

WR14 (15A)
For Winding
Resistance
measurements



The Raytech WR14 is a Winding Resistance meter system specially designed for high precision DC winding resistance measurement of high inductive windings such as large power transformer windings. It can also be used for precisely diagnosing and for preventive maintenance. Many power transformer's faults such as shorted turns, tap changer problems and loose connections can be detected precisely.

For maximum mobility, the WR14 is battery operated and very lightweight. It includes also special tools such as advanced transformer core demagnetizing, temperature rise measurement and analysis (optional), and automatic temperature correction using up to 2 temperature probes.

The WR14 can inject current to both high voltage and low voltage side using the jumper cable provided, and resistance measurement can be performed simultaneously using two separate measurement channels.



Temperature

Operating -10°C to 55°C
 Storage -20°C to 70°C
 Abs. Input Voltage 90 to 264 VAC, 47-63 Hz
 12VDC charging

Resistance range 0.00 μΩ to 100 kΩ
 Accuracy ± 0.1% Rdg
 Resolution 5 Digits or 0.05 μΩ
 Current range 25 mA...15 A
 Inductance range 0 ... 1500 Henry

Measurement Parameters

Current Range	Measuring Range	Accuracy	Resolution
10 – 15 A	0.00 μΩ ... 1 Ω	± 0.1% Rdg ± 0.1 μΩ	5 Digits or 0.05 μΩ
5 – 10 A	0.0 μΩ ... 3 Ω	± 0.1% Rdg ± 0.2 μΩ	5 Digits or 0.1 μΩ
1 – 5 A	0.0000 mΩ ... 15 Ω	± 0.1% Rdg ± 0.5 μΩ	5 Digits or 0.5 μΩ
0.5 – 1 A	0.000 mΩ ... 30 Ω	± 0.1% Rdg ± 2 μΩ	5 Digits or 1 μΩ
0.1 – 0.5 A	0.000 mΩ ... 300 Ω	± 0.1% Rdg ± 5 μΩ	5 Digits or 2 μΩ
25 – 100 mA	0.00 mΩ ... 1200 Ω	± 0.1% Rdg ± 20 μΩ	5 Digits or 10 μΩ
– 25 mA	1.2 kΩ ... 10 kΩ	± 0.1% Rdg ± 100 mΩ	5 Digits or 200 mΩ
– 25 mA	10 kΩ ... 100 kΩ	± 0.5% Rdg ± 10 Ω	4 Digits or 20 Ω

Accessories

- Current and potential lead set 5 meters
- Jumper cable 5 meters
- Instruction manual
- T-Base Pro software for data exchange and analysis

Specifications

Model with 2 channels

WR14 and WR14R (rackmount version)

Size (field case)

L: 470 mm (18.5")
 W: 357 mm (14.1")
 H: 176 mm (6.9")

Weight

9.4 kg (20.6 lbs.)

Interface

USB 2.0 full speed (1 host, 1 device) and 9 Pin RS232 serial

Memory Storage

Stores up to 10 000 complete test results

Panel Display

5.7" Color LCD with LED back lighting and touch screen

Front Panel

Sealed, Anodized

Options

- WRO 402 10 meters cable set
- TP 01 External temperature probe
- AHRT 01 «Heat run test» software
- WRO 202 DC car adapter



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