ROHDE&SCHWARZ

Make ideas real

PS>

R&S®LCX200

versus Keysight E4980AL-052



- ► 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 thank to a large capacitive touchscreen ▶ Frequently used functions are directly accessible via the front panel keys





Parameter	R&S°LCX200	Keysight E4980AL-052		
Test signal frequency	DC, 4 Hz to 500 kHz	DC, 20 Hz to 500 kHz		
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 m Ω to 100 $M\Omega$	$10~m\Omega$ to $100~M\Omega$		
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-052

► The Keysight E4980AL-052 LCR meter does not have a touchscreen and operates solely with keys

Graphical representation of measurements



100E	SEQ				PREV PAGE
io.	FREQ[Hz]	Cp[F]	D[-]	CHE	NEXT
		999.442	2.82263		PAGE
	119.2 k	999.434	2.86183		FAGE
		999.486	2.04843		
	119.5 k	999.497	2.82726		_
	119.6 k	999.466	2.88342		
		999.477	2.87176		
		999.496			
		999.488			
	128 k	999.457			

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.

Keysight E4980AL-052

► 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-052

No external bias function

Accuracy - The R&S®LCX200 has a lower error margin than the Keysight E4980AL-052 100 MΩ 10 % 2% 10 MΩ 1 ΜΩ 0.2% 0.3 % 100 kΩ 10 kΩ R&S®LCX200 0.05% 0.1 % 1 kΩ 100Ω 0.3 % 10 Ω 1Ω 200 mΩ 100 mO 10 % 10 mΩ Keysight E4980AL-052 1 kHz 100 Hz 1 Hz 4 Hz 10 Hz

Rohde & Schwarz GmbH & Co. KG (www.rohde-schwarz.com)

Rohde & Schwarz customer support (www.rohde-schwarz.com/support) Rohde & Schwarz training (www.training.rohde-schwarz.com)

R&S® is a registered trademark of Rohde & Schwarz GmbH & Co. KG | PD 3683.6493.32 | Version 01.10 | April 2023 (sa)

Trade names are trademarks of the owners | R&S®LCX200 versus Keysight E4980AL-052 | Data without tolerance limits is not binding

Subject to change | © 2022 – 2023 Rohde & Schwarz GmbH & Co. KG | 81671 Munich, Germany