



# Measurement Equipment

MEASUREMENT EQUIPMENT FOR SUBSTATION  
MAINTENANCE AND COMMISSIONING

*In the constant search of satisfying our customer's needs and requirements, SMC found that many of our customers require modern and practical measuring test equipment, especially in the maintenance and commission departments, incorporating the characteristics and functions required by them.*

SMC has been designing innovative and revolutionary products for electrical measurement tests. Our independent and traditional concepts in product and design, focus on the necessities of our customers.

**Portability.** Reduced size, weight, and robust which is essential for field use.

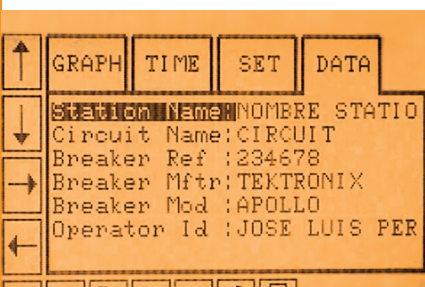
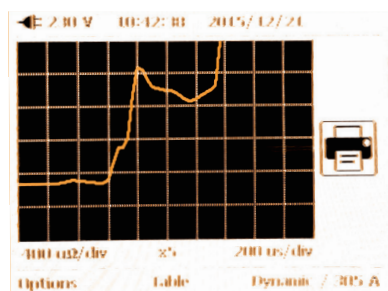
**Autonomy.** Almost all this range of products has internal rechargeable batteries incorporated in the equipment. Therefore can be used without a voltage supply which is not always available in commissioning and substation work.

**Integration.** The use of microprocessors and other technical advances, enables the equipment to be multifunctional, as well as, avoiding errors and saving time.

**Reliability and accuracy.** The equipment is designed and produced with the latest technology and components, assuring the accuracy and reliability.

The Circuit Breaker Analyzer, which incorporates a three phase contact resistance measurements, is one of the example that EuroSMC incorporates into our designs. All the new equipment designed by us in the past years have been leaders in the market.

The new **GOOSEMeter** is the answer to the tasks and applications that are required for the new substations, which demand new tools to make the work easier and more efficient.



# PME-500-TR

## CIRCUIT BREAKER ANALYZER

### DESCRIPTION

The PME-500-TR is small, lightweight, and stand-alone equipment with rechargeable batteries and it is easy to use. The current measurement of the coils, synchronizing time, and contact resistance measurement are made with an ultra rapid microprocessor, which is extremely reliable and gives a high accuracy. Tests are stored in the internal memory of the unit and are downloaded to a PC. The test results can also be exported to other programs such as MS Excel, etc.

### APPLICATIONS

- Simultaneous measurement for the 3 main contacts (open/closed) and 2 auxiliary contacts, including pre-insertion resistors (if present).
- Evaluates the synchronism between the circuit breaker poles.
- Determines the maximum currents, opening and closing times in both coils simultaneously.
- Evaluates the state of the substation auxiliary batteries by graphically showing the coil consumption.
- Immediately displays and prints test results, both numerically and graphically.
- Automatically provides the contact resistance.

### CHARACTERISTICS

- 3 timing inputs for the three main contacts, 0.1ms resolution.
- 2 isolated auxiliary binary inputs, with a capacity for dry contacts or voltage signals up to  $\pm 360$  V DC, 0.1ms resolution.
- Measures and records the Coil currents simultaneously (open and closed), with 1ms resolution up to 50 A DC (auto range).
- Connection to the breaker by means of a special multipole cable connector or by 4 mm input taps.

- Built-in thermal paper printer, 110 mm.
- Autonomous power supply with internal rechargeable batteries, up to 10 hours.
- Programmable operating sequences C, O, C-O, O-C, C-O-C and O-C-O.
- Automatic measurement of the contact resistance, resolution 0.1  $\mu\Omega$ .
- Immediate graphic display of the test results.
- A Touch Screen panel (113 x 61 mm.) displays graphic images and is also the control of the unit.
- Allows the setup of the test data and test configuration from the touch screen panel (it converts into a complete keyboard).
- Software is supplied to download test results.
- Firmware can be upgraded via computer.
- Reduced size and weight.
- Dimensions:  
340 x 300 x 150 mm. / 8 kg.  
14 x 12 x 16 in. / 17.6 lb.



### OPTIONS

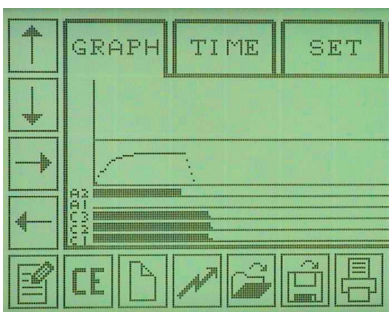
#### PME-RESC



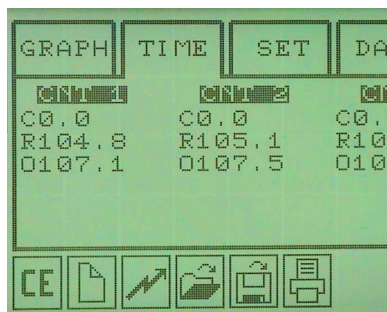
OPTIONAL SET OF FAST MEASUREMENT CLAMPS



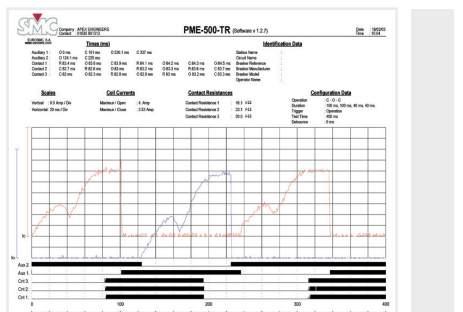
CONNECTOR DETAILS



GRAPHICAL PRESENTATION OF RESULTS.



NUMERICAL PRESENTATION OF RESULTS.



CUSTOM REPORT WITH THE COMPANY LOGO.