



# R&S®LCX200 (with R&S®LCX-K210 frequency upgrade) versus Hioki IM3536



## 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-K210	Hioki IM3536
Test signal frequency	DC, 4 Hz to 10 MHz	DC, 4 Hz to 8 MHz
Test signal voltage (RMS)	10 mV to 10 V	10 mV to 5 V
Test signal current	100 µA to 200 mA	10 µA to 100 mA
Bias voltage (internal)	0 V to 10 V	0 V to 2.5 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, 10 Ω
Measurement range	100 mΩ to 100 MΩ	1 mΩ to 200 MΩ
Measurement times	15 ms/100 ms/500 ms	0.5 ms/4 ms/20 ms/300 ms
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, RS-232



## 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

#### Hioki IM3536

- ▶ The Hioki IM3536 has a 5.7-inch VGA color TFT LCD display

### Graphical representation of measurements

#### R&S®LCX200

- ▶ The R&S®LCX200 has a large, easily readable 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.

#### Hioki IM3536

- ▶ The Hioki IM3536 requires an external connection to a PC in order to display data graphically

## External bias functions



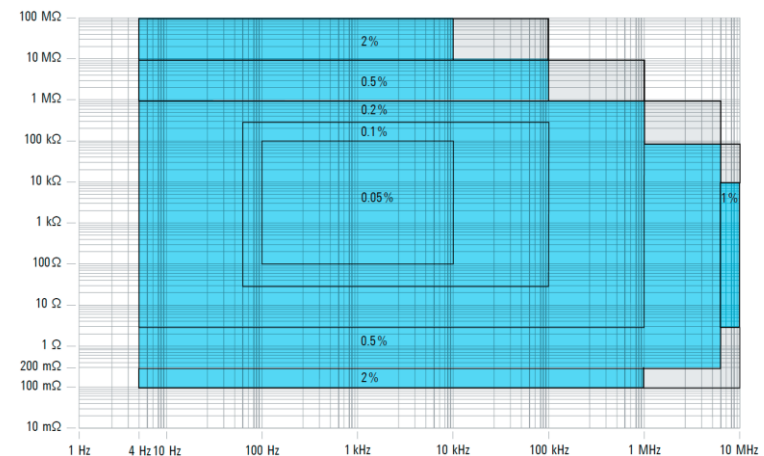
#### Hioki IM3536

- ▶ No external bias function

#### 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

## Accuracy



The graphical charts clearly show the excellent accuracy of the R&S®LCX200, especially in the higher frequencies. The Hioki instrument does not provide graphical accuracy information.