

FTD-9000

TRANSFORMER CAPACITANCE AND TAN DELTA TESTER TRANSFORMER DIELECTRIC LOSS TESTER

INTELLIGENT ☒ AUTOMATIC ☒ PORTABLE ☒ HIGH ACCURACY ☒

■ Introduction & Application



FTD-9000 Automatic Transformer Dissipation Factor and Capacitance Tester can effectively find the overall damp, deterioration and partly defects of electrical equipment insulation, which are widely used in electrical manufacturing, electrical equipment installation, handover and preventive testing.

The **Anti-interference Transformer Dielectric Loss Tester** is used for on-site anti-interference, dielectric loss measurement or laboratory dielectric loss measurement. This test instrument is an integrated structure with built-in dielectric loss bridge, variable variable frequency power supply, test transformer and standard capacitor, etc. The instrument adopts frequency conversion anti-interference and Fourier transform digital filtering technology,

fully automatic and intelligent measurement, and the measurement data is very stable under strong interference. The result of measurement is displayed by large screen display, and the instrument comes with micro printer to print and print test results.

■ Main Features

- The instrument adopts complex number current method to measure capacitance, dielectric loss and other parameters. The measured result is highly accurate and it is easy to realize automatic measurement.
- The instrument adopts variable frequency technology to eliminate 50Hz/60Hz power frequency interference. So a reliable data will be reachable even under the strong electromagnetic interference.

- The instrument adopts large screen LCD . In the process of testing, Chinese menu prompt is visualized and easy to operate.
- The instrument is easy to operate and the measuring process is controlled by microprocessor. Once a suitable measuring method is selected, the data measurement will complete automatically under the control of microprocessor.
- The instrument is designed to be an integrated model with reference capacitor and HV power supply in it, enables site test measurement and reduces site wiring.
- The instrument is equipped with CVT testing function, which can achieve CVT self-exciting testing without external accessories and measure the capacitance and dielectric loss of C1 and C2 by at a time.
- GST measurement adopts ivddv technology and avoids unstable data provided by previous GST measurement.
- The instrument provides low voltage shell function of GST. When the bus of 220kV CVT is grounded, Dielectric loss tester can be conducted for C11 without removing 10 kV GST.
- The instrument has a function of measuring high-voltage dielectric loss. It can carry out dielectric loss test with over 12kV with the help of voltage transformer or series resonance.
- The instrument has a ground-fault protection function. In case that the instrument is not grounded or grounded incorrectly, the instrument will refuse to enter into normal procedure and output HV. As for the over-current protection function, it will protect the instrument from damage when the tested article is in a short circuit or breakdowns.
- The instrument has a function of electric shock protection. When the instrument operator suffers an electric shock due to incaution, the instrument will cut off the HV immediately and thus ensure the security of operator.



■ Technical Parameters

Accuracy	Cx: $\pm(\text{reading} \times 1\% + 1\text{pF})$ Tgδ: $\pm(\text{reading} \times 1\% + 0.00040)$
Anti-interference	Variable frequency anti-interference, the above accuracy can be reached even under 200% interference.
Capacitance range	Internal HV: 3pF~60000pF/12kV 60pF~1.2μF/0.5kV External HV: 3pF~1.5μF/12kV 60pF~30μF/0.5kV Best Resolution: 0.001pF, 4 valid digits.
tgδ range	Unlimited, 0.001% resolution, automatic identification for capacitance, inductance and resistance of three tested articles.
Test current range	10μA~1A
Internal HV	Set voltage range: 0.5~10kV/12kV Maximum output current: 200mA Buck-boost method: continuous smooth regulation Accuracy: $\pm(1.5\% \times \text{reading} + 10\text{V})$ Voltage Resolution: 1V
Test frequency	45, 50, 55Hz single frequency 45/55Hz automatic dual variable frequency Frequency accuracy: $\pm 0.01\text{Hz}$
External HV	UST, maximum test current is 1A/ 40~70Hz GST, maximum test current is 12kV/1A/40-70Hz
CVT self-excitation low voltage output	Output voltage 3~50V, output current 3~30A
Measuring duration	About 40s, depending on measuring method
Input power supply	180V~270VAC, 50Hz/60Hz $\pm 1\%$, supplied by alternating current or generator
Computer interface	Standard RS232 interface
Printer	WH-A7 mini-type thermal printer
Operating Temperature	-10℃~50℃
Relative humidity	<90%, Non-condensing
Overall dimension	340×260×270mm
Weight	22kg

Note: 1. The dimension and weight will be changed with changing of technical specs.
2. All the specs can be customized according to client's requirements.

■ In Stocks

PRODUCTS IN STOCK



■ Other Testers You Might Be Interested In

Part I: Oil Testers

- Transformer Oil BDV Tester
- Transformer Oil Trace Moisture Content Tester
- Transformer Oil Acidity Tester
- Transformer Oil Interfacial Tension Tester
- Transformer Oil Flash Point Tester (Open/Closed Cup)
- Transformer Oil Tan Delta Tester
- Transformer Oil DGA (Dissolved Gas Analyzer) Tester
- Transformer Oil Kinematic Viscosity Tester
- Transformer Oil Density Meter
- Transformer Oil Particle Counter
- Sf6 Gas purity and Decomposition Tester
- Portable Dew Point Meter

Part II: Transformer & HV Testers

- Transformer Load and No Load Loss Tester
- TTR Transformer Turns Ratio Tester (Portable/Handheld Type)
- Transformer DC Resistance Tester 1 ~ 100A
- Transformer Tan Delta and Capacitance Tester 0 ~ 12kV
- CT PT Analyzer
- SFRA Transformer Sweep Frequency Response Analyzer
- VLF Hipot Test Set 30 ~ 90kV
- Insulation Resistance Tester 0.25 ~ 30kV
- AC Hipot Tester
- DC Hipot Tester
- Circuit Breaker Contact Resistance Tester
- Grounding Earth Resistance Tester

■ You Might Also Be Interested In

- ✧ **ZYD-T Series Double-stage Vacuum Transformer Oil Filtration Machine**



Project cases



FUOOTECH High Vacuum Transformer Oil Filtration, Dehydration and Degassing Plant

✧ **DAG Series Dry Air Generator for Transformer Maintenance**

