



**TR-MARK III 250V**

For 3 phase  
Turns Ratio  
measurements

The MARK III 250V is the leader for 3 phase turns ratio measurements. A fully automatic, self-calibrating system with single hook up to transformer, automatic vector group detection and a voltage measurement range up to 250V. A color LCD with back lighting and touch screen increases user comfort. USB interfaces make it easy to store measurements on external

storage devices, transfer data easily to a personal computer or download nameplate data of transformers under test.

Turns Ratio range	0.8...40 000
Accuracy	± 0.06% Rdg
Resolution	5 Digits
Current range	0...1A
Test voltage	1/10/40/100/250VAC
Phase angle	± 90 Degree
Operating temp.	-10°C to 55°C
Storage temp.	-20°C to 70°C
Input power	110/240 VAC 50/60 Hz



**Measurement Parameters**

Voltage Range	Measuring Range	Accuracy	Resolution
250V	0.8 ... 5000	± 0.06% Rdg ± 1 LSD	5 Digits
	5000 ... 10'000	± 0.1 % Rdg ± 1 LSD	5 Digits
	10'000 ... 32'500	± 0.3 % Rdg ± 1 LSD	5 Digits
	32'500 ... 40'000	± 0.4 % Rdg ± 1 LSD	5 Digits
100V / 40V	0.8 ... 2000	± 0.06% Rdg ± 1 LSD	5 Digits
	2000 ... 4000	± 0.1 % Rdg ± 1 LSD	5 Digits
	4000 ... 13'000	± 0.3 % Rdg ± 1 LSD	5 Digits
	13'000 ... 16'000	± 0.4 % Rdg ± 1 LSD	5 Digits
10V	0.8 ... 500	± 0.1 % Rdg ± 1 LSD	5 Digits
	500 ... 1000	± 0.12% Rdg ± 1 LSD	5 Digits
	1000 ... 3250	± 0.3 % Rdg ± 1 LSD	5 Digits
	3250 ... 4000	± 0.4 % Rdg ± 1 LSD	5 Digits
1V	0.8 ... 50	± 0.1 % Rdg ± 1 LSD	5 Digits
	50 ... 100	± 0.15% Rdg ± 1 LSD	5 Digits
	100 ... 325	± 0.3 % Rdg ± 1 LSD	5 Digits
	325 ... 400	± 0.4 % Rdg ± 1 LSD	5 Digits

**Features**

- Automatic measurements of Voltage /Turns Ratio, Phase Displacement and Current
- Easy one time hook up to the transformer
- Automatic test voltage range
- Displays deviation from a nominal ratio
- Measures power transformers, PT's and CT's
- Load on test object < 0.05 VA
- Internal memory stores more than 10 000 test results
- Enhanced protection circuitry
- Internal printer
- Tap changer user interface (input and output)
- USB 2.0 (host/device) and serial RS232 (9 Pin) interface
- Front panel sealed anodized with 5.7" color LED LCD and touch screen

**Specifications**

**Model TR-MARK III 250 V**

- Waterproofed field case
- Size L: 470 mm (18.5") W: 371 mm (14.6") H: 190 mm (7.5")
- Weight 9.5 kg (21 lbs.)

**Model TR-MARK III R 250 V**

- 19" Rackmount version
- Size L: 490 mm (19.3") W: 390 mm (15.4") H: 177 mm (7")  
Rack Unit: 4U
- Weight 8.1 kg (17.9 lbs)

**Accessories**

- Complete cable set (H and X lead cable 2 x 5 m, extension cables 2 x 10 m and power cord)
- Cable bag
- Instruction manual
- Software for data download

**Options**

- T-Rex: 3-phase supply to energize all 3 phases at once
- TRO 203: External test switch for tap changer testing
- TRO 205: Additional extension cables 2 x 10m



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