

INSULATION TESTER

NAGMAN 263

SALIENT FEATURES

1. Basic measurement functions

Earth resistance measurement (RE)

Measurement method: 3-pole method,
4-pole methodMeasuring range: $0.02\Omega \sim 1999\Omega$ Minimum resolution: 0.01Ω

Basic accuracy: 5%

Soil resistivity measurement (ρ)Measurement range: $0.01\Omega \cdot m \sim 376.8\Omega \cdot m$
Interval of auxiliary earth rods,
setting range: $1.0\text{ m} \sim 30.0\text{ m}$

AC true RMS voltage E.V

Measurement range: $0 \sim 50V$ AC bandwidth: $40\text{Hz} \sim 200\text{Hz}$

Measurement basic accuracy: 2%

2. Earth test other features

Earth resistance measurement adopts square wave excitation test, the maximum open-circuit voltage is $50V_{pp}$, and the short-circuit current is $<3mA$.

Automatic range detection in earth resistance measurement.

RK resistance test, the line resistance effect can be removed.

Earth comparison test, the measurement result can be evaluated by the preset "pass/fail (\checkmark / X)" limit and be given audio alarms accordingly.

3. Product calibration

By connecting with the standard instrument, calibrating panel according to the procedures and saving the appropriate calibration data, the periodic calibration is completed, and the due accuracy and performance of the product are guaranteed.

4. Large LCD display with white LED backlight.

5. Easy man-machine operation, portable, solid and suitable for field use.

GENERAL SPECIFICATIONS

AC Voltage E.V

Measurement range	Resolution	Frequency range	Precision
$0.00V \sim 50.00V$	$0.01V$	$45 \sim 200\text{Hz sine}$	$2\%+5$

Input resistance: about $1M\Omega$

Measurement rate: 2 times/s.

Earth Resistance RE (RG when testing ρ)

Range	Measurement range	Resolution	Precision	Remarks
20Ω	$0.10\Omega \sim 19.99\Omega$	0.01Ω	$5\%+5$	0.2 Ω error is added when the resistance is less than 2Ω . RH and RS are 500Ω rk corrected data.
200Ω	$20.0\Omega \sim 199.9\Omega$	0.1Ω		
2000Ω	$200\Omega \sim 1999\Omega$	1Ω		

Output features: test open circuit voltage UM, the maximum is around $50V_{pp}$, square waveTest the short circuit current IM, the maximum is around $3mA_{pp}$, but $IM \times (RH + RE) < UM$

Measurement time: typical 2 seconds.

RH MAX: $(4K\Omega + 100RE)$ or $50K\Omega$ (whichever is lower).RS MAX: $(4K\Omega + 100RE)$ or $50K\Omega$ (whichever is lower).Additional error at RH MAX or RS MAX: $3\%+10$.Series interference voltage: $16.2/3\text{Hz}$, 50Hz , 60Hz , 400Hz and $DC 3V$ (20Ω range does not include DC).Additional error at $3V$ series interference voltage: $5\%+10$.

Typical Photo: Final Product look may vary

Soil Resistivity (ρ) Measurement

Range	Measurement range	Resolution	Precision
20 $\Omega\cdot$ m	0 $\Omega\cdot$ m ~ 19.99 $\Omega\cdot$ m	0.01 $\Omega\cdot$ m	Depends on RG $\rho = 2\pi \times a \times RG$
200 $\Omega\cdot$ m	20.0 $\Omega\cdot$ m ~ 199.9 $\Omega\cdot$ m	0.1 $\Omega\cdot$ m	
2000 $\Omega\cdot$ m	200.0 $\Omega\cdot$ m ~ 1999 $\Omega\cdot$ m	1 $\Omega\cdot$ m	
20K $\Omega\cdot$ m	2.00K $\Omega\cdot$ m ~ 19.99K $\Omega\cdot$ m	0.01K $\Omega\cdot$ m	
200K $\Omega\cdot$ m	20.0K $\Omega\cdot$ m ~ 376.8K $\Omega\cdot$ m	0.1K $\Omega\cdot$ m	

The distance between the earth rods: a=1.0 m ~ 30.0 m

GENERAL CHARACTERISTICS

Operating temperature and humidity	0 to 40°C (non-condensing \leq 10°C), \leq 85%RH
Storage temperature and humidity	-20°C to 60°C, \leq 90%RH
Working altitude	\leq 2000m.(Indoor use)
Rated transient overvoltage	6K (1.2*50us) I, II, III measure peak value
Withstand voltage	AC8320V(50/60Hz)/5 seconds (between the circuit and the outer box)
Insulation impedance	1000M Ω or greater/DC1000V (between the circuit and the outer box)
Vibration and shock	Randomness 2g, 5 to 500Hz; 1m drop test
Power supply	8 x 1.5 V (AA) alkaline batteries
Automatic shutdown operation	Automatic shutdown time 0 ~ 90 minutes can be set
Size and weight	178 x 110 x 59 (mm), about 600g (including batteries)

STANDARD INCLUSIONS

- Basic Instrument with Battery
- Test kit (Red : 15 m; black/green : 5 m; yellow : 10 m) - 1 set
- Earth steel chisel - 4
- 1.5V Alkaline Battery - 8 Nos.
- Handle Rope
- Carrying Case
- Conformance Certificate
- Instruction Manual

OPTIONAL

- 15V Power Adapter
- Calibration Certificates are issued in Accordance with our Scope as granted by NABL per ISO/IEC 17025:2017 Standards

Manufactured by



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