

# SG7001

## Automated single and three phase Transformer Turns Ratio Meter



SG7001 is an important basic measurement for power transformer diagnosis. It helps to detect faulty transformer windings as well as defective tap changer positions. This advanced instrument automatically recognizes winding connections and vector group numbers of transformer windings. Just connect the measuring cables and press the start button and get the test results.

SG7001 can directly measure the turns ratio of single-phase transformers as well as three-phase transformers. Deviations in these measurements will quickly indicate problems in transformer windings and in the magnetic core circuits. Transformer ratio can change due to several factors, including physical damage from faults, deteriorated insulation, contamination and shipping damage. If a transformer ratio deviates more than 0.5 percent from the rated voltage ratio, it may not operate reliably. To measure small ratio changes such as this, the accuracy of a SG7001 is needed.

Its design makes this instrument well suited for use in a variety of harsh environments.

The SG7001 is particularly suited for testing in substations, transformer-manufacturing environments, and meter shops. It features a high-contrast, backlit LCD screen which can be seen in bright or ambient light.

### Feature

- Single- and three-phase transformer testing
- Fast test speed, seven seconds of the completion of three-phase testing.
- High accuracy and good repetition.
- With communication interface, the test result could be saved.
- One start could measure three phases winding ratio, error, tap position and the tap Value ect. automatically
- It can test every type of transformer and Current and Voltage Instrument Transformers
- It be used for inspection purposes to determine the no-load accuracy of most CTs and PTs. It also can be used to determine the need to test potentially faulty CTs and PTs.
- Automatic self-calibration for each test.
- Able to measure the Z type transformer.
- Safety connection control feature proofs test setup before applying test voltage to avoid any damage of personnel, test equipment and instrument.
- With the calendar, it is easy to check the data.
- The imported waterproof case is especially suitable for field work.
- Build-in printer for quick test report generation and total prevention of data loss.

## Technical Data

### General

Excitation voltage:	10V and 160V
Print:	Thermal strip printer
Size:	240mm x 185mm x 110mm
Weight:	3.5kg
Working Power Supply:	AC220V±10% (50±1) Hz
Working Temperature:	0-40°C
Working Humidity:	<85%RH without dew
Power Dissipation:	<100W

### Measurement Range and Accuracy

Ratio test range:	0.9-9999
Accuracy:	(0.9-2000) ± (0.1%+2 character) (2000-5000) ± (0.2%+2 character) (5000-9999) ± (0.3%+2 character)
Resolution:	$1 \times 10^{-4}$



**For further information please contact:**

---

---

### Samgor Technology

Add: 9F, Founder Tower No.1122 Xin Jin Qiao Rd.  
Pudong, Shanghai, 201206, China

Tel: 86-21-58999552 58999556

Fax: 86-21-68482953 50323350

E-mail: [info@samgor.com](mailto:info@samgor.com)

Http:// [www.samgor.com](http://www.samgor.com)

---

---

