

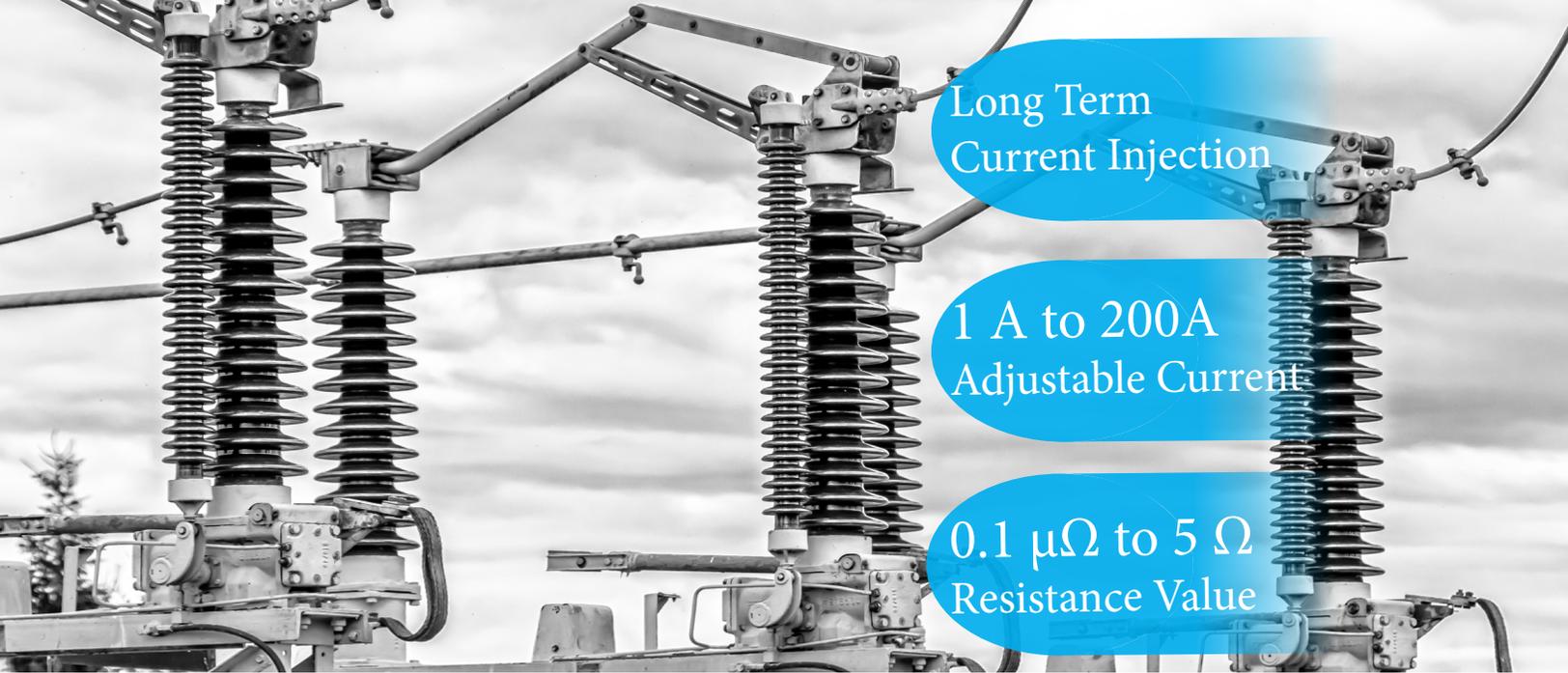


**HIGHTEST**  
TECHNOLOGY



# ARES-200

## 200 A DC Micro-Ohm Meter



Long Term  
Current Injection

1 A to 200A  
Adjustable Current

0.1  $\mu\Omega$  to 5  $\Omega$   
Resistance Value

## ARES-200 200 A DC Micro-ohm Meter with Built-in Printer

ARES-200 is a micro-ohmmeter produced using advanced engineering technologies which can apply up to 200 A current.

With its easy-to-use software, ARES-200 can easily measure contact resistances of circuit breaker, shunt and disconnecter by applying adjustable current from 1A to 200A.

It can calculate the real values of the resistors by providing penetration with the feature of the continuous current application.

ARES-200 can measure from 0.1  $\mu\Omega$  to 5  $\Omega$ . ARES-200 is capable of measuring static resistance of the contact points of the circuit breaker.

There is also an "Auto-Test" mode available on ARES-200, which enables to start testing automatically just by connecting the leads of the sensor cables across the two points of the current path and makes it highly convenient when measuring an array of resistance values in a circuit breaker contact.

