



Fully Automatic

Automatic Vector Group Detection

Rugged & Reliable

Features:

Automatic Measurements of Voltage / Turns Ratio, Current, and Phase displacement

Single push button operation Single hook up to the transformer Automatic test voltage range

Displays deviation from a nominal ratio

Graphical tap changer display

Tap changer interface (In- and Output)

Load on test object < 0.05 VA

Measures Power transformers PT's and CT's

Displays % error vs. name plate value Automatic Vector Group detection Enhanced Heavy-duty protection circuitry

Extremely rugged (Can withstand a drop test of 1 meter)

Resolution

0.01 Degree

Measurement Parameters:

Range	Accuracy at	Accuracy at	Resolution
	100V or 40V	10V	
0.8 2000	±0.08% Rdg ±1 LSD	±0.15% Rdg ±2 LSD	5 Digits
2001 4000	±0.1% Rdg ±1 LSD	±0.22% Rdg ±2 LSD	5 Digits
4001 13000	±0.3% Rdg ±1 LSD	±0.5% Rdg ±2 LSD	5 Digits

 Current
 Accuracy
 Resolution

 0 .. 1 A
 ±0.001 A
 0.1 mA

Phase Angle Accuracy
±90 Degree ±0.05 Degree

Turns ratio range: 0.8 to 13000

Temperature: Operating -10°C to 60°C Storage -40°C to 70°C

Specifications:

Model: TR Spy Mark II

Size: L: 470 mm (18.5") W: 371 mm (14.6") H: 190 mm (7.5")

Weight: 8.2 kg (18 lb.)

Input Power: 100 to 250 Vac 50/60 Hz auto ranging. Fuse: 2 A
Test Voltage: User Selectable: 100, 40, 10, and 1 Vac. 1 A

Panel Display: LCD Graphic with back lighting

Front Panel: Sealed, Anodized, Piezo-electric actuation

Interface: Standard 9 Pin RS232 serial / 25 Pin Centronics parallel

Memory Storage: Internally stores more than 4,000 test results

Accessories:

Complete cable set (consisting of a 5m cable with an extension cable of 10m), cable carrying bag, power supply cord, instruction manual, software for data download

Options:

TRO 201 Cable Extension of 20m length

TRO 203 External test switch for Tap changer testing
Spy base Windows based control & operation software
T-REX 3-phase Supply to energize all 3 phases at once

Specifications are subject to change without notice.

