## WINRES-20B BLUE 3 20 A WINDING RESISTANCE TESTER WITH BUILT-IN BATTERY, BLUETOOTH & PRINTER







## WINRES-20B BLUE 20 A Winding Resistance Tester with Built-in Battery, Bluetooth & Printer

WINRES-20B BLUE is designed by advanced engineering technology to measure the winding resistance of transformers.

WINRES-20B BLUE can measure current, voltage, power transformer windings and shunt resistors.

Applying up to 20 A Direct Current allows WIN-RES-20B BLUE to measure the resistance of the transformers fast and accurate.

The smart design of the WINRES-20B BLUE makes easier to determine the end of measurement automatically according to users' decision.

WINRES-20B BLUE can measure two resistance values simultaneously with its two voltage measurement channels. Users can prefer to test two primary or two secondary or one primary and one secondary winding according to the configuration of transformers.

Beginning from 0.01  $\mu\Omega$  resistances, WINRES-20B BLUE can measure up to 100,000  $\Omega$  resistance. WINRES-20B BLUE discharges the measured circuit after each test.

For inductive load, WINRES-20B BLUE can demagnetise the load. The temperature measurement input enables one to connect an optional sensor to WINRES-20B BLUE and perform temperature correction automatically.

WINRES-20B BLUE's intelligent software allows controlling the current flow if there is a failure in the current circuit. With this feature, WINRES-20B BLUE procures added safety to users.

A 7-inch TFT touch display allows WINRES-20B BLUE to show all measurement results on a single screen. WINRES-20B BLUE can be controlled by USB and built-in Bluetooth interface and users can record/store measurement results.

In case setting up Laptop or PC for the onfield test is difficult; users can record data to the device's internal memory (up to 100 Test Records) or to an external USB flash memory.

With the HighTest Data Management Platform (DMP Software), users can analyse and manage measurement results.

Operators can easily print the measurement results with the 2.28-inch built-in Printer of WINRES-20B BLUE.

WINRES-20B BLUE has a built-in battery power feature which allows users to make tests even when there is no electricity.

Multi-language capability and user-friendly operation menu make it easy to control WINRES-20B BLUE, even by less trained staffs.

Three-Phase Adaptor TPA-03 (optional accessory) allows connecting all primary and secondary sides concurrently, whereby users can select either to test the resistance of all phases or selective phases. With the TPA-03 option, WINRES-20B BLUE can control tap changer (raise and lower) with its tap changer outputs.

WINRES-20 BLUE is a light, compact and rugged device with the protection class IP67 (case closed).



## Features

- 2 channels resistance measurement
- I Measurements from 0.01  $\mu\Omega$  to 100,000  $\Omega$
- 0.001 A to 20 A DC adjustable current output
- I High accuracy (0.1%)
- I Demagnetisation feature
- User-friendly operation menu
- I Temperature correction (1 input, sensor optional)
- Built-in printer (2.28-inch)
- Data Management Platform (DMP Software) allows WIN-RES-20B BLUE analyse and manage results on PC

- Built-in Battery
- Internal memory, USB Flash Drive
- PC control via USB cable
- Built-in Bluetooth control and communication
- 7-inch large colour touch display
- Emergency stop
- Multi-language
- Optional accessory TPA-03 (Three-Phase Adapter) makes WINRES-20B BLUE outputs concurrently connectable to primary and secondary sides of three-phase power transformers.

## **Technical Specifications**

| Measurement Parameters  | 2 channels resistance  |                  |                       |
|-------------------------|--|------------------|-----------------------|
| Test Voltage            | 50 V   |                  |                       |
| Current output          | From 0.001 A to 20 A DC (User selectable)  |                  |                       |
| Resistance Measurement  | From 0.01 $\mu\Omega$ to 100,000 $\Omega$  |                  |                       |
| Accuracy                | Current Value  | Resistance Value | Accuracy              |
|                         | 1 mA - 10 mA   | Up to 100 kΩ     | 0.1 % rdg 0.1 % of Fs |
|                         | 10 mA - 100 mA   | Up to 5 kΩ       | 0.1 % rdg 0.1 % of Fs |
|                         | 100 mA - 1 A   | Up to 500 Ω      | 0.1 % rdg 0.1 % of Fs |
|                         | 1 A  | Up to 50 Ω       | 0.1 % rdg 0.1 % of Fs |
|                         | 20 A   | Up to 2.5 Ω      | 0.1 % rdg 0.1 % of Fs |
| Demagnetisation         | Yes  |                  |                       |
| Power Supply            | 100 - 240 V, 47/63 Hz  |                  |                       |
| Battery                 | 14.4 V 6.9 Ah built-in Battery   |                  |                       |
| Memory                  | Up to 100 records (include up to 25 tap results)   |                  |                       |
| Printer                 | 2.28-inch built-in Printer   |                  |                       |
| Communication           | USB 2.0/1.1 Standard-A, USB 2.0/1.1 Standard-B, Built-in Bluetooth   |                  |                       |
| PC Software             | DMP Software   |                  |                       |
| Display                 | 7-inch Colour Touch Display  |                  |                       |
| Dimensions              | 16.7" x 13.4" x 6.8" (424 mm x 340 mm x 173 mm )   |                  |                       |
| Weight                  | 7 kg   |                  |                       |
| Working Temperature     | -10 °C to + 60 °C  |                  |                       |
| <b>Protection Class</b> | IP67 (case closed)   |                  |                       |
| Set of Package          | WINRES-20B BLUE, Power Cable, Ground Cable, 1x 15 feet Current Cable Set, 2 x 15 feet Voltage Cable Set, 30 feet Extension Cable Sets for Current and Voltage channels, USB Cable, Tap Changer Cable Set, Jumper Cable, Printer Paper (x2), USB flash drive, Instruction Manual (Soft Copy), DMP Software, Cable Bag |                  |                       |
| Options                 | Hard carrying case, Three-Phase Adapter TPA-03, Temperature Sensor   |                  |                       |

Specifications are valid under 25 °C temperature. \*Contents subject to change without notice.

HighTest Technology Ltd. is a leading manufacturing company based in the UK which produces highly precise test equipment. We mainly focus on the development, manufacture, and marketing of Transformer test systems and Solar test devices. We have several years of experience in the field of developing and producing high-end test equipment. Customer satisfaction is our prime motto. We supply our test equipment worldwide to Transformer manufacturers, Electrical utilities, PV module/ Solar panel manufacturers, general contractors and service companies. Our test equipment is designed and produced according to the most widely adopted international standards. As we value our customers the most, our well-experienced team always provide excellent after-sales support and technical assistance.



• Distributor / Representative

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