

## TR-Mark III 250V: Fully Automatic, Three Phase Transformer Turns Ratio Meter

### Features

- Extended test voltage measurement range of up to 250V
- Automatic measurements of voltage, turns ratio, current, and phase displacement
- Easy one-time hook up to the transformer
- Automatic test voltage range
- Displays deviation from a nominal ratio
- Tap changer interface with graphic results
- Load on test object <0.05 VA
- Measures power transformers, PTs and CTs
- Automatic vector group detection
- Enhanced heavy-duty protection circuitry
- Emergency stop button immediately turns off output
- Internal printer
- Data storage of over 10,000 measurements
- Simple to operate color LCD touch screen with backlight
- Two USB interfaces
- 5-Year standard warranty



TR-Mark III 250V

### Accuracy

Range	Accuracy at 100V or 40V	Accuracy at 10V	Resolution
0.8 ... 2,000	±0.06% Rdg ±1 LSD	±0.15% Rdg ±1 LSD	5 Digits
2,001 ... 4,000	±0.1% Rdg ±1 LSD	±0.3% Rdg ±1 LSD	5 Digits
4,001 ... 13,000	±0.3% Rdg ±1 LSD	not specified	5 Digits
13,001 ... 16,000	±0.4% Rdg ±1 LSD		5 Digits

Range	Accuracy at 250V	Resolution
0.8 ... 5,000	±0.06% Rdg ±1 LSD	5 Digits
5,001 ... 10,000	±0.1% Rdg ±1 LSD	5 Digits
10,001 ... 32,500	±0.3% Rdg ±1 LSD	5 Digits
32,501 ... 40,000	±0.4% Rdg ±1 LSD	5 Digits

Current	Accuracy	Resolution
0 ... 1A	±0.001A	0.1mA

Phase Angle	Accuracy	Resolution
±90 Degree	±0.05 Degree	0.01 Degree

### Specs

- Size: **L:** 470 mm (18.5") **W:** 371 mm (14.6") **H:** 190 mm (7.5")
  - Weight: 10.2 kg (22.4 lbs.)
  - Input Power: 100 to 250 VAC, 50/60 Hz, auto ranging. Fuse: 2A
  - Turns Ratio Range: 0.8 to 40,000
  - Test Voltage: User Selectable: 250, 100, 40, 10, and 1VAC
  - Temperature: **Operating:** -10°C to 60°C (14°F to 140°F); **Storage:** -20°C to 70°C (-4°F to 158°F)
- See Instruction Manual for more Parameters. Specifications subject to improvement at any time.

- Panel Display: 5.7" Color LCD with backlight and touch screen
- Front Panel: Sealed, anodized
- Interface: 2 USB 2.0 (1 host/1 device) and 9 Pin RS-232 serial
- Memory Storage: Internally stores more than 10,000 test results
- Max. Test Current: 1A

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### Standard Accessories Included

H and X Lead Set – 5m (16 ft.)

Red Extension Lead Set (2) – 10m (32 ft.) each

Power Cord – 6.09m (20 ft.)

Ground Lead – 5m (16 ft.)

A-B USB Cable – 3.05m (10 ft.)

External USB drive and touch screen Stylus

Cable Bag with Shoulder Strap

Paper Refill for Printer – 5 rolls

Spare Fuse Set

Instruction Manual

Certificate of Accuracy

### Optional Items Available

1003N-31001: External Trigger Switch for Tap Changer Testing – 10m (32 ft.)

TR-Mark III R 250V: Rackmount Version

1002A-05002: Red Extension Lead – 10m (32 ft.)

T-Rex: 3 Phase Test Voltage Option for TR-Mark III 250V

1004N-15002: Annual Warranty Extension

Raytech is a world leader in the design and production of precision electronic measuring instruments and systems. The unique design approach of the engineering team at Raytech has resulted in the development of highly regarded measuring instruments, which have set new standards in the electrical testing industry.

Our exceptional reputation for support and service is unmatched.

Raytech products are designed for many years of trouble-free use, which is why we can offer a **standard 5-year warranty** – guaranteeing the highest quality instrumentation available.



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