



HIGHTEST
TECHNOLOGY

TURA-03

3-Phase Transformer

Turns Ratio Tester with Built-in Printer



Up to
50,000
Ratio

1 V to
250 V
Test Voltage

Large
Colour Touch
Display

High
Accuracy
0.08%

Built-in
Printer



Measurement 0.8 to 50,000 Ratio

Test Voltage 1V to 250V

High Accuracy 0.08%

TURA-03

3 Φ Transformer Turns Ratio Tester with Built-in Printer

TURA-03 is designed using advanced engineering technology to measure the turns ratio of single-phase and three-phase transformers.

TURA-03 has fast, easy and accurate TTR measurement features for current, voltage and power transformers using its user-friendly software.

By using ANSI/IEEE C57.12.90 measurement method TURA-03 can produce precise results.

TURA-03 is one of the most accurate devices with its wide range (0.8 to 50,000) ratio measurement capability and high precision (0.08 %).

Besides the ratio measurement, TURA-03 can also measure excitation current, phase angle, polarity, and ratio error.

Even though TURA-03 has three-phase cable configuration, users can also make single-phase transformer tests.

TURA-03 can detect vector groups automatically.

TURA-03 has a wide operation range from high excitation value current transformer to high powered power transformer at substations with the 1V, 4V, 10V, 40V, 100V and 250V AC test voltage generation capability.

A 7-inch colour touch display allows TURA-03 to show all measurement results on a single screen.

USB, Bluetooth (Option) and Flash Memory features allow TURA-03 to control, record and store measurement results (up to 100 Test Records).

With the HighTest Data Management Platform (DMP Software), users can control TURA-03 and analyse measurement results.

Operators can easily print the measurement results with the 2.28-inch built-in Printer of TURA-03.

Multi-language capability and user-friendly operation menu make it easy to control TURA-03, even by less trained staffs.

TURA-03 can control tap changer (raise and lower) via its tap changer outputs.

TURA-03 is a light, compact and rugged device with the protection of IP67 (case closed).

In addition to ratio tests, TURA-03 can be used to perform Magnetic Balance Test as well.





Features

- Turns Ratio Measurement
(Single-phase and three-phase measurement)
- Ranges from 0.8 to 50,000 ratio measurement
- High Accuracy (0.08 %)
- 1V, 4V, 10V, 40V, 100V and 250V AC test voltage
- Ratio Error Measurement
- Magnetic Balance Test
- Excitation Current, Phase Angle, Polarity Measurement
- Built-in Printer
- Automatic vector group detection feature
- Internal memory, USB Flash Drive
- PC control via USB cable
- Optional Bluetooth control and communication
- 7-inch large colour touch display

Technical Specifications

Measurement Parameters	Turns Ratio Measurement, Excitation Current, Phase Angle, Polarity, Ratio Error (%), Vector group detection, Magnetic Balance		
Ratio Measurement Modes	CT Mode, PT Mode (Single-Phase and Three-Phase)		
Measurement Method	ANSI/IEEE C57.12		
Test Voltages	CT Mode: 1 V and 4 V PT Mode: 1, 4, 10, 40, 100, 250 V		
Ratio Range	0.8 – 50,000		
Accuracy	Mode	Ratio	Accuracy
	CT Mode (1V -4 V)	0.8000 - 399.99 400.00 - 4000.0	0.08 % 0.1 %
	PT Mode(10 V- 250 V)	0.8000 - 5000.0 5000.1 - 12000 12001 - 50000	0.08 % 0.15 % 0.5 %
Phase Angle Measurement	0-360 Degree		
Excitation Current	2 A		
Accuracy	Range	Resolution	Accuracy
	Up to 1.0000 mA	0.2 μ A	0.25 % rdg \pm 500 μ A
	1.0000 mA to 10.000 mA	1 μ A	0.25 % rdg \pm 500 μ A
	10.000 mA to 100.00 mA	10 μ A	0.25 % rdg \pm 500 μ A
	100.00 mA to 2000.0 mA	100 μ A	0.25 % rdg \pm 500 μ A
Power Supply	100-240 V 47/63 Hz		
Battery	Yes, 14.4 V 3.45 Ah Optional (Models: TURA-03B, TURA-03B BLUE)		
Memory	Up to 100 records (include up to 25 tap results)		
Printer	2.28-inch Printer		
Communication	USB 2.0/1.1 Standard-A, USB 2.0/1.1 Standard-B, Bluetooth (factory install option)		
PC Software	DMP Software		
Display	7-inch Colour Touch Display		
Dimensions	16.7" x 13.4" x 6.8" (424 mm x 340 mm x 173 mm)		
Weight	7.1 kg		
Working Temperature	-10 $^{\circ}$ C to +60 $^{\circ}$ C		
Protection Class	IP67 (case closed)		
Set of Package	TURA-03, Power Cable, Ground Cable, 15 feet Standard Test Cable Set, 30 feet Extension Cable Set, Tap Changer Cable Set, USB Cable, Printer Paper (x2), USB flash drive, Instruction Manual (Soft Copy), DMP Software, Cable Bag		
Options	Hard Carrying Case, Bluetooth (factory install option), Battery		

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.



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