

# Winding Resistance Meter 50 A

WR-  
50-A  
Ω

High Power DC Supply (50 A/50 V)

Demagnetisation and Discharge Circuit

Color touch screen



**Raytech**  
SWITZERLAND

WR-Series

# Winding Resistance Meter 50 A

## WR50-12

### Features

2 measuring channels (3 measuring channels with WR50-13)  
Charges inductive loads up to 1500 Henry, heavy duty protection circuitry  
Simple touch screen operation  
Extremely wide measuring range from 0.00  $\mu\Omega$  to 100 k $\Omega$ , DC current adjustable  
3 Temperature channels (with automatic resistance correction)  
High power DC Supply (50 A/50 V)  
Fastest discharge unit on market (more than 10 times faster)  
Discharge indicator – visible and audible indicator for discharge status  
Fully automatic **demagnetizing** circuit (world unique)  
Data transfer to internal printer at selectable intervals  
Mounted in rugged case for field testing  
Data exchange with USB-Key  
Fully automatic cooling curve analysis (option AHRT 01)



### Measurement Parameters

Current Range	Measuring Range	Accuracy	Resolution
30 – 50 A	0.00 $\mu\Omega$ ... 1.3 $\Omega$	$\pm 0.1\%$ Rdg $\pm 0.05 \mu\Omega$	5 Digits or 0.05 $\mu\Omega$
15 – 30 A	0.0 $\mu\Omega$ ... 3.3 $\Omega$	$\pm 0.1\%$ Rdg $\pm 0.1 \mu\Omega$	5 Digits or 0.1 $\mu\Omega$
8 – 15 A	0.0000 m $\Omega$ ... 6.3 $\Omega$	$\pm 0.1\%$ Rdg $\pm 0.2 \mu\Omega$	5 Digits or 0.2 $\mu\Omega$
3 – 8 A	0.0000 m $\Omega$ ... 16.7 $\Omega$	$\pm 0.1\%$ Rdg $\pm 0.5 \mu\Omega$	5 Digits or 0.5 $\mu\Omega$
1 – 3 A	0.000 m $\Omega$ ... 47.2 $\Omega$	$\pm 0.1\%$ Rdg $\pm 1 \mu\Omega$	5 Digits or 1 $\mu\Omega$
0.7 – 1 A	0.000 m $\Omega$ ... 71.4 $\Omega$	$\pm 0.1\%$ Rdg $\pm 2 \mu\Omega$	5 Digits or 2 $\mu\Omega$
0.3 – 0.7 A	0.000 m $\Omega$ ... 167 $\Omega$	$\pm 0.1\%$ Rdg $\pm 5 \mu\Omega$	5 Digits or 5 $\mu\Omega$
0.1 – 0.3 A	0.00 m $\Omega$ ... 500 $\Omega$	$\pm 0.1\%$ Rdg $\pm 10 \mu\Omega$	5 Digits or 10 $\mu\Omega$
25 – 100 mA	0.00 m $\Omega$ ... 2 k $\Omega$	$\pm 0.1\%$ Rdg $\pm 20 \mu\Omega$	5 Digits or 20 $\mu\Omega$
– 25 mA	2 k $\Omega$ ... 10 k $\Omega$	$\pm 0.2\%$ Rdg $\pm 200 m\Omega$	5 Digits or 200 m $\Omega$
– 25 mA	10 k $\Omega$ ... 100 k $\Omega$	$\pm 0.8\%$ Rdg $\pm 20 \Omega$	5 Digits or 20 $\Omega$
Resistance Range	0.00 $\mu\Omega$ to 100.0 k $\Omega$		
Inductance Range	0 Henry to 1500 Henry		
Temperature	Operating -10 °C to 60 °C, Storage -20 °C to 70 °C		

### Specifications

Model	WR50-12
Size	L: 521 mm (20.5"), W: 432 mm (17"), H: 216 mm (8.5")
Weight	16.6 kg (36.6 lbs.)
Input Power	90 to 264 Vac (1.5 kW max.), 47...63 Hz, Automatic ranging
Output Voltage	0 to 50 V DC
Test Current	User Selectable: 50...0.025 A
Panel Display	Color LCD with back lighting and touch screen
Interface	2 USB 1.1 and 9 Pin RS 232 Serial
Front Panel	Sealed, Anodized
Memory Storage	Stores up to 10 000 complete test results

### Accessories

Current and potential lead set 10 meters, instruction manual, jumper cable 10 m

### Options

WRO 201	10 m cable extension set (not with option screw pole connectors)
TP 01	External temperature probe
AHRT 01	«Heat run test» Software
WR50-13	3 channel version
WR50-12R	19", 4U Rackmount version 2 channel
WR50-13R	19", 4U Rackmount version 3 channel
WRO 505	screw pole connectors



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