets this LCR meter apart?

- ▶ Fast, accurate and versatile
- ▶ Upgradeable frequency range
- ▶ Test signals for all requirements
- ▶ DC bias
- ▶ Data logging function
- ▶ High-resolution touchscreen
- ▶ Versatile test fixtures

Your benefit	Features
Versatile functionality, all frequently used measurements supported	▶ The R&S®LCX performs the full range of measurements required to characterize resistors, capacitors and inductors
DC measurements and wide test signal frequency range	▶ The R&S®LCX200 has an upper frequency limit of 500 kHz and can be extended to 1 MHz or 10 MHz using software options if required
Easy to use	▶ Modern and intuitive operation thanks to a large capacitive touchscreen ▶ Frequently used functions are directly accessible via the front panel keys

Parameter	R&S®LCX200 with R&S®LCX-K201	Keysight E4980AL-102
Test signal frequency	DC, 4 Hz to 1 MHz	DC, 20 Hz to 1 MHz
Test signal voltage (RMS)	10 mV to 10 V	0 V to 2 V
Test signal current	1 mA to 200 mA	0 mA to 20 mA
Bias voltage (internal)	0 V to 10 V	0 V/1.5 V/2 V
Bias current (internal)	0 mA to 200 mA	not specified
Ext. bias voltage input	0 V to 40 V	not available
Source impedance	100 Ω, 10 Ω	100 Ω
Measurement range	100 mΩ to 100 MΩ	10 mΩ to 100 MΩ
Basic measurement accuracy (impedance)	±0.05 %	±0.05 %
Open/short/load compensation	yes	yes
Cable extension length	1 m	1 m/2 m/4 m
Special functions	graphical chart/list sweep	list sweep
Transformer measurements	4 Hz to 100 kHz	not available
Remote control interfaces	USB, LAN, GPIB (option)	USB, LAN, GPIB



Touchscreen functionality and display

High-resolution touchscreen with virtual menus and special functions



R&S®LCX200

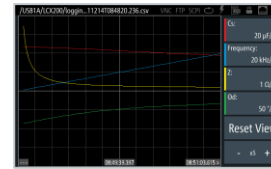
- ▶ The capacitive touchscreen is the central operating element of the R&S®LCX200
- ▶ Virtual keyboards, menus and special functions accessed through icons provide a user-friendly experience



Keysight E4980AL-102

- ▶ The Keysight E4980AL-102 LCR meter does not have a touchscreen and operates solely with keys

Graphical representation of measurements



R&S®LCX200

- ▶ The R&S®LCX200 has a large high-resolution screen that can display a wide variety of additional information such as settings and statistics.
- ▶ Measurements can be displayed as graphs; up to four measurement functions can be selected and plotted versus time. Minimum and maximum values can also be marked.

TYPE	FREQ	SEQ	Co[F]	D[-]	QIP	PREV PAGE	NEXT PAGE
109	119.1 k	999,442 f	2,82263 m				
192	119.2 k	999,434 f	2,86183 m				
193	119.3 k	999,436 f	2,84848 m				
198	119.4 k	999,435 f	2,81929 m				
195	119.5 k	999,497 f	2,82726 m				
196	119.6 k	999,466 f	2,83342 m				
197	119.7 k	999,477 f	2,83718 m				
198	119.8 k	999,496 f	2,83966 m				
199	119.9 k	999,488 f	2,84773 m				
200	120 k	999,457 f	2,82296 m				

Keysight E4980AL-102

- ▶ The Keysight E4980AL series has a 320 × 240 pixel, RGB color LCD display without graphical functionality

External bias functions



R&S®LCX200

- ▶ As standard, the R&S®LCX200 generates internal DC bias voltages of up to 10 V
- ▶ The R&S®LCX-K108 option extends the range of applications
- ▶ With the option, voltages of up to 40 V, e.g. from an external power supply unit, can be applied at the external bias ports on the rear of the LCR meter
- ▶ The option allows the internal bias source to be operated in current regulation mode with an adjustable current of up to 200 mA

Keysight E4980AL-102

- ▶ No external bias function

Accuracy - The R&S®LCX200 has a lower error margin than the Keysight E4980AL-102

