

**sanwa**<sup>®</sup>  
TOKYO JAPAN

*3 Range Test Voltage*

# DIGITAL INSULATION RESISTANCE TESTER

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MG1000



DIGITAL INSULATION RESISTANCE TESTER

# MG1000

## MG500 MG125

Automatic live circuit detection ( $\geq 30V$  AC/DC)

Sanwa MG series allows you to measure insulation resistance more safely by avoiding operation mistakes.

# DIGITAL INSULATION RESISTANCE TESTER MG1000, MG500, MG125

Sanwa MG series allows you to measure insulation resistance more safely by

DIGITAL INSULATION RESISTANCE TESTER

## MG1000

Automatic live circuit detection ( $\geq 30V$  AC/DC)

**1000V**  
4000M $\Omega$

**500V**  
4000M $\Omega$

**250V**  
4000M $\Omega$

*3 Range  
Test Voltage*

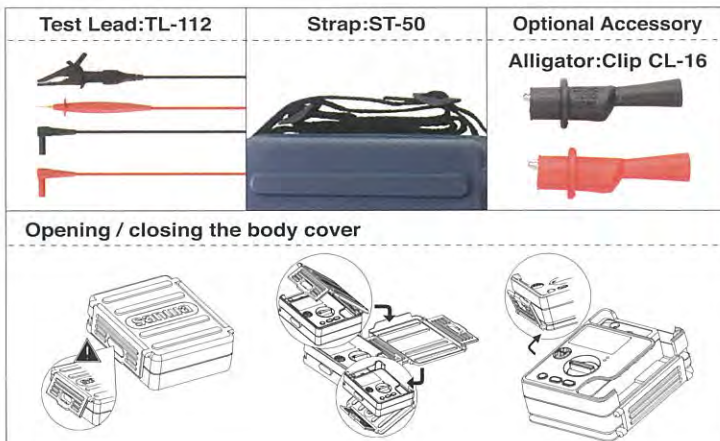


## Digital Insulation Resistance Tester MG

General I

- ① In any range (M $\Omega$ ), the hot-line state (30 V minimum) can be detected through the buzzer sound and the red LED illumination. If you press the MEASURE button by mistake in this state, no test voltage will be generated. Thus, the measuring circuit and the equipment involved will not be affected adversely.
- ② During the measurement of M $\Omega$ , a large bolt mark is illuminated on the LCD with the buzzer sound, allowing you to find that voltage is generated.
- ③ To select the highest test voltage range, you need to turn the rotary switch while holding down the 0 $\Omega$  ADJ button. This design feature prevents the highest test voltage from being generated by an operation mistake.
- ④ An easy-to-hold body with a portrait design has been adopted to ensure stable measurements.
- ⑤ The tester comes with a strap, and uses less slippery elastomeric material for its lateral sides so that the user can grip the tester more firmly.
- ⑥ After measurements have been finished, the last measured value can be held automatically. Unlike an analog tester, you do not need to check the reading during measurements and therefore can comfortably concentrate on the object under measurement.
- ⑦ A large logarithmic bargraph is provided to enable the user to check the measured value like using an analog tester.
- ⑧ The backlight allows you to check the measured value even in a dark place. Since the rated voltage output can be checked with the green LED, you can find whether the measurement is being carried out properly.


### Standard Accessories



### Model:MG1000

Nominal test voltage & Measurement Range	Center scale	Measurement Range		Accuracy
250V 4,000M $\Omega$ /40.00M $\Omega$ 400.0M $\Omega$ /4000M $\Omega$	10M $\Omega$	1st effective measurement range	0.5~20.00M $\Omega$	$\pm(3\%rdg+4dgt)$
		2nd effective measurement range	0~0.49M $\Omega$ 20.01~4000M $\Omega$	$\pm(5\%rdg+5dgt)$
500V 4,000M $\Omega$ /40.00M $\Omega$ 400.0M $\Omega$ /4000M $\Omega$	100M $\Omega$	1st effective measurement range	1.000~500M $\Omega$	$\pm(3\%rdg+4dgt)$
		2nd effective measurement range	0~0.999M $\Omega$ 501~4000M $\Omega$	$\pm(5\%rdg+5dgt)$
1000V 4,000M $\Omega$ /40.00M $\Omega$ 400.0M $\Omega$ /4000M $\Omega$	100M $\Omega$	1st effective measurement range	2.000~1000M $\Omega$	$\pm(3\%rdg+4dgt)$
		2nd effective measurement range	0~1.999M $\Omega$ 1001~4000M $\Omega$	$\pm(5\%rdg+5dgt)$
Open circuit voltage	1 to 1.3 times of nominal test voltage			
Rated measurement current	1.0-1.2 mA (250 V @ 0.25 M $\Omega$ , 500 V @ 0.5 M $\Omega$ , 1000 V @ 1 M $\Omega$ )			
Short-circuit current	2mA or less			
Live circuit detection	At $\geq 30V$ AC/DC or more, inhibits test, buzzer sounds and ALARM indicator lights up.			

## General Specifications

AC Sensing	Average value
LCD	4200 count with analog bargraph
Sampling rate	Approx. 2 times / sec.
Range selection	Auto only Range up: approx. 4200 count or over, Range down: approx. 380 count or below
Over-range indication	"OL" indication on LCD V function: 780V or over MΩ, 4000Ω, 40Ω function: Approx. 4200 count or over
Polarity indication	"—" indication only when negative input
Low battery indication	"  " lights or flickers at about 7.7V-7.2V or below
Environmental condition	Altitude 2000m or below, pollution degree II
Operating temperature / humidity	0°C to 40°C and maximum relative humidity 90% (No condensation)
Storage temperature / humidity	-10°C ~ 50°C, 70%RH or below (with battery removed).
Power supply	R6 1.5V x 6 pcs (MG125, MG500) ; LR6 1.5V x 6 pcs (MG1000)
Time of measurement	MG125, MG500 : Approx. 5 hours MG1000 : Approx. 2 hours 30 minutes
Safety / EMC	IEC61010-1 CAT.III 600V, IEC61557-1/2/4, IEC61326 (EMC), IEC60529-IP54, IEC61010-031 (TL-112)
Dimensions	170 (L) X 142 (W) X 57 (H)
Weight	Approx. 600g (battery included)
Power consumption	Apporox. 7mA at V function
Accessories	Battery (built-in), test leads (TL-112), Strap (ST-50), instruction manual
Optional accessories	Alligator clip CL-16

※ Temperature 23 ± 5 °C, humidity 45% to 75% RH.

MG125

MG500



# sanwa®

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