

# SG7101

## Precision Power Analyzer



The precision power analyzer is mainly applied to measure all kinds of loss and impedance for electric equipments such as power transformer, generator, and electric motor. For example, even if the test voltage and test current wave severity distortion or the tested transformer power factor too low ( $\text{Cos}\phi < 0.02$ ). And the high precision and stability test result can be guaranteed during testing the no load and load loss of power transformer. **SG7101** precision power analyzer is the only production, which has the same precision with Switzerland SG7101 power analyzer in national. At the same time it also can be used to test power transformer and electric motor loss, analyze impedance and power system electric energy quality, and measure line parameter in transmission line. It's nice test capability, self-contained test function, and humanity operation interface make it be the leader of new generation power test apparatus.

### Feature

- ◆ Single-phase, three-phase, and three-phase with neutral voltage, current, power, can synchronously be measured and work out parameters.
- ◆ Three-phase, three-phase with neutral voltage and current independently input ( $U_a, U_b, U_c, U_n; I_a, I_b, I_c, I_n$ ), adopt eight A/D sampling and digital single process technology, eight channels completely isolation, strongly rejecting interference.

- ◆ Adopt industrial computer system to control and calculate, have 12 inch true color TET LCD and prominent visual and maneuverability.
- ◆ Have printer interface and subminiature printer; print all kinds of test wave and parameter at any moment.
- ◆ Measure rate fast, high precision, expediently operating, have high precision test and all kinds of specific function, being really innovative settle project.

### Main test parameter

- ◆ Voltage, current: effective value, rectification average value, average value, peak-peak value, positive peak value, negative peak value, wave factor, wave peak factor, min value, max value, frequency, and so on. Phase voltage, line voltage, neutral voltage, and neutral current.
- ◆ Power: active power, reactive power, apparent power, power factor.
- ◆ Harmonic: to 64 voltages, current harmonic, harmonic distortion, harmonic heft phase, voltage harmonic factor, current harmonic factor, current, K factor.
- ◆ Impedance: transformer equivalent impedance, efficiency and apparent resistance, efficiency and apparent reactance, zero order impedance.

### Main function

- ◆ Multi-test modes, measure much more:
  - across-the-board
  - Single phase test
  - Two-phase test
  - Three-phase three watts watch test
  - Harmonic time field map
  - Impedance analyzing
- ◆ Multi-connection models, implement multi-tests:
  - Three-phase and four line direct connect neutral current
  - Three-phase and four line direct measure neutral voltage
  - Three-phase and four line direct measure no load loss by PT and CT

## Performance Index

### ◆ Voltage test technology index

Test range:	600V/400V/250V/100V RMS
Max input:	720V (connect PT to enlarge test)
Test range:	1V ~ 720V
Basic precision:	test range 10% ~ 120% guarantee 0.1%
Frequency	40Hz ~ 300Hz

### ◆ Current test technology index

Test range:	10A/5A/1A/0.1A RMS
Max input:	12A (connect CT to enlarge test)
Test range	0.001A ~ 12A
Basic precision:	test range 10% ~ 120% guarantee 0.1%
Frequency:	40Hz ~ 300Hz

### ◆ Power test technology index

Test Range:	corresponding V*A 16 test ranges
Frequency:	45Hz ~ 60Hz
Basic precision:	0.01≤Cosφ≤0.05; 2%±4 digit 0.05<Cosφ≤0.1; 0.5%±4 digit 0.1<Cosφ≤1; 0.1%±4 digit

### ◆ Harmonic test technology index

Frequency:	45Hz ~ 60Hz
Harmonic time:	1 to 63, 1 ~ 63 diagram, 1 ~ 63 data
Precision:	1%
Sampling accuracy:	16 bits
Sampling Frequency:	25.6kHz/chunnel@50Hz (typical)
Error Voltage/Current:	±0.1% test value±3 digit
Power:	±0.5% test value±4 digit

### ◆ Test range conversion model:

#### Automation/manual

Work temperature:	-10 ~ 50℃
Relative humidity:	≤90% RH no dew
Size:	489mm×374mm×250mm
Weight:	19kg
Power:	AC220V/50Hz

### For further information please contact:

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