



# TRANSFORMER TURNS RATIO TESTER TURA-01 SERIES

Measures the Ratio  
of Transformers

Up to  
**33,000**  
Ratio

1 V to  
**100V**  
Test Voltage

Large  
Colour Touch  
Display

High  
Accuracy  
**0.08%**

Built-in  
Printer





Measurement  
0.8 to  
33,000 Ratio  
Test Voltage  
1V to 100V  
High Accuracy  
0.08%

## TURA-01 SERIES

### Transformer Turns Ratio Tester with Built-in Printer

TURA-01 Series is designed using advanced engineering technology to measure the turns ratio of single-phase and three-phase transformers.

TURA-01 Series has fast, easy and accurate TTR measurement features for current, voltage and power transformers using its user-friendly software.

TURA-01 Series is one of the most accurate devices with its wide range (0.8 to 33,000) ratio measurement capability and high precision (0.08 %).

Besides the ratio measurement, TURA-01 Series can also measure excitation current, phase angle, polarity, and ratio error.

Even though TURA-01 Series has a single-phase cable configuration, the user can make three-phase transformer tests. TURA-01 Series can show all kinds of connection diagrams on display which can change depending on transformer configuration. The operator doesn't need to search for a connection diagram.

TURA-01 Series has a wide operation range from high excitation current transformer to high powered power transformer at substations with the 1V, 4V, 10V, 40 V and 100 V AC test voltage generation capability.

A 4.3-inch touch display allows TURA-01 Series to show all measurement results on a single screen.

USB, Bluetooth (Option) and Flash Memory features allow TURA-01 Series to control, record and store measurement results (up to 100 Test Records).

With the HighTest Data Management Platform (DMP Software), users can control TURA-01 Series and analyse measurement results.

Operators can easily print the measurement results

with the 2.25-inch built-in Printer of TURA-01 Series.

Multi-language capability and user-friendly operation menu make it easy to control TURA-01 Series, even by less trained staff.

By using the optional TPA-03 Three Phase Adapter, the user can make 3-phase connection and can test all phases simultaneously.

TURA-01 Series is a light, compact and rugged device with the protection of IP67 (case closed).





## Features

- Turns Ratio Measurement (Single-phase and three-phase measurement)
- Ranges from 0.8 to 33,000 ratio measurement
- High accuracy (0.08 %)
- 1V, 4V, 10V, 40 V and 100 V AC test voltage
- Ratio error measurement
- Excitation current, phase angle, polarity measurement
- Built-in Battery & Printer
- Internal memory, USB Flash Drive
- PC control via USB cable
- Optional Bluetooth control and communication
- 4.3-inch large colour touch display
- Optional expansion feature with Three-Phase Adapter (TPA-03)

## Technical Specifications

<b>Measurement Parameters</b>	Turns Ratio Measurement, Excitation Current, Phase Angle, Polarity, Ratio Error (%), Magnetic Balance (Required TPA-03)		
<b>Ratio Measurement Modes</b>	CT Mode, PT Mode (Single-Phase and Three-Phase)		
<b>Test Voltages</b>	CT Mode: 1 V and 4 V PT Mode: 1, 4, 10, 40, 100 V		
<b>Measurement Method</b>	ANSI/IEEE C57.12.90		
<b>Ratio Range</b>	0.8 – 33,000		
<b>Ratio Resolution</b>	5 Digits		
<b>Accuracy</b>	<b>Mode</b>	<b>Ratio</b>	<b>Accuracy</b>
	CT Mode (1V -4 V)	0.8-399 400-4000	0.08 % 0.1 %
	PT Mode(10 V- 100 V)	0.8-5000 5001-12000 12001-33000	0.08 % 0.15 % 0.5 %
<b>Phase Angle Measurement</b>	0-360 Degree, $\pm 0.2$ degree ( $\pm 1$ digit)		
<b>Excitation Current</b>	2 A, 2 % of reading ( $\pm 1$ mA)		
<b>Power Supply</b>	100 - 240 V 47/63 Hz		
<b>Battery</b>	14.4 V 3.6 Ah built-in battery		
<b>Memory</b>	Up to 100 records (include up to 25 tap results)		
<b>Printer</b>	2.25-inch built-in printer		
<b>Communication</b>	USB 2.0/1.1 Standard-A, USB 2.0/1.1 Standard-B, Bluetooth (Model: TURA-01 BLUE)		
<b>PC Software</b>	DMP Software		
<b>Display</b>	4.3-inch TFT touch display		
<b>Dimensions</b>	12.5" x 10.1" x 6.0" (318 mm x 257 mm x 152 mm )		
<b>Weight</b>	3.8 kg		
<b>Working Temperature</b>	-10 °C to +60 °C		
<b>Storage Temperature</b>	-30 °C to +70 °C		
<b>Humidity</b>	95% RH non condensing		
<b>Protection Class</b>	IP67 (case closed)		
<b>Set of Package</b>	TURA-01, Power Cable, Ground Cable , 5 m Standard Test Cable Set, USB Cable, Printer Paper (x2), USB flash drive, Instruction Manual (Soft Copy), DMP Software, Soft Carrying Case		
<b>Options</b>	Carrying Case, TPA-03 Three-Phase Adapter, Bluetooth (factory-install option), 10 m Extension Cable		
<b>Ordering Information</b>	TURA-01 - Transformer Turns Ratio Tester With Built-in Printer & Battery		
	TURA-01 BLUE- Transformer Turns Ratio Tester With Built-in Printer, Battery & Bluetooth		

Specifications are valid under 25 °C temperature. \*Content subject to change without notice.

HighTest Technology Ltd. is a leading manufacturing company based in the UK which produces highly precise test equipment. We mainly focus on the development, manufacture and marketing of Transformer test systems.

We have several years of experience in the field of developing and producing high-end test equipment. Customer satisfaction is our prime motto. We supply our test equipment worldwide to Transformer manufacturers, Electrical utilities, general contractors and service companies. Our test equipment is designed and produced according to the most widely adopted international standards. As we value our customers the most, our well-experienced team always provide excellent after-sales support and technical assistance.



HIGHTEST TECHNOLOGY LIMITED  
4F Great Northern Works, Hartham Lane,  
Hertford, Hertfordshire, SG14 1QN,  
United Kingdom  
Tel: +44 203 900 2710, +44 203 287 2302  
info@hightest.co.uk www.hightest.co.uk

• Distributor / Representative