

15KV 20KV High Voltage Insulation Resistance Tester

Quality / Accuracy / Reliability



Anti-interference insulation resistance tester is designed to evaluate the electrical insulation quality of large high-voltage transformers, motors, generators, long-distance power cables, tube bus and so on which are under strong interference of high-voltage substation and power plant on the scene. The tester has high output power (5mA), real-time voltage measurement (the actual charged voltage of the sample), leakage current measurement, and automatic discharge (discharge voltage measurement), which is particularly suitable for large capacitive test with over 110kv interference on the test site.

Features:

- 1. Optical digital insulation resistance tester is the use of magneto-optic crystal Faraday effect, IE660044.7 and IEC61850.
- 2. Optical digital insulation resistance tester does not produce radiation and electromagnetic pulses. It has high anti-interference ability with accurate measurement data.
- 3. As the light is an insulator which effectively isolate high-pressure (to protect the safety of operators), it guarantees the accuracy and reliability of the sample data while preventing noise.
- 4. It can cope with harsh testing environment. (Operating temperature -30°-+60°)
- 5. It has a 5.7 inch large screen display, actual test voltage display and leakage current display.
- 6. It has the true automatic discharge function without any manual discharge.
- 7. It has a high anti-interference ability with short-circuit current 5mA.

Functions:

- In strict accordance with safety standards, the output voltage: 2500v, 5000v, 10000v, 15000v, 20000v.
- The instrument is designed with automatic calibration function, which is able to automatically calibrate accuracy before testing.
- The instrument has the live voltage measurement function for the actual test product though which you can see whether the drop voltage after load is in line with national requirements; leakage current measurement function, and automatic discharge function with which help you can directly see the insulation quality of test sample.
- The instrument can automatically measure and remember R15S, R60S, R10min value, and automatically display the polarization index (PI), the test value and test time of induced electrical absorption ratio (DAR).
- The instrument has a good anti-interference performance, which ensures the test accuracy even when the interference current is up to 600mA. Besides, it has a good anti-interference ability especially suitable for 110KV and above large-capacity transformers and long-distance power cable power system.
- Short-circuit protection can protect the instrument from burning in

- Automatic discharge: the advanced high-voltage discharge technology ensures the rapid discharge of the capacitive samples and the current discharge voltage (test voltage is 0v), for example: if the test voltage is 20000v, when the operator stops the test, the instrument monitors the discharge voltage from 10000v to 0v (current visual display) and gives a tip "safe to stitch", then the operator can stitch the lines.
- You can use lithium battery or AC power supply, and neither of them affect the test accuracy. (Option 1. DC power supply 2. AC power supply)
- The analog pointer and digital display coexist, and the number reflects the accuracy of the test sample's insulation resistance, and the analog indicator reflects the dynamic changes of the insulation resistance during the test.
- The alarm function keeps operators away from the test site when the buzzer warming the high voltage output. When the test is completed, the warning sound automatically stops.
- High load capacity and anti-interference ability.
- Battery power digital display and undervoltage alarm protection.
- Smart battery charge management can effectively prevent the battery from overcharge.
- The instrument has an automatic shutdown function, which activates over 5 minutes after the measurement.



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Specifications:

