

## RD6001 Capacitance & Tan Delta Tester

Capacitance & Tan Delta Tester is a high-precision instrument for testing the dielectric loss tangent and capacitance of various high-voltage power equipment in power plant, substation and other field or laboratory.

The Capacitance & Tan Delta Tester is an integrated structure with built-in dielectric loss test bridge, variable frequency voltage regulating power supply, step-up transformer and SF6 high stability standard

capacitor. The test high-voltage source is generated by the inverter inside the instrument, which is used to test the tested object after boosting by the transformer. The test frequency can be 50Hz, 60Hz, 45Hz/55Hz, 55Hz/65Hz, 47.5Hz/52.5Hz. The digital notch technology avoids the interference of power frequency electric field on the test, and fundamentally solves the problem of accurate measurement under the interference of strong electric field.



### Product features

#### **1. Full touch large LCD**

It is easy to operate. The instrument is equipped with high-end full touch LCD and super large full graphic operation interface. Every process is clear, and the operator can use it without additional professional training. It is an ideal intelligent measuring equipment at present.

#### **2. Data storage**

The instrument is equipped with a calendar chip, which can save the test results in chronological order, view the historical records at any time, and print them out.

### **3. Multiple test modes**

The instrument can be tested by internal high voltage, external high voltage, internal standard, external standard, positive wire method (UST), negative wire method (GST), positive and negative with measure (GST-G), self-excitation method and other methods. High voltage (greater than 10kV) dielectric loss can be achieved under external

### **4. CVT test by one step at a time**

The instrument can also test the dielectric loss and capacitance of CVT (capacitive voltage transformer) C1 and C2, realizing the simultaneous test of C1 and C2. The instrument can also test the CVT ratio and voltage Angle difference.

### **5. Measure CVT without removing high voltage lead**

The instrument can correctly measure the dielectric loss and capacitance of CVT without removing the high voltage lead.

### **6. CVT reverse shielding method for measuring C0**

The instrument can measure the dielectric loss and capacitance of C0 at the upper end of CVT by reverse shielding method.

### **7. High speed sampling signal**


The inverter and sampling circuit inside the instrument are all digitally controlled, and the output voltage is continuously adjustable.

### **8. Multiple protection, safe and reliable**

The instrument has multiple protection measures such as input voltage fluctuation, output short circuit, over-voltage, over-current and temperature to ensure the safety and reliability of the instrument. The instrument also has grounding detection function to ensure that ungrounded equipment is not allowed to boost voltage.



## Product specifications and technical parameters

|                                      |            |                                                                                                               |
|--------------------------------------|------------|---------------------------------------------------------------------------------------------------------------|
| Picture                              |            |                             |
| Model                                |            | <b>RD6001</b>                                                                                                 |
| Anti-interference principle          |            | Frequency conversion method                                                                                   |
| High voltage output                  |            | Range: 0.5kV ~ 10kV , Accuracy: 2% , Maximum current: 200mA , Capacity: 1500VA                                |
| CVT test auto-exciting output        |            | AC 0 ~ 50V/15A                                                                                                |
| Dielectric loss and capacitance test | <b>tgδ</b> | Range: unlimited , Accuracy: $\pm(\text{reading} \times 1.0\% + 0.040\%)$ , Resolution: 0.001%                |
|                                      | <b>Cx</b>  | Range: 15pF < Cx < 300nF , Accuracy: $\pm(\text{reading} \times 1.0\% + 1.00\text{pF})$ , Resolution: 0.001pF |
|                                      |            | Cx < 40nF @ 10kV , Cx < 150nF @ 5kV , Cx < 300nF @ 1kV , Cx < 300nF @ CVT tes                                 |
| CVT ratio test                       |            | Range: 10 ~ 10000 , Accuracy: 0.1% , Resolution: 0.01                                                         |
| Test frequency                       |            | 50Hz , 60Hz , 45Hz/55Hz , 55Hz/65Hz , 47.5Hz/52.5Hz                                                           |
| Data storage                         |            | 200 groups, support U disk data storage                                                                       |
| Service condition                    |            | Temperature: -15℃ ~ 40℃ , Humidity: < 80% RH                                                                  |
| Power supply                         |            | AC 220V±10% , 50Hz                                                                                            |



## Related Products



**RD6001**



**RD6000A**



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