



TR-1 and **TR-1P**
For 1 phase
Turns Ratio
measurements

Raytech Single Phase Transformer Turns Ratio Meter TR-1/P is designed to be a rugged and reliable automatic transformer Ratiometer. This system has a high degree of accuracy and can measure ratios up to 4000:1. The design of this test system is based upon the popular Raytech Automatic Three Phase test set: TR-Mark III.

This system is a battery-operated instrument, designed for highly accurate readings on-site with laboratory precision. It is a lightweight system that comes complete with its rugged waterproof field case.

Advanced Protection: Upon powering on the system initializes itself with a self-calibrating, circuit checking sequence. If any problems are detected during this initialization period, or during operation, the operator is immediately notified.

The system constantly monitors the condition of the transformer under test. The TR-1/P can even recognize shorted leads and will terminate the test without any damage to the test equipment. This works especially well when test leads accidentally fall free from the transformer while under full voltage measurement. This, incidentally, is one of the many reasons why we can extend our warranty to 2 years.

Temperature		<i>Turns Ratio range</i>	0.08 ... 4000
Operating	-10°C to 55°C	<i>Accuracy</i>	± 0.08% Rdg
Storage	-20°C to 70°C	<i>Resolution</i>	5 Digits
Abs. Input Voltage	90 to 264 VAC, 47-63 Hz	<i>Current range</i>	0A...1 A
	12VDC charging		

Measurement Parameters

Range	Accuracy in PT Mode (40 V)	Accuracy in CT Mode (1...5 V)	Resolution
0.8 ... 100	± 0.08% Rdg ± 1 LSD	± 0.08% Rdg ± 1 LSD	5 Digits
101 ... 4000	± 0.08% Rdg ± 1 LSD		5 Digits

Current	Accuracy	Resolution
PT-Mode 0...0.1 A	± 1 mA	0.1 mA
CT-Mode 0... 1 A	± 1 mA	0.1 mA

Specifications

Model

TR-1 and
TR-1P (with printer)

Size

L: 270 mm (10.62")
W: 245 mm (9.68")
H: 125 mm (4.87")

Weight

3.2 kg (7 lbs.)

Interfaces

Interface RS232 serial (with optional interface adapter)

Memory Storage

Internally stores 50 test results

Panel Display

LCD graphic with back light

Front Panel

Sealed, Anodized

Options

TRO 101

10 meters extension cable

TRO 106

DC car adapter

TRO 107

Serial interface with cable



Accessories

- Single phase cable set 3 meters
- Instruction manual
- Toolbox software for data exchange and analysis (requires cable TRO 107)
- Power cord
- 2 Paper rolls (TR-1P)



Raytech AG

Oberebenstrasse 11

CH-5620 Bremgarten

www.raytech.ch

Phone +41 56 648 60 10

Fax +41 56 648 60 11

welcome@raytech.ch