

## LC-2KV

### AUTOMATIC TRANSFORMER OIL TAN DELTA TEST SET

The LC-2KV automatic transformer oil tan delta test set designed and manufactured according to GB/ T5654-2007 "measurement of relative capacitance, tan delta and dc resistivity of liquid insulation materials". Used for measuring tan delta and dc resistivity of insulating liquid dielectric such as insulating oil. Integrated structure. Internal integration of tan delta oil cup, temperature controller, temperature sensor, tan delta test bridge, ac test power source, standard capacitor, high resistance meter, dc high voltage source and other main components. The LC-2KV test set is equipped with a 5.7-inch TFT pure color LCD touch screen and a English menu. The test results can be stored and printed out automatically. The operator can use it skillfully without professional training.

### Function & Features

1. Stable output voltage;
2. Built-in real-time clock;
3. With USB, RS232 port;
4. High speed RAM9 platform;
5. Voltage resolution and accuracy  $\pm 1\%$ ;
6. Insulating oil tan delta & Resistivity test;
7. Empty cup electrode calibration function;
8. Electromagnetic compatibility concept(EMC);
9. Standard GB/T5654-2007, IEC 60247, IEC 61326;
10. Adopted 5.7 inch pure color TFT LCD touch screen display;
11. Internal standard capacitor for SF6 inflatable three pole type capacitor;
12. Voltage setting range 200 ~ 2200V AC, 0 ~ 500V DC voltage setting range;
13. Medium frequency induction heating, PID temperature control algorithm;



### Application

- |                                |   |
|--------------------------------|---|
| 1. Universities;               | 2. ISO17025 Electrical laboratory;                              |
| 3. Power plant;                | 4. Railway electrical department;                               |
| 5. Research institutes;        | 6. Electricity power bureau & power company;                    |
| 7. Insulation oil factory;     | 8. Power engineering commissioning company;                     |
| 9. Electrical testing center;  | 10. Electrical department of industrial and mining enterprises; |
| 11. Transformer manufacturers; |   |

## Parameters

Electrical parameters	
Power supply	AC 220V±10% or 110V±10%, 50/60HzAC
Test AC Voltage output range	200-2200V
Test DC Voltage output range	0-500V
Accuracy	2%
Tan Delta	
Measurement range	$1 \times 10^{-6}$ to 100
Resolution	$1 \times 10^{-6}$
Accuracy	± 1% reading ± $1 \times 10^{-5}$
Capacitance	
Measurement range	5pF - 200pF
Resolution	0.01pF
Accuracy	± 1% reading ± 0.5pF
Relative Permittivity	
Measurement Range	1 to 30
Resolution	0.01
Accuracy	± 0.5%
Resistivity Measurement	
Measurement Range	2.5 MΩm to 100 TΩm
Resolution	0.01
Accuracy	2%
Test Temperature	
Range	0 °C to 120 °C
Resolution	0.1 °C
Accuracy	± 1 °C
Programmable	Yes
LCD	5.7 inch touch TFT LCD
Communication	RS232 and USB port
IP Rating	IP30
Storage data	1000sets
Printer	internal installed 58mm wide thermal printer.
Standard	IEC 61326 , IEC61010, GB/ T5654-2007, IEC 60247, ASTM D924-08 or D1169:2002
Mechanical parameters	
Dimension (L×W×H) (mm)	460x370x330
Weight (kg)	25

## Parameters

Environmental conditions	
Operating temperature	-10°C to 50°C
Storage temperature	-40°C to 70°C
Relative humidity	≤90%RH non-condensing