

S453

220A Micro-ohmmeter

UP TO 220 A OUTPUT · 0.01 $\mu\Omega$ RESOLUTION



Find Weak Connections Before They Heat Up

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

The S453 combines up to 220 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 220 A

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



Kelvin Accuracy

Four-wire measurement removes lead resistance from the result.



Fine Current Control

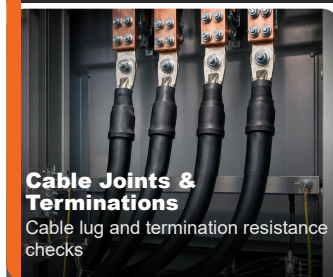
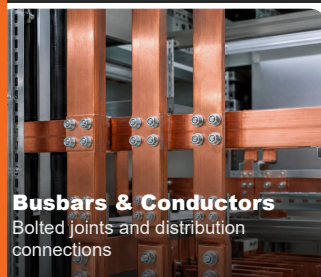
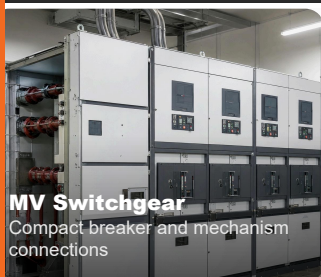
Eight preset levels plus 2.5 A adjustment across up to 87 steps.



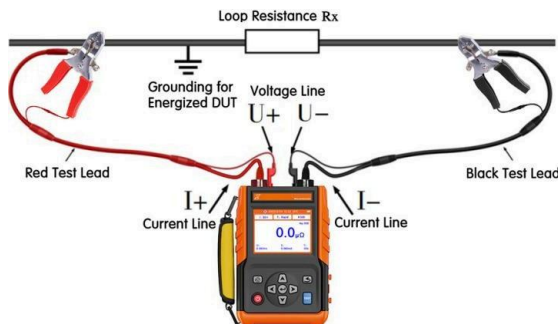
Connected Reporting

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

Where It Works



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 S453 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 220 A
Fine adjustment	2.5 A steps; 87 levels
Measurement range	1 μΩ to 3.5 Ω
Minimum resolution	0.01 μΩ
Accuracy, 30–220 A	0.1% rdg + 0.2% range + 1 μΩ
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



S453 + Tool Box



3 m Test Leads



USB Cable



Self-Check Resistor



12.6 V Charger



Manual & QA Documents