

CAT IV
600V

Insulation Tester

TM-507

Auto Discharge

DISPLAY

- 4 digits LCD display.
- Polarity indication: Automatic polarity, "-" display for negative input.
- Low battery indication: "■■■■".

FUNCTIONS

- Function keys: POWER, GO, ZERO, LOCK, BACKLIT.
- Continuity test.
- Measures high insulation resistance with auto range of 250V, and (4MΩ/40MΩ/400MΩ/1000MΩ) with auto range of 500V and of (4MΩ/40MΩ/400MΩ/2000MΩ) with auto range of 1000V (4MΩ/40MΩ/400MΩ/4000MΩ).
- Measures DC voltage (0V~600V), AC Voltage (0V~600V).
- Auto power off.
- Auto discharge.

DC voltage measurement

Range	Resolution	Accuracy	Input impedance	Overload protection
0.1 - 600.0V	0.1V	±(0.5% rdg + 1 dgt)	3MΩ	605V AC max RMS

AC voltage measurement

Range	Resolution	Accuracy	Input impedance	Overload protection
0.1 - 600.0V	0.1V	±(0.8% rdg + 4 dgt)	3MΩ	605V AC max RMS

Max crest factor: $\sqrt{2}$

Resistance measure / Test Continuity with buzzer

Range	Resolution	Accuracy	Overload protection
0.1 - 199.9Ω	0.1Ω	±(2.0% rdg + 3 dgt)	605V AC max RMS per 1 minute

The buzzer sounds while measured resistance is lower than 30Ω.

LO Ω : Continuity of protection conductors

Range	Resolution	Accuracy	Overload protection
0.01 - 19.99Ω	0.01Ω	±(2.0% rdg + 3 dgt)	605V max RMS

Test current: >200mA DC up to 5Ω (measuring cables resistance included)

Test current: >45mA DC over 5Ω (measuring cables resistance included)

Open circuit voltage: $4 < V_0 < 24V$

MΩ: Insulation resistance (Auto Range)

Test voltage	Range	Resolution	Accuracy	Overload protection
250V	0.001 - 0.100MΩ	0.001MΩ	± 10 dgt	605V max RMS
	0.101 - 3.999MΩ	0.001MΩ	±(2.0% rdg + 5 dgt)	
	4.00 - 39.99MΩ	0.01 MΩ	±(5.0% rdg + 5 dgt)	
	40.0 - 399.9MΩ	0.1 MΩ	±(5.0% rdg + 5 dgt)	
	400 - 1000MΩ	1MΩ	±(5.0% rdg + 5 dgt)	
500V	0.001 - 0.250MΩ	0.001MΩ	± 15 dgt	605V max RMS
	0.251 - 3.999MΩ	0.001MΩ	±(2.0% rdg + 5 dgt)	
	4.00 - 39.99MΩ	0.01 MΩ	±(5.0% rdg + 5 dgt)	
	40.0 - 399.9MΩ	0.1MΩ	±(5.0% rdg + 5 dgt)	
	400 - 2000MΩ	1MΩ	±(5.0% rdg + 5 dgt)	
1000V	0.001 - 0.250MΩ	0.001MΩ	± 15 dgt	605V max RMS
	0.251 - 3.999MΩ	0.001MΩ	±(2.0% rdg + 5 dgt)	
	4.00 - 39.99MΩ	0.01 MΩ	±(5.0% rdg + 5 dgt)	
	40.0 - 399.9MΩ	0.1MΩ	±(5.0% rdg + 5 dgt)	
	400 - 1000MΩ	1MΩ	±(3.0% rdg + 5 dgt)	
	1000 - 4000MΩ	1MΩ	±(5.0% rdg + 10 dgt)	

Autorange

Open circuit voltage: $<1.3 \times V_0$

Accuracy of nominal voltage: -0% +10%

Short circuit current: <3.0mA

Nominal testing current: 1mA @ 1KΩ x V (1mA @ 500KΩ)