

# GF1061

## PORTABLE HIGH PRECISION CT PT ANALYZER WITH PRINTER

GF1061 portable CT PT analyzer is mainly used for field or lab testing, it can finish the measurements (M) and protection (P) class CT, PT and TYP class CT. Adopt 7 inch touch TFT LCD, self-equipped mini type printer supporting field printing; supporting to use USB flash disk to download data or RS232 port to PC control. This model GF1061 CT PT Analyzer is the most complete and easy-to-use testing system for protection and metering CTs according to IEEE C57.13 and IEC60044 & IEC61869 standards.

### Application

1. Power plant;
2. Electrical laboratory;
3. Metrological service center;
4. Electricity power bureau & power company;
5. National Metrology and testing department;
6. Power engineering commissioning company;
7. Current transformer and voltage transformer factory;
8. Electrical Department of industrial and mining enterprises;



### Features

1. CT excitation curve;
2. Data storage 10000groups;
3. 7 inch color touch TFT LCD;
4. With battery function optional;
5. Full automatic demagnetization;
6. 10% error curve, 5% error curve;
7. Testing of various types of CT/PT;
8. Download word/PDF test report;
9. Easy to operate, test error quickly;
10. Test CT all parameter in one minute;
11. Auto check knee point voltage value;
12. The best light CT analyzer-only 4.5KG;
13. Programmable control by PC computer;
14. Knee point voltage from 0.1 V up to 50 kV;

### Main functions

| I. Current Transformer (CT)  | II. Voltage Transformer (PT)      |
|------------------------------|-----------------------------------|
| 1. Magnetization curve       | 1. Excitation characteristic test |
| 2. Transformation ratio test | 2. Transformation ratio test      |

| I. Current Transformer (CT) - continued                 | II. Voltage Transformer (PT) - continued       |
|---|--|
| 3. Polarity   | 3. Polarity                                    |
| 4. 5% and 10% error curve                               | 4. Ratio error, phase error                    |
| 5. Accuracy limiting factor (ALF)                       | 5. Degauss                                     |
| 6. Degauss  | 6. Calculation of knee point value             |
| 7. Ratio error, phase error                             | 7. Burden test                                 |
| 8. Automatic calculation of excitation knee point value | 8. Resistance test(Winding DC resistance test) |
| 9. Burden test  |  |
| 10. Resistance test(Winding DC resistance test)         |  |
| 11. Secondary time constant (Ts)                        |  |
| 12. Remanence coefficient (Kr)                          |  |
| 13. Transient dimensioning factor (Ktd)                 |  |
| 14. Peak instantaneous error (Er)                       |  |
| 15. Magnetizing inductance (LU)                         |  |
| 16. Instruments security factor(FS)                     |  |
| 17. Composite error                                     |  |
| 18. Visible Flashing LED when terminals are Live        |  |
| 19. Audible Warning Sound Error Indicator               |  |
| 20. Ability to Store and Generate/Print Report of Tests |  |
| 21. Built-in Thermal Printer                            |  |

## Parameters

| Electrical parameters                       |            |  |
|---|------------|--|
| Accuracy                                    |            | 0.02% or 0.05%                                 |
| Power supply                                |            | AC 220V±10% or AC 120V±10%, 50/60Hz or Battery |
| Output voltage                              |            | 0-100Vrms                                      |
| Output current                              |            | 0-5Arms (20A peak-value)                       |
| Output power                                |            | 0-400 VA (1500 VApeak)                         |
| Automatic frequency variation range         |            | 0.1-60Hz                                       |
| Equivalent excitation voltage               |            | ≤5000V/50KV                                    |
| Accuracy                                    |            | ≤0.02% or 0.05%                                |
| Secondary winding DC resistance measurement | Range      | 0.1-1000Ω                                      |
|   | Accuracy   | ≤0.02% or 0.05%                                |
| Secondary actual load measurement           | Range      | 0.1VA-1000VA                                   |
|   | Accuracy   | ≤0.02%±0.1VA                                   |
| CT/PT phase error measurement               | Accuracy   | ±1min (typical) / 3 min (guaranteed)           |
|   | Resolution | 0.1min   |

**Electrical parameters - continued**

|                            |   |                 |
|----------------------------|---|-----------------|
| CT ratio error measurement | Range                                       | 1-50000         |
|                            | Accuracy                                    | ≤0.02% or 0.05% |
| PT ratio error measurement | Range                                       | 1-30000         |
|                            | Accuracy                                    | ≤0.02% or 0.05% |
| LCD display                | 7' inch TFT touch color LCD                 |                 |
| Cable Length               | Primary 5m; Secondary 5m; others customized |                 |
| Communication port         | USB, RS232, WIFI                            |                 |
| PC control software        | Yes, Optional                               |                 |
| Printer                    | Yes, Thermal printer                        |                 |

**Standards**

|                     |  |  |
|---------------------|--|--|
| Reference standards | GB1207-2006, GB1208-2006, GB16847-1997<br>IEC60044-1, IEC60044-2,6, IEC61869, ANSI/IEEE C57.13 |  |
| Safety standards    | GB 4793.1-2007   |  |
| EMC                 | EMC standard 89/336/EEC  |  |
|                     | FCC Subpart B of Part 15 Class A   |  |
|                     | IEC 1000-4-2/3/4/6   |  |

**Mechanical parameters**

|                                    |                 |
|------------------------------------|-----------------|
| Overall dimension (L x W x H) (mm) | 280 x 250 x 160 |
| Weight (kg)                        | ≤4.5            |

**Environmental conditions**

|                       |  |
|-----------------------|--|
| Relative humidity     | Relative humidity 5%-95% not condensing  |
| Operating temperature | -10°C to +50°C   |
| Storage temperature   | -20°C to +70°C   |
| Altitude              | ≤1000m; If the altitude is greater than 2500m, the instrument needs to be customized |