



## Features

- ✓ Test Voltage : 10V, 40V, 100V
- ✓ Measure Turns Ratio, Voltage Ratio & Ratio Error
- ✓ Measure Phase Deviation & Excitation Current
- ✓ Auto Detection of Transformer Vector Group
- ✓ Quick set up with intuitive guide
- ✓ Inbuilt Printer with Memory for 500 test results
- ✓ Bluetooth enabled for Motware Mobile App

## XTRM-3

### Transformer Turns Ratio Meter

CAT III	IP	CE	USB	Bluetooth
600V	54			

Motware's Transformer Turns ratio Meter XTRM-3 is a new generation fully automated kit to measure Turns Ratio, Voltage Ratio, Ratio Error, Phase Displacement and Excitation Current in Transformer. It also automatically detects transformer vector group. User selectable test voltage provided to test various ratings of power transformers. XTRM-3 controls from remote position using TAP changer option which allows operator to perform measurement at various Tap position and has quick setup templates which automatically calculates nameplate voltage ratios of transformer to avoid time consuming process by adding details of each TAP ratio. Internal memory for 500 test results provided to save results during testing on site. Emergency safety switch is provided for operator's safety during undesired condition.

XTRM-3 has Bluetooth connectivity module with Motware mobile app for remote access of testing data & storage in the cloud for further analysis & record purpose.

## Applications

Transformer Turn Ratio Meter determines the turns ratio and polarity of single and three-phase transformers and also confirm nameplate ratio, polarity, and vectors and useful in identifying trouble in the in transformer windings, such as open circuit and short circuit of turn-to-turn sensitivity.

- Turn Ratio testing of Single phase/ Three phase Auto Transformers, Power Transformers and Distribution Transformers
- Turn Ratio testing of Instrument Transformers



## Technical Details

### XTRM-3

#### Technical Specifications

**Power Supply** 115V/230V AC, 50/60 Hz

**Measurement ratio** 0.8 : 10000

#### Ratio Accuracy

**10V**  $\pm 0.15\%$  (0.8 - 999)

**40V**  $\pm 0.1\%$  (0.8 - 999)

$\pm 0.15\%$  (1000 - 1999)

$\pm 0.20\%$  (2000 - 3999)

$\pm 0.25\%$  (4000 - 10000)

**100V**  $\pm 0.1\%$  (0.8 - 999)

$\pm 0.15\%$  (1000 - 1999)

$\pm 0.20\%$  (2000 - 3999)

$\pm 0.25\%$  (4000 - 10000)

**Test Voltage** 10V AC, 40V AC, 100V AC

**Excitation Current** Upto 2A

**Resolution** 0.1mA

**Phase Angle**  $\pm 180^\circ$

**Phase Angle Resolution** 0.01

**Accuracy**  $\pm 0.50^\circ \pm 1$ digit

**Display** LCD

**Printer** Built in Thermal Printer

**PC interface** USB

**Report Storage** 500 reports

#### Environmental Specifications

**Operating Temperature** 0°C to 40°C

**Storage Temperature** -10°C to 60°C

**Relative Humidity**  $\leq 95\%$ RH at 40°C max (non condensing)

#### Physical Specifications

**Dimensions** 188 mm(L) x 401mm(W) x 502mm(H)

**Weigh** 15 kg (Approx)

#### Safety Features

Safety / EMC in accordance with EN 61010-1, EN 61326-1

CE Certified

Ingress Protection IP54 / CAT IV 600V

Emergency Stop

#### Full Windows Compatible Software

**Software is fully compatible with Microsoft**

**Type** Window based Software

**Interface** USB communication port

**Features** Remote Operation

Data Downloading

Analysis and Report Generation

#### Accessories

##### Standard

- Mains Power Cord
- Main Protected Fuse
- Extension Cable
- 15m Measuring Test Lead Set with alligator clips
- Thermal Paper roll
- Instruction Manual
- Calibration Certificate

##### Optional

- Software 1 No
- USB Cable 1 No
- Remote tap changer switch 1 No
- 20 Mtr. Test Leads with alligator clamp
- Bluetooth application via cloud based Motware application