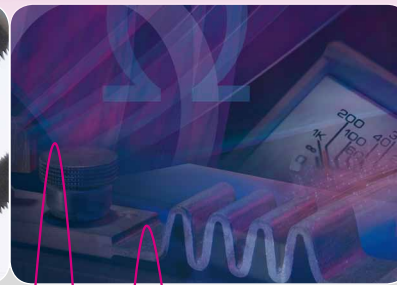


PROMET SMO

High-Precision Ohm Meter



R_n	110.0 $\mu\Omega$ ↓	Cu	--
21:57:28	90.0 $\mu\Omega$ ↑	21:57:29	21:57:28
0,100 $\mu\Omega$	0,100 $\mu\Omega$	0,100 $\mu\Omega$	0,100 $\mu\Omega$
21:57:27	0,100 $\mu\Omega$	21:57:31	
0,100 $\mu\Omega$	0,100 $\mu\Omega$		
21:57:28		21:57:28	
0,100 $\mu\Omega$	0,100 $\mu\Omega$		





High-precision micro-ohm meter for ohmic and inductive loads

PROMET SMO is a compact, battery operated, high-precision measuring device for determining resistance values in the $\mu\Omega$ range. The use of four-wire measuring technology and high test currents of up to 100 A enable PROMET SMO to meet the most stringent accuracy requirements. PROMET SMO can also be used to determine the winding resistances of transformers, motors and instrument transformers.

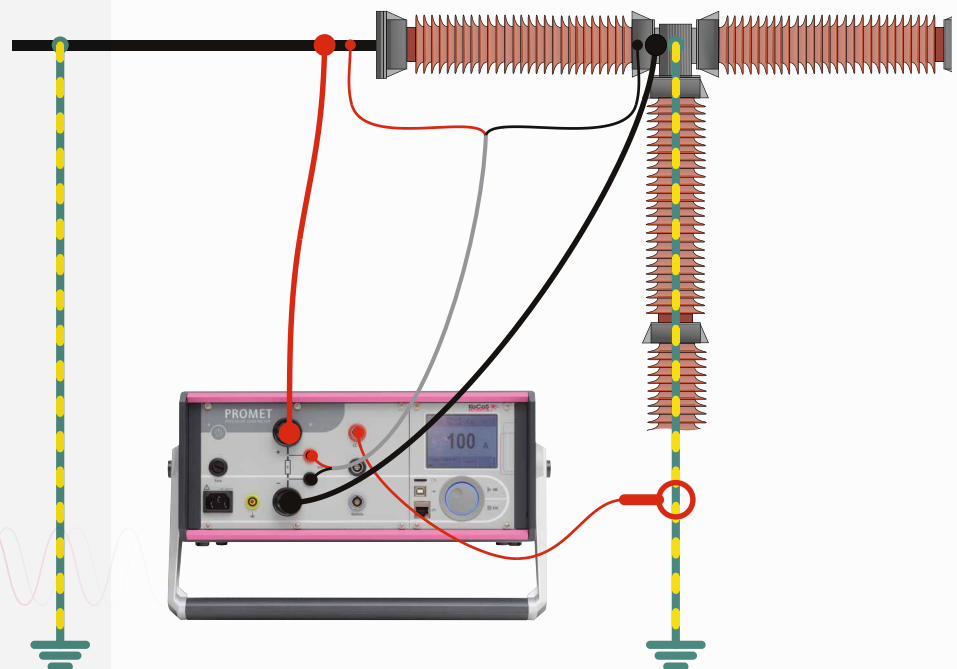
High functionality, rechargeable batteries and a light weight of just 9.3 kg make this measuring device suitable for universal use.

Assessing the condition of contact systems

Regular measurements of the contact resistance allow an accurate assessment of the condition of contact systems. Using PROMET SMO, excessively high transfer resistances resulting from poor connections can be identified by measuring the static contact resistance. This ensures that maintenance requirements can be identified at an early stage and down times kept to a minimum.

Contact resistance determination with earthing on both sides

Thanks to parallel measurement of the earth current, the resistance can be determined precisely for the main contacts of switchgear devices even with earthing on both sides. The earth current is measured with a current clamp and automatically taken into account by the system during resistance determination. Not only would disconnecting the earth conductor make carrying out tests more complicated, it would also be detrimental to safety.



Measurements on inductive loads

PROMET SMO has been designed for a number of applications including measuring the resistance of inductive loads up to 1000 henrys, such as HV, MV and LV transformers, motors and instrument transformers, for example.

A special algorithm ensures that inductive loads are charged and discharged quickly keeping measurement times short.

The charging and discharging of the energy stored in the core are visualized on the display. The measuring device is also equipped with safety functions to protect against discharge arcs when current leads are disconnected.

Measurements with temperature compensation

PROMET SMO can determine resistances with temperature compensation. The temperature at the measurement point is measured using a sensor and the resistance value is calculated taking the reference temperature into account. A database with the parameters necessary for temperature compensation is saved in the device and can be extended as and when needed.