ARES-200 can measure idle circuit breakers as well as dual grounded circuit breakers.

The optional current clamp will be able to measure the part of the current going through the ground line during the test and make the calculations considering this component.

The frequently used test models can be saved as templates and the tests can be performed more rapidly and quickly. Thanks to the quick test feature of the ARES-200 user interface, the test can be performed in barely 15 seconds.

The 4.3-inch touch colour display shows all measurement results manifest on a single screen. With an easy-to-use user-friendly interface, the ARES-200 guides operators to perform tests quickly.

ARES-200's flash memory feature allows controlling, recording and storing measurement results (up to 200 Test Records). And also the user can copy test records using a USB drive. Operators can easily print the measurement results with the 2.25-inch built-in printer of ARES-200 and can prepare on-field reports easily.

The HighTest data management platform (DMP Software) can also be used to control ARES-200 remotely by a PC and the measurement results can be easily analysed and stored in the PC. With the ARES-200's Bluetooth option, tests can be started remotely via DMP software and the results can be transferred to the PC. Thus, on-field tests can be performed even by a single person.

With ARES-200's temperature measurement channel, the temperature values of the measured sample can be taken and calculated according to the desired temperature value. ARES-200 is a compact, rugged device with IP67 protection class (case closed) which weighs 9 kg.

### Why do we measure contact transition resistance at breakers?

When high current passes over the switchyard, circuit breakers open the circuits or at the points where high current passes it acts as closing switches. Resistance value measured in periodic control of circuit breaker should be the same as the resistance value in the closed position which is very important for system safety.

High resistance values may cause local hotspots, voltage drops, fire risk, unplanned power failure, and extra energy loss in the system. Maximum accuracy measurement with the 4-wire method (kelvin method) will indicate whether the breaker contacts are properly contacted, if there is any corrosion on the contacts, or it shows if there is an effect that increases the resistance.

ARES-200 can apply up to 200 A current through its current cable and measure the voltage drop on both sides of the resistance with the sense terminal. Thus the calculated resistance value displayed on ARES-200 is not affected by the resistance of the measuring cable.



## FEATURES

- Contact Resistance Measurement
- Adjustable Current: 1 A to 200 A
- Measurement Range from 0.1  $\mu\Omega$  to 5  $\Omega$
- Typical Accuracy 0.1%
- Static Resistance Measurement
- Dual Ground Test mode
- Auto-test mode
- Built-in Printer
- Optional Current Clamp
- Internal Memory, USB Flash Drive
- PC control via USB cable
- Optional Bluetooth control & communication
- 4.3-inch TFT touch Display
- Protection Class: IP67 (case closed)

## Technical Specifications

<b>Measurement Parameter</b>	Contact Resistance
<b>Measurement Modes</b>	Static Resistance, Dual ground
<b>Auto-Test Mode</b>	Yes
<b>Test Current</b>	1 A to 200 A
<b>Measurement Range</b>	0.1 $\mu\Omega$ to 5 $\Omega$
<b>Accuracy</b>	Typical: 0.1% $\pm$ 0.1% Fs Guaranteed: 0.5% $\pm$ 0.1% Fs
<b>Display</b>	4.3-inch TFT touch Display (visible under sunlight)
<b>Memory</b>	Up to 200 records with 25 intervals for each
<b>Communication</b>	USB 2.0/1.1 Standard-A, USB 2.0/1.1 Standard-B, Bluetooth (factory installed option)
<b>PC Software</b>	DMP Software
<b>Printer</b>	2.25-inch Built-in Printer
<b>Test Plan</b>	Up to 6 plans
<b>Current Clamp</b>	Yes, Optional
<b>Power Supply</b>	100-240 V 47/63 Hz
<b>Dimensions</b>	16.7" x 13.4" x 6.8" (424 mm x 340 mm x 173 mm )
<b>Weight</b>	9 kg
<b>Operating and Storage temperature</b>	Working: -10 °C to + 60 °C Storage: -30 °C to 70 °C
<b>Humidity</b>	95% RH non condensing
<b>Protection Class</b>	IP67 (case closed)
<b>Set of Package</b>	ARES-200, Power Cable, Ground Cable , 33 feet Standard Test Cable Set, USB Cable, Printer Paper (x2), USB flash drive, Instruction Manual (Soft Copy), DMP Software, Cable Bag
<b>Options</b>	Hard Carrying Case, Length Customised Cables, Bluetooth (factory installed option), Current Clamp

4.3-inch TFT  
Touch Display

Auto-Test Mode

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

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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.

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, 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.



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