

Impedance Analyser

Specifications:

Generator

Frequency range: 10uHz to 35 MHz

Accuracy: $\pm 0.05\%$ of the desired frequency

Gain accuracy: $0.1\% + 0.0001/\text{kHz}$ ($f, 1\text{MHz}$)

$1\% + 0.04\%/\text{kHz}$ ($1\text{MHz} < f < 35\text{MHz}$)

Phase accuracy: $0.02^\circ < 10 \text{ kHz}$ $f < 10 \text{ kHz}$

$0.05^\circ + 0.0001^\circ/\text{kHz}$ $10 \text{ kHz} < f < 35 \text{ MHz}$

Voltage range AC $\pm 100 \mu\text{V}$ to $\pm 10 \text{ V}$ peak to peak

Voltage range DC $\pm 100 \mu\text{V}$ to $\pm 10 \text{ V}$

Input range 10 V, 3 V, 1 V, 300 mV, 100 mV, 30 mV, 10 mV, 3 mV, 1 mV peak to peak

Resolution 16 bit

Measurement Ranges

Inductance 10 nH to 10 kH

Capacitance 1 pF to 1000 μF

Resistance 1 m Ω to 500 M Ω

Basic accuracy 0.1%

Output

Output voltage 0 V to 5 V peak

Output impedance 50 Ω

Output resolution 50 μV to 5 mV level

Output bias $\pm 5 \text{ V}$