

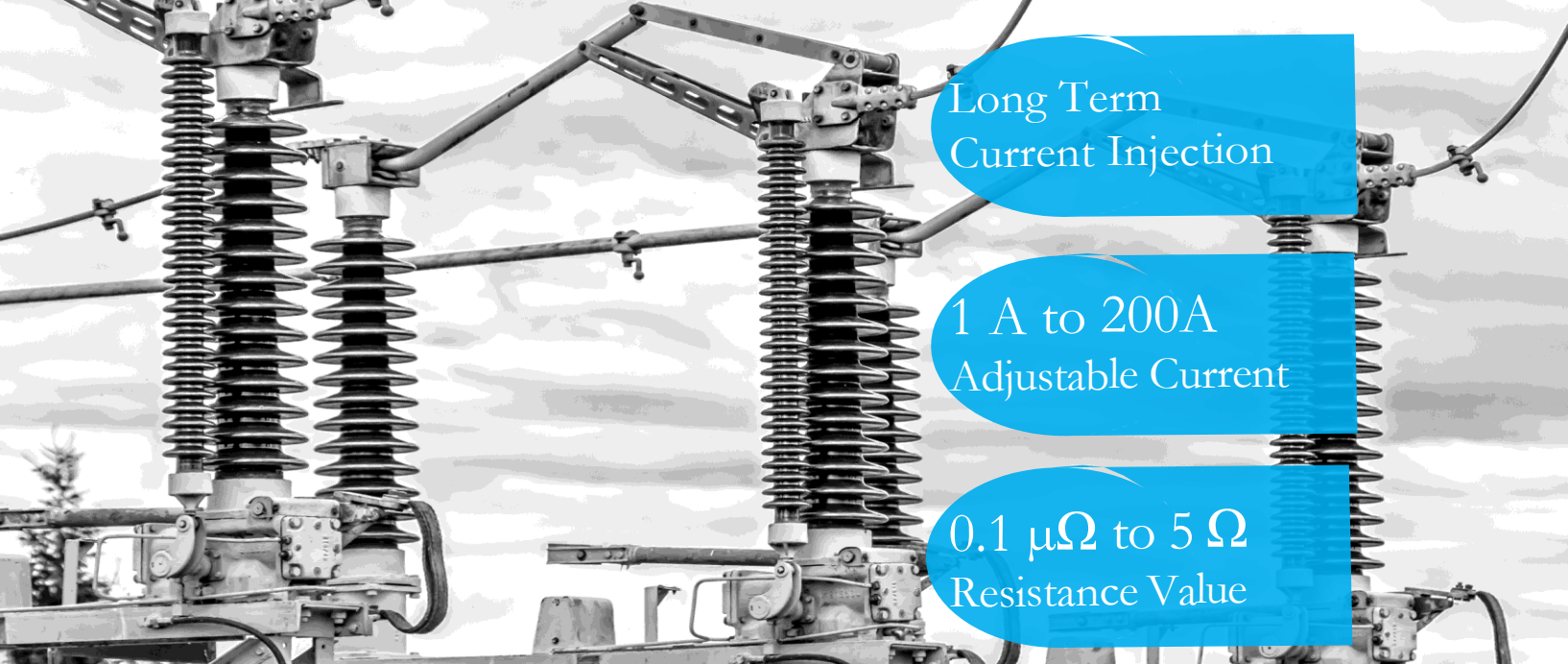


**HIGHTEST**  
TECHNOLOGY



Static, Dynamic &  
Dual Ground Measurement

# DARES-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

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

DARES-200 is a micro-ohmmeter produced using advanced engineering technologies which can apply up to 200 A current. With its easy-to-use software, DARES-200 can easily measure contact resistances of circuit breaker, shunt, 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. DARES-200 can measure from 0.1  $\mu\Omega$  to 5  $\Omega$ . DARES-200 is capable of measuring static and dynamic resistance of the contact points of the circuit breaker.

DARES-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 DARES-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 DARES-200 guides operators to perform tests quickly.

DARES-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 DARES-200 and can prepare on-field reports easily.

The HighTest data management platform (DMP Software) can also be used to control DARES-200 remotely by a PC and the measurement results can be easily analysed and stored in the PC.

With the DARES-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 DARES-200's temperature measurement channel, the temperature values of the measured sample can be taken and calculated according to the desired temperature value. DARES-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.

DARES-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 DARES-200 is not affected by the resistance of the measuring cable.

### Why Dynamic Resistance Meter?

In the circuit breakers, the time-dependent graph of the measured resistance when the breaker is switched from closed to open can be obtained to determine whether the contacts are deformed. This cannot be detected by measuring the circuit breaker only in the closed position. For this reason, dynamic resistance measurement is done on circuit breakers.



