

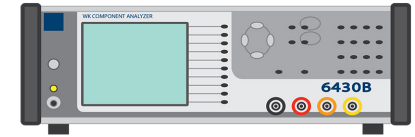
Competitive Comparison

Keysight E4980AL Precision LCR Meter versus WK 6430B LCR Meter

Keysight E4980AL



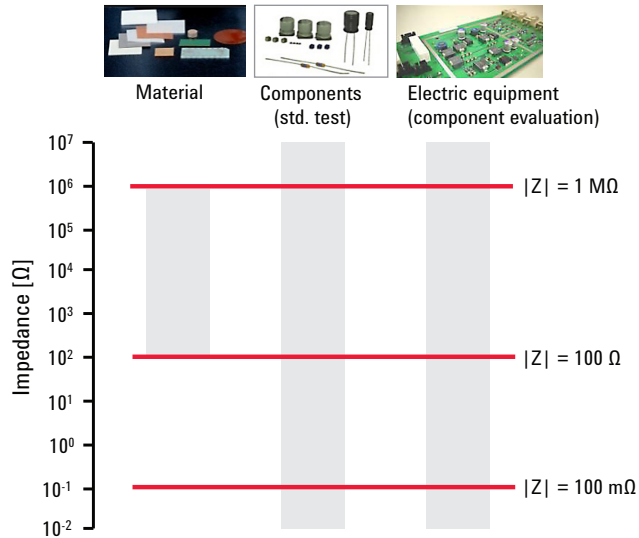
- Combination of accuracy, speed and versatility
- Wide variety of accessories
- Upgradability



	Keysight E4980AL		WK 6430B	
Frequency range	20 Hz to 500 kHz (Option 052)	✓	20 Hz to 500 kHz	✓
Test signal level	2 Vrms	✗	10 Vrms (up to 300 kHz), 5 Vrms	✓
Test signal level monitor	Yes	✓	No	✗
ALC	Yes	✓	Yes	✓
Basic accuracy (freq. range)	0.05% (100 Hz to 500 kHz)	✓	0.05% (20 Hz to 10 kHz)	✗
Measurement speed for basic accuracy	119 msec (med. at 500 kHz)	✓	900 msec (slow at 10 kHz)	✗
Measurement accuracy for high/med/high/med/low Impedance	See next page	✓	See next page	✗
DC bias signal level	1.5 V, 2 V	✓	2 V	✗
DCR measurement	Yes	✓	Yes	✓
Compensation	Open/Short/Load	✓	Open/Short	✗
Cable length correction	1/2/4 m	✓	No	✗
List sweep	Test frequency, test signal voltage/current (201 points)	✓	Test frequency (8 points)	✗
Comparator BIN sort	Yes	✓	Yes	✓
USB/LAN interface	Yes	✓	No	✗
Test accessory	Over 20 kinds	✓	7 kinds	✗
Frequency upgrade	Yes (1 MHz)	✓	No	✗

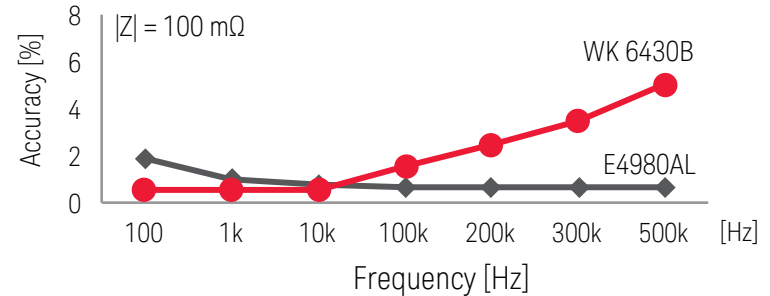
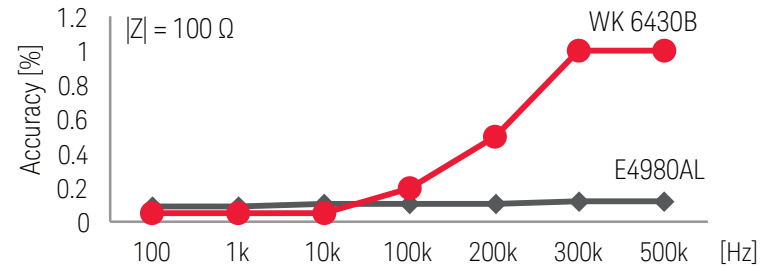
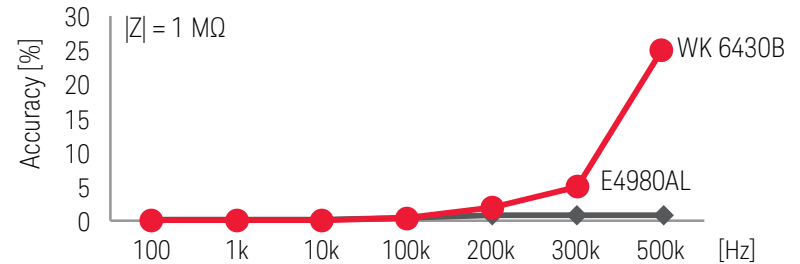
Sources: E4980A/E4980AL Data Sheet (Published in December 2014, 5989-4435EN)
6430B / 6440B Product Specification Issue B

Typical Impedance Range by DUT Category



For basic testing or evaluation of electronic components such as capacitors and materials, wide impedance measurement range and test frequency range are required. For example, the high-value capacitance is measured at 120 Hz, and the low-value capacitance is measured at 1 MHz.
 e.g. 10 mF capacitor: $|Z| = 133 \text{ m}\Omega$ at 120 Hz
 1 pF capacitor: $|Z| = 159 \text{ k}\Omega$ at 1 MHz

Impedance Measurement Accuracy over Test Frequency



Sources: E4980A/E4980AL Data Sheet 5989-4435EN, 6430B / 6440B Product Specification Issue B

Measurement condition:

Test signal level: 1Vrms, cable length: 0 m, measurement speed: E4980AL med., WK 6430B slow

www.keysight.com/find/E4980AL