Model 15kv 20kv Rated Voltage (kV) 2.5, 5, 10, 15kv 2.5, 5, 10, 15, 20kv Measured Voltage (kV) Rated voltagex (1±10%) Load resistance less than 1% measuring range Measuring Range 0 ~20TΩ 0 ~20TΩ Accuracy level 5.0 (0.001~100)GΩ/15kV (0.001~200)GΩ/20kV (0.001~100)GΩ/20kV (0.001~100)GΩ/15kV (0.001~200)GΩ/10kV (0.001~200)GΩ/10kV (0.001~200)GΩ/10kV (0.001~200)GΩ/15kV (0.001~200)GΩ/25kV (0.001~200)GΩ/25kV (0.001~200)GΩ/25kV (0.001~200)GΩ/2.5kV Maximum error 10% RDG range (100~200)GΩ/15kV (100~200)GΩ/15kV (100~200)GΩ/15kV (100~200)GΩ/15kV (20~100)GΩ/2.5kV (5~10)GΩ/2.5kV (100~200)GΩ/15kV (20~100)GΩ/25kV (5~10)GΩ/2.5kV Maximum error 15% RDG rang (200~1000)GΩ/15kV (200~1000)GΩ/15kV (200~1000)GΩ/2.5kV (200~1000)GΩ/15kV (200~1000)GΩ/2.5kV Output Short-circuit Current ≥5mA Measuring range: 0.01 ~99.99
Measured Voltage (kV) Rated voltagex (1±10%) Load resistance less than 1% measuring range Measuring Range 0 ~20TΩ 0 ~20TΩ Accuracy level 5.0 $(0.001 \sim 100)$ GΩ/15kV $(0.001 \sim 200)$ GΩ/16kV $(0.001 \sim 100)$ GΩ/20kV $(0.001 \sim 100)$ GΩ/15kV $(0.001 \sim 100)$ GΩ/15kV $(0.001 \sim 200)$ GΩ/16kV $(0.001 \sim 200)$ GΩ/25kV $(0.001 \sim 200)$ GΩ/25kV $(0.001 \sim 200)$ GΩ/2.5kV Maximum error 10% RDG range $(100 \sim 200)$ GΩ/16kV $(100 \sim 200)$ GΩ/16kV $(100 \sim 200)$ GΩ/15kV $(100 \sim 200)$ GΩ/15kV $(100 \sim 200)$ GΩ/16kV $(20 \sim 100)$ GΩ/2.5kV Maximum error 15% RDG range $(200 \sim 1000)$ GΩ/15kV $(20 \sim 1000)$ GΩ/2.5kV $(200 \sim 1000)$ GΩ/2.5kV Maximum error 15% RDG rang $(200 \sim 1000)$ GΩ/15kV $(200 \sim 1000)$ GΩ/15kV $(200 \sim 1000)$ GΩ/2.5kV Output Short-circuit Current $\geqslant 5$ MA
Measuring Range 0 ~20TΩ 0 ~20TΩ Accuracy level 5.0 $(0.001 \sim 100) G\Omega/15 kV$ $(0.001 \sim 100) G\Omega/20 kV$ $(0.001 \sim 100) G\Omega/15 kV$ $(0.001 \sim 100) G\Omega/16 kV$ $(0.001 \sim 200) G\Omega/20 kV$ $(0.001 \sim 200) $
Accuracy level 5.0
$\begin{tabular}{lllllllllllllllllllllllllllllllllll$
$\begin{array}{c} \text{(0.001$$^\sim100)$G$$\Omega/15kV} \\ \text{(0.001$$^\sim200)G\Omega/10kV} \\ \text{(0.001$$^\sim200)G\Omega/5kV} \\ \text{(0.001$$^\sim200)G\Omega/2.5kV} \\ \text{(0.001$$^\sim200)G\Omega/2.5kV} \\ \text{(0.001$$^\sim200)G\Omega/2.5kV} \\ \text{(0.001$$^\sim200)G\Omega/2.5kV} \\ \text{(100$$^\sim200)G\Omega/15kV} \\ \text{(100$$^\sim200)G\Omega/15kV} \\ \text{(100$$^\sim200)G\Omega/16kV} \\ \text{(100$$^\sim200)G\Omega/16kV} \\ \text{(100$$^\sim200)G\Omega/10kV} \\ \text{(100$$^\sim200)G\Omega/10kV} \\ \text{(100$$^\sim200)G\Omega/10kV} \\ \text{(100$$^\sim200)G\Omega/10kV} \\ \text{(200$$^\sim100)G\Omega/5kV} \\ \text{(200$$^\sim100)G\Omega/2.5kV} \\ \text{(200$$^\sim100)G\Omega/2.5kV} \\ \text{(200$$^\sim1000)G\Omega/2.5kV} \\ \text{Output Short-circuit Current} \\ \geqslant 5\text{mA} \\ \end{array}$
$\begin{array}{c} (100\sim200) \text{G}\Omega/15 \text{kV} \\ (100\sim200) \text{G}\Omega/10 \text{kV} \\ (20\sim100) \text{G}\Omega/5 \text{kV} \\ (5\sim10) \text{G}\Omega/2.5 \text{kV} \\ \end{array} \\ (5\sim100) \text{G}\Omega/2.5 \text{kV} \\ \end{array} \\ \begin{array}{c} (200\sim1000) \text{G}\Omega/15 \text{kV} \\ (5\sim10) \text{G}\Omega/2.5 \text{kV} \\ \end{array} \\ \begin{array}{c} (200\sim1000) \text{G}\Omega/2.5 \text{kV} \\ \end{array}$
Maximum error 15% RDG rang $(200\sim1000)$ GΩ/15kV $(200\sim500)$ GΩ/2.5kV $(200\sim1000)$ GΩ/15kV $(200\sim500)$ GΩ/2.5kVOutput Short-circuit Current \geqslant 5mA
Massuring range: 0.01 ~00.00
Absorption ratio, PI measuring range Maximum error: ±(1%RDG+1d)
Output Voltage Display Error ±(3%RDG + 1d)
Safety Specifications The instrument safety performance in line with IEC61010-1:2001. The instrument implementation standards Q/WKD10.
Insulation Resistance 50M (Between the measured line and the shell)
Pressure Resistance AC 10kV 50Hz 1min (Between the measured line and the shell)
Battery-powered: 2 groups of batteries power supply, 16V lithium-ion rechargeable battery 3000mAH Battery management system, which automatically disconnected when it's fully charged
Charging power supply 220V±10%, 50/60 HZ
Display Digital and analog pointer display, 5.7 inch screen resolution 320*240
Working Environment Temperature: -30°C ~+60°C 85%RH
Temperature. 30 C 100 C 05/0/11
Dimensions 38.5 *29.8 *19.6cm

Manufactured By:

NEUTRONICS MANUFACTURING COMPANY

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Product Specifications are subject to change without notice

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