

ANALOG MULTITESTER AU-31



Introduction

This is a tester developed, in a basic policy of radical design and functions, for use in measurement in a small capacity electric circuit that is equipped with functions equal to those of a digital tester.

The tester features adoption of a switching method of automatic-range switching (when measuring voltages & resistances), automatic-polarity selection type with no pointer needle reverse-swinging at minus input, high input impedance type, series-connected capacitor input type, and 0-ohm adjustment non-required, thus providing an easy-to-use analog multifunction.

Features

1. Adoption of genuine full-automatic ranging eliminates the need to switch in measuring voltage and resistance, and enables optimum range to automatically be set.
2. For direct voltage and direct current, polarities of + - can be automatically measured, and LED lights at the - (minus) input.
3. For both DC and DC currents, high input impedance of 10Mohms at voltage measurement eliminates measuring loss.
4. For DC/AC superposed circuit, AC component only can be measured with DC component eliminated, when measuring AC current.
5. Differently from a conventional tester, 0-ohm adjustment is not required when measuring resistance.
6. Consumption of internal batteries can be recognized without difficulties.
7. Closing a cover (lid) automatically switches off the power.

General Specifications

Meter sensitivity	Electric meter
Range switch	Auto & Manual
Accuracy guaranteed temperature & humidity range	23±2°C 45-75% RH
Operating temperature humidity range	0~40°C, 80% RH Max. No condensation
Power supply	R03 x 4
Fuse	0.3A/250V (20mm)
	Instruction manual, Test leads(TL-61G), Spare

Accessory	fuse
Dimension	110 x 124 x 48 mm
Weight	Approx. 290g

Measurement Range & Accuracy

DCV

Range	Accuracy	Input Resistance	Remarks
300mV	±3% of max. scale	1MΩ	---
3/12/60/300V/1000V	±3% of max. scale (±4% for 1000V)	10MΩ	
30kV (by use of optional probe)	10% of max. scale	1000MΩ (Probe resistance)	

ACV

Range	Accuracy	Input Resistance	Remarks
300mV	±3% of max. scale Frequency characteristic 40Hz~10kHz ±5%	1MΩ (Full wave rectification)	---
3/12/60/300V/1000V	±3% of max. scale (±4% for 1000V)	10MΩ (Full wave rectification)	

DCA

Range	Accuracy	Input Resistance	Remarks
30mV/3A	±3% of max. scale	---	Shunt voltage drop 220mV

ACA

Range	Accuracy	Input Resistance	Remarks
30mV/3A	±3% of max. scale	---	Shunt voltage drop 220mV

Ohm (Ω)

Range	Accuracy	Input Resistance	Remarks
20k/200k/2M/20M/200MΩ	±3% of max. scale	---	Terminal open voltage : 1.2V DC

Low Frequency Output

Range	Accuracy	Input Resistance	Remarks
-9dB/+11/+23/ +37/+51/+62dB 0dB=0.775V (1mW)(600Ω)	±3% of scale length (4% for +62dB)	10MΩ (Full wave rectification)	---

