

## **GD6800 Capacitance and Dissipation Factor Tester**



## **Product Description**

GD6800 measures the capacitance and dielectric loss factor ( $tg\delta$ ) of high voltage electric equipment. It is integrated structure, built-in dielectric loss test bridge, variable frequency adjustable power supply, boosting transformer and SF6 standard capacitor.

High voltage source is generated by internal inverter of the instrument, which is used for testing test object after transformer boost. If adding a insulation cup and temperature control device, dielectric loss of insulating oil can be tested.

## **Features**

- Touch LCD screen display.
- Calendar chip and large storage inside. Save testing result according to time order, check history record and print the result.
- The instrument data can be exported through U disk, and can be used to view and manage the data through the software on PC.
- Multiple testing mode, with modes of inside high voltage, outside high voltage, inner standard, external standard, GST/UST, self-excitation. High voltage(more than 10kV) dielectric loss test can be made in the situation of external standard outside high voltage.
- Test full sealed CVT (Capacitive Voltage Transformer) C<sub>1</sub> and C<sub>2</sub>
  dielectric loss and capacitance at the same time. Also test CVT
  transformation ratio and voltage angle difference.
- The dielectric loss and capacitance value of C0 in the upper end of CVT can be measured by using the reverse shielding method.
- High speed sampling signal. Inverter and sampling circuit inside are digitized controlled. Output voltage is adjusted continuously.
- LCR automatic measurement. Inductance, capacitance, resistance can be measured and displayed.
- Multiple protection of input voltage fluctuation, output short circuit,
  over-voltage, over-current, temperature, secure and reliable. Meanwhile,
  it has the function of grounding testing, that voltage boost is not permitted
  for non-grounding equipment.
- No need to dismantle HV lead to measure dielectric loss and capacitance of CVT.

Frequency can be changed into 50Hz, 47.5Hz/52.5Hz, 45Hz/55Hz, 60Hz, 57.5Hz/62.5Hz, 55Hz/65Hz.

## **Specifications**

| Working condition   | -15°C~40°C           | RH<80%                 |
|---------------------|----------------------|------------------------|
| Anti-interferen     | Frequency conversion |                        |
| Power supply        | AC 220V±10%          | Generator can be used. |
| High voltage output | 0.5KV~10KV           | Every 0.1kV            |
|                     | Accuracy             | 2%                     |
|                     | Max. current         | 200mA                  |
|                     | Capacity             | 2000VA                 |
| Self-excitation     | AC 0V~50V/15A        | 45HZ/55HZ              |
| power               |                      | 47.5HZ/52.5HZ          |
|                     |                      | 55HZ/65HZ              |
|                     |                      | 57.5HZ/62.5HZ          |

|                                |                              |                   |                  | Automat     |      |
|--------------------------------|------------------------------|-------------------|------------------|-------------|------|
| Resolution                     | tgδ: 0.001%                  |                   |                  | Cx: 0.001pF |      |
| Accuracy                       | ∆tgδ: ±(reading*1.0%+0.040%) |                   |                  |             |      |
|                                | ∆C x: ±(reading*1.0%+1.00PF) |                   |                  |             |      |
| Measurement                    | tgδ                          | Without limit     |                  |             |      |
|                                | Сх                           | 15pF < Cx < 300nF |                  |             |      |
|                                | 10KV                         |                   | Cx < 60 nF       |             |      |
|                                | 5KV                          |                   | Cx < 150 nF      |             |      |
|                                | 1KV                          |                   | Cx < 300 nF      |             |      |
|                                | CVT test                     |                   | Cx < 300 nF      |             |      |
| LCR<br>measurement<br>range    | L>20H(2kV)                   |                   | R>10KΩ(2kV)      |             |      |
| LCR<br>measurement<br>accuracy | 0.1%                         |                   | Angle resolution |             | 0.01 |
| CVT ratio                      | 10~100                       | 00                |                  |             |      |

| CVT ratio accuracy      | 0.1%   |
|-------------------------|--|
| CVT ratio<br>resolution | 0.01   |
| Dimension               | Main unit: 350(L)×270(W)×270(H)                  |
|                         | Accessory box: 350(L)×270(W)×160(H)              |
| Memory<br>capacity      | 200 groups, USB flash disk storage is supported. |
| Weight                  | Main unit: 22.75Kg                               |
|                         | Accessory box: 5.25Kg                            |