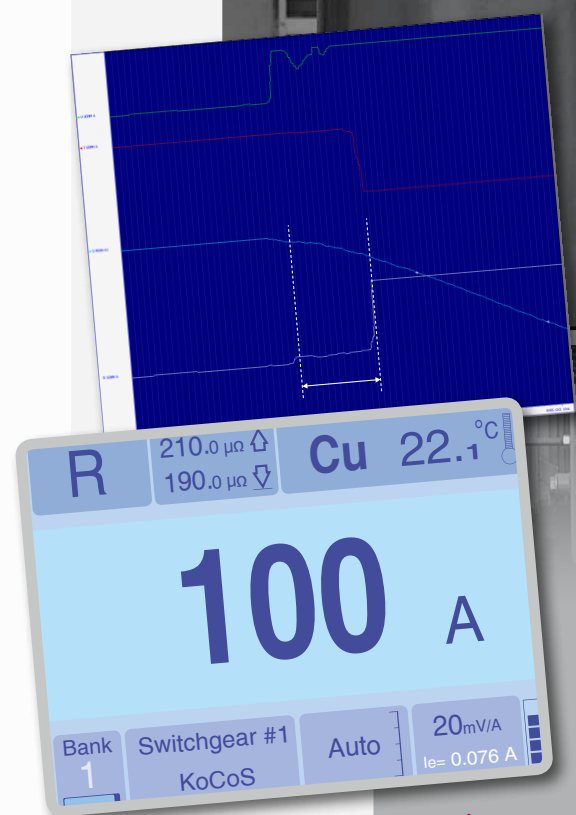
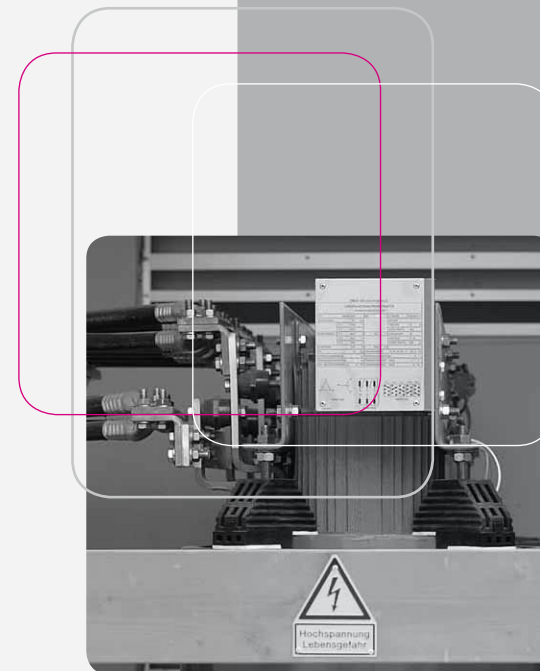
Integration in circuit breaker testing with ACTAS

PROMET SMO is equipped with interfaces for connection to ACTAS test instruments. Using the ACTAS testing software, resistance measurement can easily be integrated in circuit breaker tests. This makes it simple to automate tests and carry out a comprehensive analysis of the test results. The measured values are used for the evaluation of tests and are included in the test report.

When used in combination with ACTAS, PROMET SMO can also carry out dynamic contact resistance measurements on up to three poles.

Simple and intuitive operation

The resistive, 3.5" touch screen with function keys enables intuitive operation and provides a clear display of test parameters and measurement results. Settings can be made quickly with the ergonomic jog wheel, while the illuminated ring integrated within it provides a highly visible display of current test status. Acoustic signals are an additional source of information and also provide feedback during settings.



Remote control unit

Once the test current has been set, an optional remote control unit with integrated measurement inputs can be used to control and save measurements. Visual and acoustic signals indicate the status of the measurement currently in progress.

Results management and test report output via PC

PROMET SMO can be connected directly to a PC. Downloading and managing the data saved in the device is made easy by the user-friendly software. The measurement results, which are displayed in a clearly structured form, can also be exported to an Excel spreadsheet or presented in a test report.

Technical data

Current source	
Test current	1...100 ADC
Outputs	1
Output voltage	24 V
Voltage measurement	
Range	20 VDC
Inputs	1
Resistance range	up to 20 Ω
Inductive load	up to 1000 H
Transformer, power	up to 1 GVA
Power supply	Battery operation independent of the power supply
Connections	9 mm high-current sockets and 4 mm safety sockets
Housing, dimensions	¾ 19", 3 U, 386 x 162 x 356 mm (W x H x D)
Weight	< 9.3 kg (without accessories)
Display	High-resolution, resistive 3.5" touch screen
Operation	Touch screen, jog wheel, 2 function keys
PC interfaces, control	RJ 45 (Ethernet), USB-B
Further interfaces	Temperature sensor, remote control, current clamp
Functions	Resistance measurement on ohmic resistances Resistance measurement on inductive loads Resistance measurement with earthing on both sides Resistance measurement with temperature compensation Static and dynamic resistance measurement on switchgear devices



Standard scope of delivery



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