

sanwa
Analog Multitester
AX-313TR



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INTRODUCTION

This is a high performance tester incorporating a full-range polarity switching function and a transistor hFE measuring function.

This tester features a zero-center-meter function, a transistor hFE measuring function, a capacitance check function for a large capacitor, a continuity check function by a LED lamp, DC12 ranges, and a series-connected capacitor terminal (an output terminal), thus being a compact-but-multifunctional tester.

FEATURES

- Measures hFE from 0 to 1000.
- Continuity can be checked by the LED indicator.
- Either NPN or PNP side is selected by polarity switch knob according to transistor to be measured.
- DC 12A range
- A series condenser is built in the circuit, so DC elements are cut off when measuring AC.

SPECIFICATIONS

- Meter sensitivity__ 44 μ A
- Range switch__ Manual
- Accuracy guaranteed temperature & humidity range__ 23 \pm 2'c 45-75% RH
- Operating temperature humidity range__ 0-43'c, 80% RH Max. No condensation
- Power supply__ R6 x 2, 6F22 x 1
- Fuse__ 0.5A/250V (20mm)
- Accessory__ Instruction manual, Test leads (TL-61), Spare fuse
- Dimension__ 165 x 106 x 44 mm
- Weight__ Approx. 350g

Function	Range	Accuracy	Input Resistance	Remarks
DCV	120m/3/12/30/120/300/1200V 25kV (25kV by use of optional probe "HV-10")	\pm 2.5% of max. scale(1200V or below)	20k Ω	-
DCV(NULL)	\pm 6/ \pm 15V	\pm 2.5% of max.	40k Ω	Zero Centering

		scale		Method
ACV	6/30/120/300/1200V 40Hz - 30kHz $\pm 3\%$ 30Hz - 100kHz $\pm 1\text{dB}$ (30V or below)	$\pm 3\%$ of max. scale	9k Ω	-
DCA	50 μ /3m/30m/0.3/12A(50 μ A range is common with DC 120mV range)	$\pm 2.5\%$ of max. scale($\pm 3.5\%$ for 12A)	-	Terminal Voltage drop 0.12 - 0.3V(for shunt)
RESISTANCE	2k/20k/200k/2M/20M Continuity indicating LED : X 1 range (Emitting light at 10 Ω or less)	$\pm 3\%$ of scale length	-	Built-in battery 1.5V(SUM-3) X 2 9V(006P)X 1
dB	-10....+17dB(in AC6V range)....+63dB 0dB=0.775V(1mW) 600 Ω impedance circuit	$\pm 3\%$ of max. scale	9k Ω	-
C	1 μ F/0.1 μ F/0.01 μ F/1000 μ F	$\pm 6\%$ of scale length	-	Maximum deflecting indication by C charging current
BATT (Battery Test)	0 - 1.5V (BAD - ? - GOOD Color-coded scale)	$\pm 5\%$ of max. scale	-	Load Current : 0.3A
Li (Terminal to Terminal Current)	0 - 150F/0.1 μ A.....X 1k Ω Range 0 - 1.5A.....X 100 Ω Range 0 - 15mA.....X 10 Ω Range 0 - 150mA.....X 1 Ω Range	$\pm 5\%$ of scale length	-	Current that flows between + and -COM terminals during measurement
hFE (DC Current Amplication Factor)	Transistor hFE : 0 - 1000	$\pm 3\%$ of scale length	-	-