# WR100-13R: 100 Amp, 3 Channel Winding Resistance Meter with Demagnetization and Discharge

#### Features

Pure, filtered DC power source for the highest accuracy readings Highest Accuracy and Precision of any high current test system Complete, automatic calibration system and system diagnostics Automatic measurements of resistance from  $0.00\mu\Omega\dots100k\Omega$ 

Demagnetizing Circuit (Advanced design)

Microprocessor-based system with internal storage for over 10,000 test results

Data exchange via USB-Key or USB / RS Connection

Storage of test results while the test system is measuring

Temperature channels with automatic resistance correction

Automatic, high efficiency cooling system to dissipate internal heat

Automatic shut off for over-temperature conditions

Simple to operate color LCD touch screen with back light

Panel-mounted Emergency Stop Switch

Fully automatic cooling curve analysis (option AHRT 01)

Fastest discharge time on the market

5-Year standard warranty



WR100-13R

## Accuracy \_

Current Range	Measuring Range	Accuracy	Resolution
30 – 100A	0.00 μΩ 1.7 Ω	$\pm$ 0.1% Rdg $\pm$ 0.05 μ $\Omega$	5 Digits or 0.05 μΩ
15 – 30A	0.0 μΩ 3.3 Ω	$\pm$ 0.1% Rdg $\pm$ 0.1 $\mu\Omega$	5 Digits or 0.1 $\mu\Omega$
8 – 15A	0.0000 mΩ 6.3 Ω	$\pm$ 0.1% Rdg $\pm$ 0.2 $\mu\Omega$	5 Digits or 0.2 μΩ
3 - 8A	$0.0000$ m $\Omega$ $16.7$ $\Omega$	$\pm$ 0.1% Rdg $\pm$ 0.5 $\mu\Omega$	5 Digits or 0.5 μΩ
1 – 3A	0.000 mΩ 47.2 Ω	$\pm$ 0.1% Rdg $\pm$ 1 $\mu\Omega$	5 Digits or 1 μΩ
0.7 – 1A	0.000 mΩ 71.4 Ω	$\pm$ 0.1% Rdg $\pm$ 2 $\mu\Omega$	5 Digits or 2 μΩ
0.3 – 0.7A	0.000 mΩ 167 Ω	$\pm$ 0.1% Rdg $\pm$ 5 $\mu\Omega$	5 Digits or 5 μΩ
0.1 - 0.3A	$0.00~\text{m}\Omega~\dots~500~\Omega$	$\pm$ 0.1% Rdg $\pm$ 10 $\mu\Omega$	5 Digits or 10 μΩ
25 – 100 mA	0.00 mΩ 2 kΩ	$\pm$ 0.1% Rdg $\pm$ 20 $\mu\Omega$	5 Digits or 20 μΩ
< 25 mA	2 kΩ 10 kΩ	$\pm$ 0.2% Rdg $\pm$ 200 m $\Omega$	5 Digits or 200 m $\Omega$
< 25 mA	10 kΩ 100 kΩ	$\pm$ 0.8% Rdg $\pm$ 20 $\Omega$	4 Digits or 20 Ω

#### Specs

Size: L: 490 mm (19.3") W: 436 mm (17.2") H: 310 mm (12.2"), Rack Unit: 7U Input Power: 2 x 90 to 264 VAC (3 kW max.), 47...63 Hz, auto ranging

Test Current: User Selectable: 25 mA ... 100 A

Front Panel: Sealed, anodized

Memory Storage: Internally stores more than 10,000 test results

Inductance Range: 0 to 1,500 Henry

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.* 

Weight: 21.9 kg (48.3 lbs.) Output Voltage: 0 to 50V DC

Panel Display: 5.7" Color LCD with back light and touch screen Interface: 4 USB 1.1 (3 host, 1 device) and 9 Pin RS-232 serial

Resistance Range:  $0.00 \, \mu\Omega$  to  $100 \, k\Omega$ 

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### Standard Accessories Included

Current and Potential Lead Set — 10m (32 ft.) External USB drive and touch screen Stylus Ground Lead — 10m (32 ft.) External Zippered Pouch
A-B USB Cable — 3.05m (10 ft.)
Jumper Cables (2) — 10m (32 ft.) each

Instruction Manual Certificate of Accuracy

### **Optional Items Available**

2060N-05001: Cable Extension Set — 10m (32 ft.) 2060A-04001: Pelican Transport Shipping Case 2060N-15001: Annual Warranty Extension 2021N-26001: Temperature Probe — 10m (32 ft.)

2042N-11001: Heat-Run Curve Analysis Software (AHRT-01)



**Rear View** 

Raytech is a world leader in the design and manufacture 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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