









Transformer is a very important element in the Electric Power Distribution System. It needs to be maintained from time to time to guarantee smooth power supply at consumer end.

MECO TTR8100 is portable instrument for accurate measurement of 1-Phase & 3-Phase Transformer VT / CT Turns Ratio, Excitation Voltage, Current, Phase Angle and Deviation. TTR8100 ensures the Correct Turn Ratio and Quality of the Transformer.

It checks live Test Points, Short Circuit, Open Circuit and Reverse Polarity before each measurement.

## **Features**

- ullet Measurements of  $1\Phi$  and  $3\Phi$  Transformer / VT / CT Turns Ratio
- VT/PT Ratio 0.8~10000. CT Ratio 0.8~2000
- Graphical and Literal Illustration of Measurements and connections with Large Back-lighted Dot Matrix 240x128 LCD
- Displays Turns Ratio, Deviation, Secondary Output, Excitation Voltage and Current, Phase Angle and Nameplate Transformer / VT / CT Values in one page for easy quality interpretation.
- Check for Live Test Points, Short Circuit, Open Circuit and Reverse Polarity before each measurement.
- Store 4096 Files of Transformer Nameplate Values (VT / PT / CT, 1Φ / 3Φ, Test Frequency, Primary and Secondary Voltages or Ratio, RCF) and Measuring Data.

- Ten test Frequencies (50~400Hz)
- 9 Types of  $3\Phi$  Winding Connections pre-installed.
- Wireless Blue Tooth Communication with PC.
- Select Filter to Remove Field noise (Slow, Normal, Fast)
- Record with Date and Time Stamp
- Powerful lithium Battery (3400mAH) with built-in Charging Circuit
- User Programmable RCF (Reference Correction Factor, 0.99~1.01)
   to Correct Accuracy within 1% Error
- PC Application Software Included
- Friendly File System for Easy On-site Data Retrieval and Nameplate Values Management

Reference Conditions :  $23^{\circ}\text{C}\pm5^{\circ}\text{C}$  (30 to 50% RH). Add 25ppm /  $^{\circ}\text{C}$  for -0° to 18°C and 28° to 50°C to all Accuracy Specifications. No external electrical or magnetic fields. Output current  $\leq$  150mA for VT / PT and  $\leq$  50mA for CT. Calibration Cycle is 1 Year.

## **Electrical**

Ratio Range (VT / PT)	Autoranging : 0.8000 to 10000:1	
Accuracy (70Hz)	Ratio Range	Accuracy (%of Reading)
	0.8000 to 999.99	±0.1%
	1000.0 to 4999.9	±0.2%
	5000.0 to 10000	±0.25%
Ratio Range (CT)	Autoranging : 0.8000 to 2000.0	
Accuracy (70Hz)	Ratio Range	Accuracy (%of Reading)
	0.8000 to 2000.0	±0.5%
Excitation Signal	VT / PT Mode : 34Vrms max	
	CT Mode : Auto Level 0 to 1A, 0.1 to 20Vrms	
Excitation Current Display	Range : 0 to 1000mA	
	Accuracy : ±(2% of Reading +2mA)	
Excitation Frequency (Hz)	50, 55, 60, 70, 100, 120, 200, 240, 300, 400	
Display	5" Large Dot Matrix LCD Display (240x128) with Backlight	
Power	Rechargeable Lithium Battery, 3400mAh	
Battery Life	Over 10Hrs of Continuous Operation. Battery life (%) Indication	
Battery Charger	Universal Input (90 to 264Vrms Input)	
Charging Time	<4Hrs	
Data Storage	4096 Files Each (VTM, CTM, VTR, CTR, BMP)	
Date/Time	Battery-Backed, Real-time Calendar Clock	
Measurement Method	ANSI/IEEE C57.12.90 and IEC 600076.1	
Accessory	Test Leads x 1 Pair, Alligator Clips x 4, Rechargeable Lithium Battery x 1,	
	Instruction Manual x 1, AC Adaptor x 1, Power Cord x 1, Software CD and Manual x 1, Carrying Bag x 1	

## **Application**



