

sanwa®

TOKYO JAPAN

HYBRID DIGITAL MULTIMETER

PM33a

APPLICATIONS AND FEATURES

This instrument is a pocket type digital multimeter designed for the measurement of low-voltage circuit.

This is used at small communications equipments, home electric appliances, voltage of lump line, and measurement of various types of batteries.

Hybrid pocket size DMM + Clamp meter

- AC and DC currents measurable up to 100A
- Current measurement with thin U-shaped current sensor(10mm)
- Resistance, Capacitance, Frequency, and Duty cycle measurement
- MAX, MIN value
- Data hold
- Range hold
- Relative value
- Auto power save(30min after the last operation)

SPECIFICATIONS

	Measuring range	Best accuracy	Resolution
DCV	660m/6.6/66/600V	$\pm(0.7\%+3)$	0.1mV
ACV	660m/6.6/66/600V	$\pm(1.4\%+6)$	0.1mV
DCA	100A	$\pm(2.0\%+5)$	0.1A
ACA	100A	$\pm(2.0\%+5)$	0.1A
Resistance	660/6.6k/66k/660k/6.6M/66M Ω	$\pm(0.9\%+3)$	0.1 Ω
Capacitance	6.6n/66n/660n/6.6 μ /66 μ /660 μ /6.6m/66mF	$\pm(5.0\%+10)$	0.001nF
Frequency	660/6.6k/66kHz	$\pm(0.5\%+3)$	0.1Hz
Duty cycle	20~80%	$\pm(0.5\%+5)$	
Continuity	Buzzer sounds at less than 30 Ω . Open voltage : approx. 1.2V		
Diode test	Open voltage : approx. 3V		

Operation method	Double integration
AC measuring method	Average sensing
Display	6600 count
Range selection	Auto and Manual ranges
Overload	"OL" is displayed
Polarity	Automatic selection(only "-" is displayed when negative voltage is inputted.)
Battery low warning	Battery() mark lights when the internal battery's power is below 2.3V
Sampling rate	Approx. 3 times/sec
Guaranteed accuracy temperature and humidity range	23°C $\pm$ 5°C, below 80%RH, No condensation
Operating temperature /humidity	5~40°C, 80%RH(Max), No condensation
Storage temperature /humidity	-10°C~50°C, below 80%RH, No condensation
Environmental condition	Altitude 2000m or below, pollution degree II
Power consumption	Approx. 7mW TYP(at DCV)
Clamp diameter	10mm
EN61010-1 CAT.II	600V
EN61010-1 CAT.III	300V
Battery	LR03 x 2
Size / Mass	H130 x W75 x D19.9mm / 160g
Standard accessoriesincluded	Instruction Manual



A battery for monitoring has been installed prior to shipment from the factory. It may be discharged before the expiration of the described battery life. This battery is used to check the functions and performance of the product. Specifications and external appearance of the product described above may be revised for modification without prior notice.

sanwa®

SANWA ELECTRIC INSTRUMENT CO., LTD.

Dempa Bldg, 4-4 Sotokanda 2-Chome, Chiyoda-Ku, Tokyo 101-0021 Japan
Tel:+81-3-3251-0941 Fax:+81-3-3256-9740

www.sanwa-meter.co.jp

Distributed by

sanwa
A M E R I C A
AUTHORIZED DISTRIBUTOR
www.sanwa-america.com