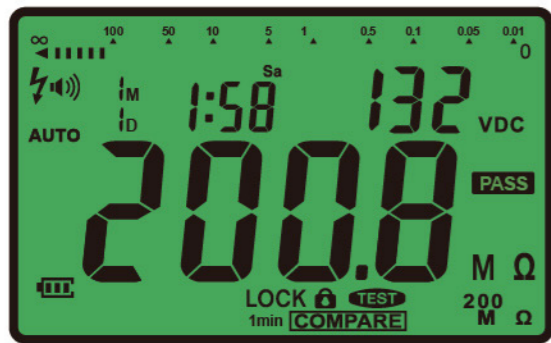




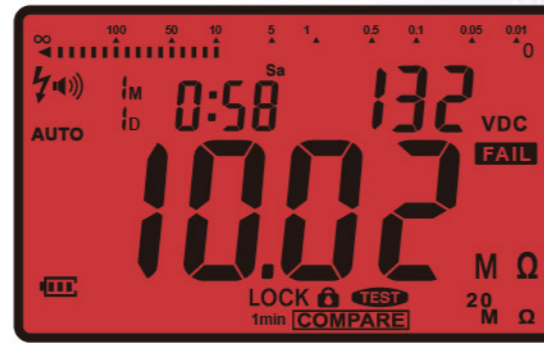
Measured Value and Reference Value Comparison

■ **PASS**



Measured value > Reference value

■ **FAIL**



Measured value ≤ Reference value

DIGITAL INSULATION TESTER

1000V 500V 250V 125V/100V 50V Max 40GΩ

DE-5050 / DE-5050R (TRUE RMS)

- Build in LCD back light , convenient for dark places and night work.
- Memory function to save test results, date and time.
- Auto power off function
- Frequency of AC voltage synchronous display (sub display)
- Output voltage synchronous display (sub display)
- 0ΩADJ adjustment
- Five ranges available for six insulation resistance tests (1000,500,250,100/125,50V)
- Insulation test 500V / 20GΩ · 1000V / 40GΩ range
- ACV / DCV accuracy ±1%rdg±4dgt (sine wave)
- Power saving mode



Features

DE-5050/5050R measures insulation resistance, low resistance, and AC/DC voltage.

- Build in back light LCD, convenient for dark places and night work.
- Memory function: Short press STORE key for data saving, max 100 sets.
And long press RECALL key to recall.
- Data saved with measuring time /date information.
- Auto power off when the instrument is left on for 10 minutes without operating.
- Voltage measurement with AC/DC auto detection. When main display AC voltage is >10V, the sub display shows the frequency value simultaneously.
- Insulation resistance measurement.
- 0ΩADJ adjustment
In low resistance measurement, short circle the tips of test leads and press the 0ΩADJ key to cancel the resistance of the test leads.

Function list

Function	DE-5050	DE-5050R
AC Voltage	AVG	TRUE RMS
DC Voltage	○	○
100MΩ~40GΩ range	○	○
Insulation indicator	Setting by COMPARE key (PASS—green light /FAIL--- red light)	
1 min test	○	○
DAR / PI	○	○
0ΩADJ	○	○
Continuity buzzer	○	○
White Back light	○	○
STORE/RECALL	○	○
Perpetual calendar	○	○

Specifications

Measuring range and accuracy
(23°C ± 5°C max. 80%R.H.or less, non condensation)

1 AC/DC Voltage measurement

Range	300.0 / 600V (Auto ranging)
Display range	AC 300.0V : 0.0~314.9V 600V : 270~628V DC 300.0V : ±0.0~±314.9V 600V : ±270~±849V
Measuring range (Accuracy guaranteed)	AC : 0.0~600Vrms(AVG : 40Hz~500Hz) (TRUE RMS : 40Hz~1KHz) DC : ±0.0~±600V
Over range display	AC : >629V DC+>849V : (OL) DC-<-849V : (-OL)
Accuracy	±1%rdg±4dgt (sine wave)

ACV type instrument : For non-sinusoidal waveforms , add the reading accuracy × 0.1 (Applicable to temperatures other than 18°C ~ 28°C)

2 Low resistance measurement (Continuity check)

Resistance range	40.00/400.0/4000Ω (Auto ranging)	
Open circuit (DC)	(4 ~6.9V)	
Measurement current	>200mA or more (2Ω or less)	
Display range	40.00Ω: 0.00 ~41.99Ω 400.0Ω: 40.0 ~419.9Ω 4000Ω: 400 ~4199Ω	
Over range display	> 4199Ω	
Measuring range & accuracy	0.20~4000Ω (Operating error range) ±2.5%rdg±8dgt	0~0.19Ω ±8dgt

3 Insulation resistance measurement

Rated Voltage	50V	100V	125V	250V	500V	1000V
Range (Auto ranging)	4/40/100MΩ	4/40/200MΩ	4/40/250MΩ	4/40/400 /500MΩ	4/40/400 MΩ 4GΩ/20GΩ (20GΩ Max range)	4/40/400 MΩ 4GΩ/40GΩ (40GΩ Max range)
Display range	4MΩ : 0.000 ~ 4.199MΩ / 40MΩ : 4.00 ~ 41.99MΩ					
	400MΩ : 40.0 ~ 419.9MΩ					
Over range display	100MΩ : 40.0 ~ 104.9MΩ	200MΩ : 40.0 ~ 209.9MΩ	250MΩ : 40.0 ~ 262.4MΩ	500MΩ : 400 ~ 524MΩ	4GΩ : 0.400 ~ 4.199GΩ 20GΩ : 4.00 ~ 20.99GΩ	4GΩ : 0.400 ~ 4.199GΩ 40GΩ : 4.00 ~ 41.99GΩ
	>104.9MΩ	>209.9MΩ	>262.4MΩ	>524MΩ	> 20.99GΩ	> 41.99GΩ
Open-circuit V	100~110% rated measurement voltage					
Short-circuit A	within 1.5mA					
Rated current	1.0 ~ 1.1 mA					
	@ 0.05MΩ	@ 0.1MΩ	@ 0.125MΩ	@ 0.25MΩ	@ 0.5MΩ	@ 1MΩ
Accuracy (tolerance)	1st effective meas. range					
	0.100 ~ 10.00MΩ 0.100 ~ 20.00MΩ 0.100 ~ 25.00MΩ 0.100 ~ 50.0MΩ 0.100MΩ ~ 0.500GΩ 0.100MΩ ~ 1.000GΩ					
	±2%rdg±2dgt					
Accuracy (tolerance)	2st effective meas. range					
	10.01 ~ 100.0MΩ 20.01 ~ 200.0MΩ 25.01 ~ 250.0MΩ 50.1 ~ 500MΩ 0.501 ~ 4.000GΩ 1.001 ~ 4.000GΩ					
	±5%rdg					
Accuracy (tolerance)	The other range					
	0.050 ~ 0.099MΩ : ±2%rdg±4dgt 0.000 ~ 0.099MΩ : ±2.0% rdg ± 6dgt 4.00 ~ 20.00GΩ 4.00 ~ 40.00GΩ ±5.0% rdg ±0.4%perGΩ					

Max. capacitive load : 1uF, max. discharge value within a defined time(10 sec.) after a test.

(Based on international safety standard IEC61010-2-034)

Measurement capacitive load : 2uF, capacitive load which falls within the variations (±10%) at capacitive load measurement test based on JIS C1302.

DE-5050
DE-5050R
(TRUE RMS)