

WR50-12: 50 Amp, 2 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 $0.00\mu\Omega$... $100k\Omega$
- 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
- Printing and storing 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 condition
- 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



WR50-12

Accuracy

Current Range	Measuring Range	Accuracy	Resolution
30 – 50A	$0.00\mu\Omega$... 1.3Ω	$\pm 0.1\% \text{ Rdg} \pm 0.05\mu\Omega$	5 Digits or $0.05\mu\Omega$
15 – 30A	$0.0\mu\Omega$... 3.3Ω	$\pm 0.1\% \text{ Rdg} \pm 0.1\mu\Omega$	5 Digits or $0.1\mu\Omega$
8 – 15A	$0.0000\text{ m}\Omega$... 6.3Ω	$\pm 0.1\% \text{ Rdg} \pm 0.2\mu\Omega$	5 Digits or $0.2\mu\Omega$
3 – 8A	$0.0000\text{ m}\Omega$... 16.7Ω	$\pm 0.1\% \text{ Rdg} \pm 0.5\mu\Omega$	5 Digits or $0.5\mu\Omega$
1 – 3A	$0.000\text{ m}\Omega$... 47.2Ω	$\pm 0.1\% \text{ Rdg} \pm 1\mu\Omega$	5 Digits or $1\mu\Omega$
0.7 – 1A	$0.000\text{ m}\Omega$... 71.4Ω	$\pm 0.1\% \text{ Rdg} \pm 2\mu\Omega$	5 Digits or $2\mu\Omega$
0.3 – 0.7A	$0.000\text{ m}\Omega$... 167Ω	$\pm 0.1\% \text{ Rdg} \pm 5\mu\Omega$	5 Digits or $5\mu\Omega$
0.1 – 0.3A	$0.00\text{ m}\Omega$... 500Ω	$\pm 0.1\% \text{ Rdg} \pm 10\mu\Omega$	5 Digits or $10\mu\Omega$
25 – 100 mA	$0.00\text{ m}\Omega$... $2\text{ k}\Omega$	$\pm 0.1\% \text{ Rdg} \pm 20\mu\Omega$	5 Digits or $20\mu\Omega$
< 25 mA	$2\text{ k}\Omega$... $10\text{ k}\Omega$	$\pm 0.2\% \text{ Rdg} \pm 200\text{ m}\Omega$	5 Digits or $200\text{ m}\Omega$
< 25 mA	$10\text{ k}\Omega$... $100\text{ k}\Omega$	$\pm 0.8\% \text{ Rdg} \pm 20\Omega$	4 Digits or 20Ω

Specs

Size: L: 521 mm (20.5") W: 432 mm (17") H: 216 mm (8.5")
 Input Power: 90 to 264 VAC (1.5 kW max.), 47 ... 63 Hz, auto ranging
 Panel Display: 5.7" Color LCD with back light and touch screen
 Interface: 2 USB 1.1 (1 host, 1 device) and 9 Pin RS-232 serial
 Memory Storage: Internally stores more than 10,000 test results
 Inductance Range: 0 to 1,500 Henry

Weight: 17.2 kg (37.9 lbs.)
 Output Voltage: 0 to 50V DC
 Test Current: User Selectable: 25 mA ... 50 A
 Front Panel: Sealed, anodized
 Resistance Range: $0.00\mu\Omega$ to $100\text{ k}\Omega$

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.

Standard Accessories Included

Current and Potential Lead Set – 10m (32 ft.)
 External USB drive and touch screen Stylus
 External Zippered Pouch
 Spare fuse set (10A), Qty. 5

Ground Lead – 10m (32 ft.)
 Jumper Cable – 10m (32 ft.)
 A-B USB Cable – 3.05m (10 ft.)
 Cable Bag with Shoulder Strap

Power Cord – 6.09m (20 ft.)
 Paper Refill for Panel-mount Printer – 5 rolls
 Instruction Manual
 Certificate of Accuracy

Optional Items Available

2040N-05003: Cable Extension Set – 10m (32 ft.)
 2021N-26001: Temperature Probe – 10m (32 ft.)
 2042N-11001: Heat-Run Curve Analysis Software (AHRT-01)

WR50-12R: Rackmount Version
 2042N-15001: Annual Warranty Extension

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Rackmount Version Available

For your convenience, Raytech offers a 4U rackmount version, the WR50-12R.

All of the features and accuracy of the portable field unit are incorporated into the rackmount, except the internal printer. There are a total of four (4) USB interfaces to provide additional access to the instrument.



Specs

Size: L: 490 mm (19.3") W: 436 mm (17.2") H: 177 mm (7")

Rack Unit: 4U

Weight: 13.5 kg (29.7 lbs.)

Standard Accessories Included

The same accessories are included as the portable field version, except printer paper refill will not be included because the rackmount does not contain a printer.

Optional Items Available

The same optional items that are available to the field unit are also available to the rackmount unit.



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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