

## **HTZZ-1A Transformer Resistance Tester**



### **I. Introduction**

DC resistance measurement of transformer winding is an essential test project during transformer transfer, repair and changing tapping switch. Measuring DC resistance of transformer winding, you can check out weld or connection quality of down-lead, the winding inter-turn short circuit or open circuit, and whether tap-changer is well contacted. In the previous it is generally to use QJ44 double bridge to measure DC resistance, but the measuring current for this type of bridge is mA level current. So measurement will take a long time, and accuracy is lower. In order to change the above situation, our company has developed HTZZ-1A DC Resistance Rapid Tester.

This instrument is a high-precision regeneration product used to replace DC single/double bridge. Equipped with advanced switch power supply technology, the measurement speed of the instrument is faster a hundred times than that of the bridge. Using four and half bits LCD to display the measurement results and three and half bits LCD to display ambient temperature or test current value, it overcomes the shortcoming of other similar products that it is difficult to read value from the LED display in the sun and possesses automatic arc suppression function. The instrument is characterized by fast test speed, high precision, intuitive display, strong anti-interference ability, small size, low power consumption, stable and reliable test data. Built-in rechargeable battery pack (12V) and AC/DC dual-use, the instrument is very convenient for on-site and field test.

### **II.Features**

1. Fast test: The maximum output charge current of the instrument is up to 1A. When measuring it can effectively compensate current inertial for large inductor and accelerate core saturation, thereby reduced the charging time and increased test speed. Its test speed is faster hundreds of times than the traditional single instrument and double bridge.
2. High accuracy: The application of advanced four-terminal measurement and constant current source technology to the instrument makes the inductive load charging current hold a relatively stable value. Base on that, and the instrument with stable anti-sense capability and strong anti-interference characteristics can ensure the accuracy of measurement. And the use of imported high-quality components not only improves the measurement accuracy, but also makes the instrument have good repeatability.
3. Wide measurement range: resistance measurement range  $1\mu\Omega \sim 2K\Omega$ , wide range.
4. AC and DC power supply: Attached rechargeable battery, the instrument can use AC and DC power supply. Portable design, it is easy to carry and use

### III. Parameters

Working condition	Temperature	0°C~40°C
	Relative humidity	≤85%
Measurement range	Six-gear range	1μΩ~20mΩ
		20mΩ~200mΩ
		0.2Ω~2Ω
		2Ω~20Ω
		20Ω~200Ω
	200Ω~2kΩ	
Measuring accuracy	Class 0.2	
Max resolution	1μΩ	
Constant current source	1A(1μΩ~20mΩ、20mΩ~200mΩ、0.2Ω~2Ω)	
	100mA(2Ω~20Ω)	
	10mA(20Ω~200Ω)	
	1mA(200Ω~2kΩ)	
Working voltage	DC	11V~14V
	AC	220V
Dimension	365*330*180mm <sup>3</sup>	
Weight	5kg	

### IV. Accesories

