



## CT/PT.404

### Product Overview

The Instrument is designed for analysing current, voltage and protection transformer testing, the equipment adopts a high-performance DSP and FPGA. Complete functions include a high degree of automation, high test efficiency which is suitable for laboratory and on-site testing.

#### Test functions as follows:

- Excitation characteristics / Knee point
- Turns ratio
- Polarity
- Secondary winding resistance
- Secondary burden
- Ratio error
- Angular difference
- Transient characteristics

### Measuring Function:

- The instrument can satisfy the test requirements of excitation characteristics (i.e., volt-ampere characteristic) of all kinds of CT (such as: protection, measurement, TP), transformation ratio, polarity, secondary winding resistance, secondary load, ratio error and angle error, and also can be used for the testing of the excitation characteristics of all kinds of PT electromagnetic units, transformation ratio, polarity, secondary winding resistance, ratio error, etc.
- Max ratio error  $\pm 0.05\%$  is permitted. Max angular error  $\pm 2\text{min}$  if permitted. It can measure 0.2S class CT and turns ratio range is 1-40000.
- It can test CT/PT volt-ampere characteristic curve and 5%, 10% error curve based on the advanced frequency conversion method, only output maximum 180V of AC voltage and 12A AC current but can cope with the CT test with inflection/Knee point of as high as 60 KV.
- Conformance with the following standards IEC60044-1, IEC60044-6, IEC61869-2-2012 and other types of transformers.
- Auto test CT/PT parameters on knee point voltage/current, 5% and 10% deviation curve measurement, accuracy limit factor (ALF), safety factor (FS), second time constants (Ts), residual magnetism factor (Kr), saturated and unsaturated inductance.
- It is easy to use. To test CT DC resistance, excitation and polarity only need one button. All CT tests adopt same one connect method except load test.
- Built-in printer, can automatically print the test results.
- The test results can be exported via USB
- The instruments can store 1000 groups of test data.
- Comprehensive analysis software to facilitate conversion and accurate interpretation of the test data.

### Technical Specifications:

- Output 0~180Vrms, 12Arms, 36A (peak value)
- Voltage accuracy  $\pm 0.2\%$
- CT Ratio Range 1~40000  
Accuracy 0.05% Typical
- PT Ratio Range 1~35000  
Accuracy 0.05% Typical
- Phase Range 2min  
Accuracy 0.5min Typical
- Winding resistance Range 0~600 $\Omega$   
Accuracy 0.5% $\pm 2\text{m}\Omega$
- Burden Range 0~1000VA  
Accuracy 0.5% $\pm 0.02\text{VA}$
- Power supply AC 220V $\pm 10\%$ , 50Hz
- Data Storage 1000 Groups
- Data Transfer Via USB
- Environmental Conditions -10 $^{\circ}\text{C}$ ~50 $^{\circ}\text{C}$
- Humidity  $\leq 90\%$
- Dimensions 365mm $\times$ 290mm $\times$ 153mm
- Weight  $\approx 10\text{kg}$