

# LCR Meter

## High-Frequency LCR Meter TL-3900 Series

### Product description:

TL-3900 series high-frequency LCR digital bridge with its high precision and wide frequency range, can meet the measurement requirements of most low-voltage parameters of components and materials. It can be widely used in the analysis of various electrical performance of components such as microphones, resonators, inductors, ceramic capacitors, liquid crystal display, varactor diodes, transformers as well as the measure of low ESR capacitors and high Q inductors.



### Features

- High comparability of test data with international brand LCR bridge manufacturers (Keysight, WK)
- Keyboard lock function, power-off data protection function
- Graphical scanning function, list scanning function, open circuit, short circuit, and load correction function.
- Simplified Chinese and English operating languages
- Save test data and test conditions (to a USB drive or internal storage).
- Provides internal DC bias voltage -5V to +5V
- Test voltage and current automatic balancing adjustment function (ALC)
- The instrument contains 50 sets of internal test files, and a USB flash drive contains 500 sets of test files, which can be accessed at any time.
- The USB flash drive supports FAT16 and FAT32 file systems.

### Ordering Informations

- TL-3950A** : 20Hz ~ 5MHz (continuous test freq.) LCR Meter
- TL-3920A** : 20Hz ~ 2MHz (continuous test freq.) LCR Meter
- TL-3910** : 50Hz ~ 1MHz (36 points freq.) LCR Meter
- TL-3910A** : 20Hz ~ 1MHz (continuous test freq.) LCR Meter
- TL-3905A** : 50Hz ~ 500kHz (continuous test freq.) LCR Meter

### Standard Accessories :

- User Manual
- TL-39Y05 Test fixture
- TL-39Y10 Shorting place
- TL-39Y11 Kelvin test box
- Power cord
- Test report

### Optional Accessories :

- TL-39Y09 Tweezer test box
- TL-39Y08 SMD test fixture
- TL-39Y19 Test fixture
- TL-39Y11 Kelvin Test box



TL-39Y05  
Test fixture



TL-39Y10  
Shorting place



TL-39Y05  
place Test fixture



TL-39Y10  
Fine Test fixture

TL-39Y08  
SMD test fixture



TL-39Y11  
Kelvin Test box



TL-39Y09  
Tweezers Test box

### Specifications

Model	TL-3950A	TL-3920A	TL-3910	TL-3910A	TL-3905A
Frequency Range	20Hz ~ 5MHz	20Hz ~ 2MHz	20Hz ~ 1MHz	20Hz ~ 1MHz	20Hz ~ 500kHz
Test Point	1mHz resolution		36 points	1mHz resolution	
Basic Accuracy	0.1%		0.05%	0.1%	
Test Parameters	C, L, X, B, R, G, D, Q, ESR, DCR, RP, $\theta$ , IZI, IYI, P				
Test Level	0.005 ~ 5Vrms		0.005 ~ 2Vrms		
Test Speed	Fast : 100t/sec, Medium : 20t/sec, Slow : 6t/sec		Fast : 50t/sec, Medium : 20t/sec, Slow : 6t/sec		
Display Range	IZI, R, X : 0.001m $\Omega$ ~ 99.9999M $\Omega$				
	IYI, G, B : 0.00001 $\mu$ s ~ 99.9999s				
	C : 0.00001pF ~ 9.99999F				
	D : 0.00001 ~ 9.99999				
	DCR : 0.01m $\Omega$ ~ 99.9999M $\Omega$				
	L : 0.00001 $\mu$ H ~ 99999.9H				
	Q : 0.01 ~ 99999.9				
	$\theta$ rad : -3.14159 ~ 3.14159				
$\theta$ deg : -179.999° ~ 179.999°					
$\Delta$ % : -999.999% ~ 999.999%					
Signal Source Output Imp.	10 $\Omega$ CC, 25 $\Omega$ , 50 $\Omega$ , 100 $\Omega$ , 10/100 $\Omega$				
Internal DC Bias Voltage	-5V ~ +5V		0V, 1.5V, 2V		
Internal Bias Option	Optional : Max 100mA, $\pm$ 10V Bias Voltage / 0.1 ~ A Current				
Range Mode	Auto, Hold				
Trigger Mode	INT/MAN/AUTO/EXT/BUS				
Calibration Function	Open circuit/short circuit, full frequency reset, point frequency reset				
Equivalent Circuit	Series, parallel				
Comparator	10-level sorting, BINO ~ BIN9, NG, AUX				
	PASS, HI, LOW (PASS/FAIL LED display)				
Interface	USB Host, USB Device, RS-232C, Handler, GPIB (option)				
Working Environment	Tempertaure : 0 ~ 40°C, Humidity : $\leq$ 75%RH				
Input Power	198 ~ 242 Vac, 45 ~ 64Hz, $<$ 50VA				
Dimension (WxHxD)	400x132x300 mm.				
Weight	8.5 kg.				