EAGLOTEST

Down-to-earth instruments you can trust!

S452

100A Micro-ohmmeter



UP TO 100 A OUTPUT · 0.01 μΩ RESOLUTION

Find Weak Connections Before They Heat Up

High-current testing for circuit breakers, busbars and cable joints

The S452 combines up to 100 A DC output with true four-wire Kelvin measurement, flexible current control and automatic data capture for reliable low-resistance diagnostics in the field.

Key Diagnostic Highlights

Up to 100 A

Apply realistic test current to expose high-resistance contacts and weak joints.

Kelvin Accuracy

Four-wire measurement reduces the influence of test-lead resistance.

Fine Current Control

Six preset levels plus 2.5 A adjustment across up to 40 steps.

Connected Reporting

Store 999 records and export through the Android APP or PC software.

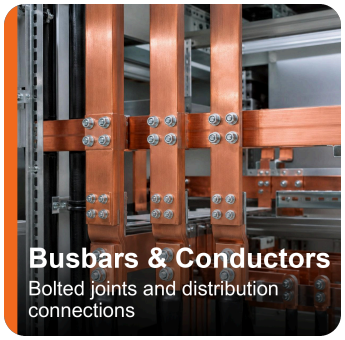
Where It Works



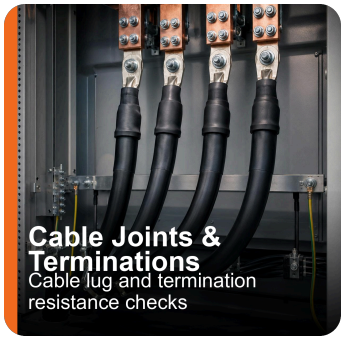
HV Circuit Breakers
Contact and loop resistance verification



MV Switchgear
Compact breaker and mechanism connections



Busbars & Conductors
Bolted joints and distribution connections

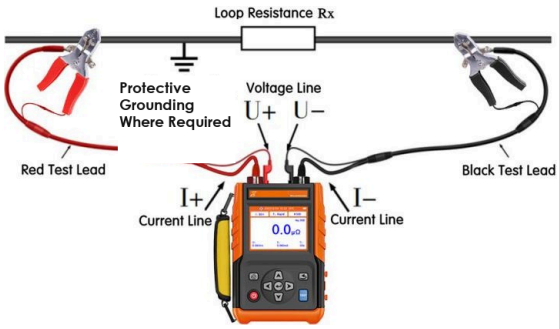


Cable Joints & Terminations
Cable lug and termination resistance checks

EAGLOTEST

Down-to-earth instruments you can trust!

Four-Wire Kelvin Measurement Principle



Separate current and voltage paths remove test-lead resistance from the measurement.

I+ / I-
Inject the DC test current through the outer current leads.

U+ / U-
Sense the voltage drop directly across the test object.

Result
The S452 calculates the true contact resistance without including lead resistance.

R = V / I

How To Test

1. **Isolate**
   De-energize, discharge and verify the DUT is safe.
2. **Connect**
   Attach I+/U+ and I-/U- using the Kelvin lead set.
3. **Configure**
   Select current, duration and object ID.
4. **Measure**
   Run the test; the result is automatically stored.

Technical Specifications

MEASUREMENT

Test method	**Four-wire Kelvin**
Current output	**≤5 A to 100 A**
Fine adjustment	**2.5 A steps; 40 levels**
Range (current-dependent)	**0.01 µΩ to 3.5 Ω**
Minimum resolution	**0.01 µΩ**
Accuracy, 30–100 A	**±(0.1%rdg+0.2%range+1µΩ)**
Test duration	**Quick or 10–60 s (≤100 A)**
Test lead length	**3 m standard; 5 m optional**

SYSTEM

Display	**5.6-inch color LCD**
Data storage	**999 groups; auto-save**
Connectivity	**Bluetooth APP + USB PC**
Battery	**12.6 V, 9000 mAh Li-ion**
Protection	**Open-circuit + overheat**
Dimensions	**188 × 85 × 312 mm**
Weight	**Approx. 2.2 kg**
Operating environment	**−10 to 50 °C; <90% RH**

Safety & Compliance

Designed to IEC 61010-1

What's in the Box

- **S452 + Tool Box**
- **3 m Test Leads**
- **USB Cable**
- **Self-Test Resistor**
- **12.6 V Charger**
- **Manual & QA Documents**