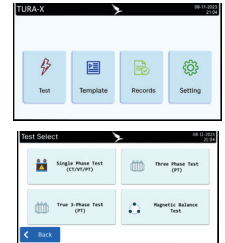


TURA-X SERIES TRUE-3 ϕ TURNS RATIO TESTER



TURA-X is designed to accurately measure the turns ratio of single-phase and three-phase transformers.

TURA-X performs fast and accurate turns ratio measurements on current, potential and power transformers via its user-friendly interface. TURA-X can apply voltage to all three-phases at a time and make three-phase measurements.

With market-leading accuracy, the TURA-X has a very wide ratio measurement capability with a precision of 0.08 %.

Other features available on TURA-X include the measure of core excitation current, phase angle, polarity, ratio error and magnetic balance.

TURA-X can detect vector groups automatically. The instrument has a wide operating range for use on equipment such as high excitation value current transformers and high power potential transformers in substations.

The instrument can generate 1V, 4V, 10V, 40V, 100V, and 250V AC test voltages.

A 7-inch colour touch display allows TURA-X to show all measurement results on a single screen. USB, Bluetooth (Option), and Flash Memory features allow TURA-X to control, record and store measurement results, (up to 100 Test Records).

Using the HighTest Data Management Platform or a.k.a. (DMP Software), users can control TURA-X and analyse measured results and records. If an immediate hard copy of the results is required the TURA-X also allows for this via an embedded 2.28-inch printer.

Multi-language capability and user-friendly menus make it easy to control the TURA-X instrument, even by less trained staff. TURA-X can also control the tap changer, (i.e. raise and lower) via its tap changer outputs.

TURA-X is a light, compact and rugged device with an IP protection class of IP67, (case closed). In addition to ratio tests, TURA-X can also be used to perform Magnetic Balance Test.



DEVICE HIGHLIGHTS



Single-phase, three-phase & True three-phase ratio measurement
With its three-phase cable configuration, users can measure turns ratio of both three-phase and single-phase transformers. Capable of testing phase shifting transformers



Optional Rechargeable Li-Ion Smart Battery
TURA-X comes with a 14.4V Li-Ion smart battery option which enables you to make tests while on field. TURA-X works on both main power and consuming battery power.



7-inch TFT Colour Touch Screen
TURA-X is built-in with a 7-inch TFT Colour Touch Screen which is visible under both bright sunlight and dim lit environment.



2.28-inch Built-in Thermal printer
TURA-X's built-in thermal printer let you print the results immediately during field test.

FEATURES

- Turns Ratio Measurement (Single-phase, Three-Phase and True Three-phase measurement)
- Ranges from 0.8 to 50,000 ratio measurement
- 1V, 4V, 10V, 40V, 100V, & 250V AC test voltages
- Ratio Error Measurement, Excitation Current, Phase Angle, Polarity Measurement, Magnetic Balance
- High Accuracy (0.08 %)
- Automatic vector group detection
- Built-in Printer
- Internal memory, USB Flash Drive
- PC Software
- Bluetooth & Battery options
- 7-inch 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, Power Transformer (Single-Phase, Three-Phase and TRUE Three-Phase)		
Measurement Method	ANSI/IEEE C57.12		
Test Voltages	CT Mode Single-Phase : 1 V and 4 V PT Mode; Three-Phase: 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, ±0.2 degree		
Excitation Current	Up to 2 A		
Power Supply	100-240V AC, 47/63 Hz		
Battery	Yes, 14.4 V / 3.45 Ah : Optional on Models: TURA-XB, TURA-XB BLUE.		
Memory	Up to 102 records (include up to 25 tap results)		
Printer	2.28-inch Built-in Printer		
Communication	USB 2.0/1.1 Standard-A, USB 2.0/1.1 Standard-B, Bluetooth (Models: TURA-X BLUE & TURA-XB BLUE)		
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 (models with battery)		
Temperature	Working: -10 °C to + 60 °C ; Storage: -30 °C to + 70 °C		
Protection Class	IP67 (case closed)		
Included in the package	Power Cable, Ground Cable, 5m Standard Test Cable Set, 10m Extension Cable Set, Tap Changer Cable Set, USB Cable, Printer Paper (x2), USB flash drive, Instruction Manual (Soft Copy), DMP Software, Cable Bag		

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

ORDERING INFORMATION

TURA-X		250V True-3Ø Transformer Turns Ratio Tester with Built-in Printer
TURA-X BLUE	 	250V True-3Ø Transformer Turns Ratio Tester with Built-in Printer & Bluetooth
TURA-XB	 	250V True-3Ø Transformer Turns Ratio Tester with Built-in Printer & Battery
TURA-XB BLUE	  	250V True-3Ø Transformer Turns Ratio Tester with Built-in Printer, Battery & Bluetooth