## 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
- Dynamic Resistance Measurement
- Dual Ground 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

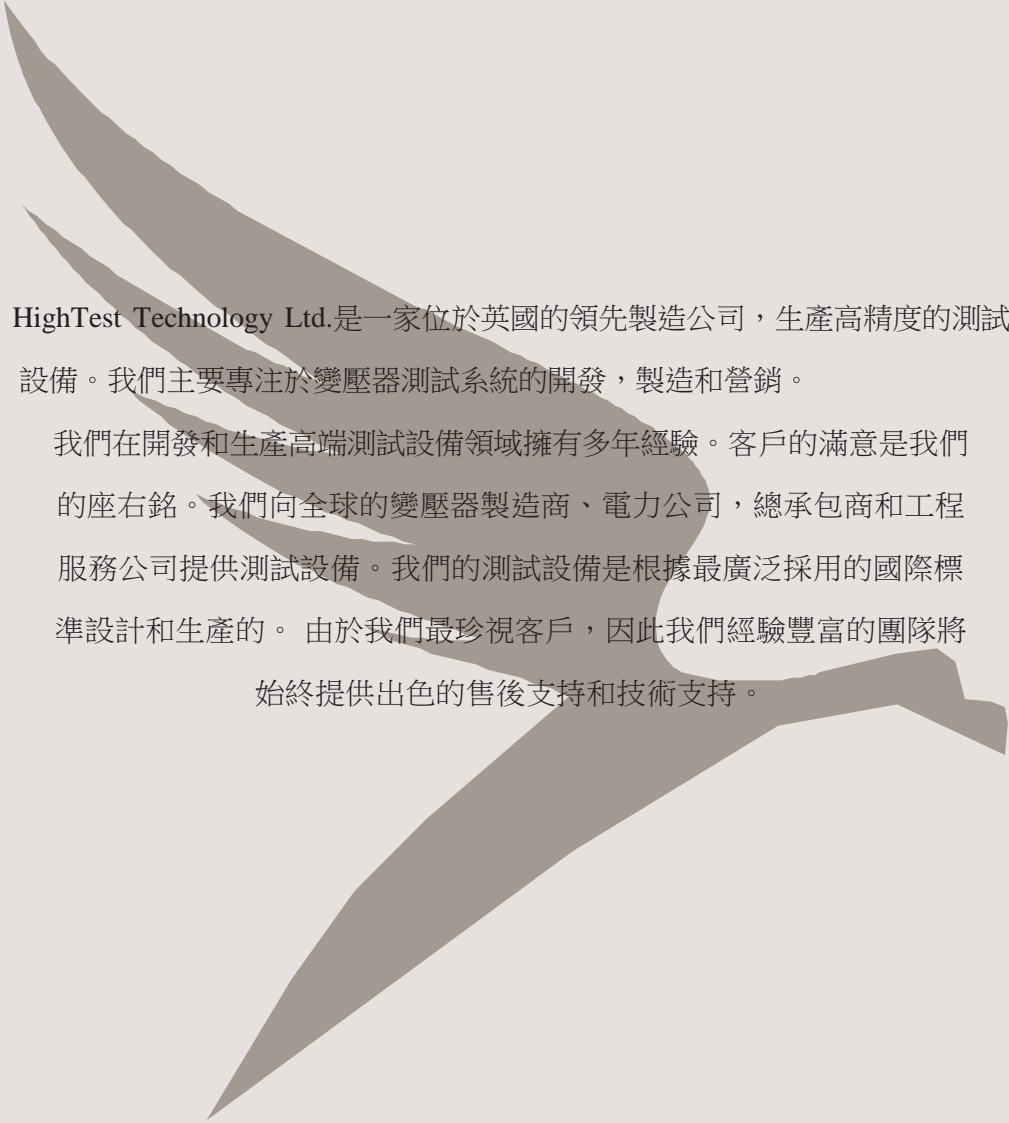
Measurement Parameter	Contact Resistance
Measurement Modes	Static Resistance, Dynamic Resistance & Dual ground
Test Current	1 A to 200 A
Measurement Range	0.1 $\mu\Omega$ to 5 $\Omega$
Accuracy	Typical: 0.1% $\pm$ 0.1% Fs Guaranteed: 0.5% $\pm$ 0.1% Fs
Display	4.3-inch TFT touch Display (visible under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

4.3-inch TFT  
Touch Display

Built-in Printer

Specifications are valid under 25  $^{\circ}\text{C}$  temperature. \*Contents subject to change without notice.

Version V04B 04/2020



HighTest Technology Ltd.是一家位於英國的領先製造公司，生產高精度的測試設備。我們主要專注於變壓器測試系統的開發，製造和營銷。

我們在開發和生產高端測試設備領域擁有多年經驗。客戶的滿意是我們的座右銘。我們向全球的變壓器製造商、電力公司，總承包商和工程服務公司提供測試設備。我們的測試設備是根據最廣泛採用的國際標準設計和生產的。由於我們最珍視客戶，因此我們經驗豐富的團隊將始終提供出色的售後支持和技術支持。



 密特科技有限公司  
[www.meatest.com.tw](http://www.meatest.com.tw)

高雄總公司：  
高雄市鼓山區中華一路820號5樓  
電話: 07-5367631 傳真: 07-5367632