Caltest 10 Portable Energy Meter Tester

ISO 9001:2008

- Energy meter testing
- Measuring of power network parameters
- Range 0,01… (10)(100)(1000)(30/300/3000) A and 160… 300 V
- Powering from measuring circuit
- Load changing function
- Printing results on the site
- Hand- held miniature case

The Caltest 10 is a single phase portable device class 0,5 designed for electricity meter testing on site.

It contains:

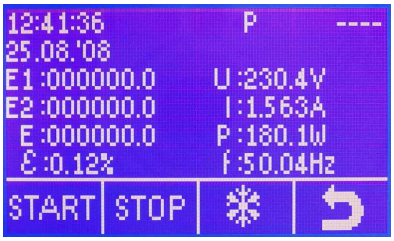
- versatility – verification of network connection, power network parameters measuring, energy meter testing with load changing possibility,
- wide range of currents 0,01…3000A with clamps, without necessity of measured circuit opening,
- multi-variant data tracing – digital and graphic display, internal memory, local printing, transmission by interface and analysis on PC computer.

Powering from measuring circuit makes device independent from necessity of using additional supply and load changing function makes independent of meter testing from site load. Local printing on miniature printer makes possible reporting of measuring results in customer's presence.

Verification of power network connection with vector diagram displaying and measuring of voltage, current, active and reactive power, phase shift, power factor and frequency.

Energy meter testing on site – functions of computing meter error directly in percentages with method of setting time of measurements or number of impulses. S0 standard is used for testing energy meters with impulse output. Miniature photo head CF101 is used for automatic counting of meter rotor turns for testing Ferrari meters. Photo head CF100 is used for automatic testing of meters with LED indicator and manual counting of rotor turns with using "start/stop" button.

Energy meter counters testing – functions of energy measuring in defined period of time and counter's error calculating, directly in percent.



Technical specification

TECHNICAL PARAMETERS OF CALTEST 10B

Function/ Parameter	Range	Error **
Voltage	85...265V	±1%
Current with clamps 10A	0,1...10A 0,01…0,1A	±0,5% ±0,5%*
Current with clamps 100A	1…100A 0,1...1A	±0,5% ±0,5%*
Current with clamps 1000A	10…1000A 1...10A	±0,5% ±0,5%*
Current with flexible clamps	0...30A/300A/3000A	±1% *
Power and Energy with clamps 10A at U=85-265V	0,1...10A 0,01...0,1A	±0,5% ±0,5%*
Power and Energy with clamps 100A at U=85-265V	1…100A 0,1…1A	±0,5% ±0,5%*
Power and Energy with clamps 1000A at U=85-265V	10…1000A 1…10A	±0,5% ±0,5%*
Power and Energy with flexible clamps at U=85-265V	0...30A/300A/3000A	1%*
Resolution of error measurement "ε"		0,001%
Phase shift	0,0...±360,0°	±1°
Power factor cos φ and sin φ	0,00...±1,00	±0,01
Frequency	45...65Hz	±0,1Hz
Ambient temperature	–5...+50°C operating, –25...+60°C transportation	
Power supply	160..230..300 V / 45..65Hz / 8VA 12VA with printer and 1000VA with Res. load	
Dimensions and weight of tester	125 / 240 / 40 mm / 0,6 kg	

*) Of subrange

**) Power and energy errors with respect to apparent power

Caltest 10 TESTER'S EQUIPMENT

The set is placed in the case. Caltest 10 set consists of:

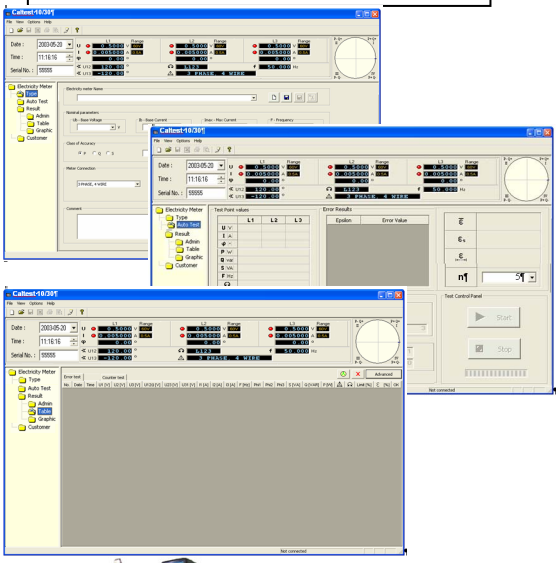
- Caltest 10 tester,
- safety voltage measurement cables (2pcs) with replaceable handlers and terminals,
- CT100A miniature electronically compensated clamps up to 100A,
- RS232 cable and converter USB-RS232,
- Calsoft 10 PC software,
- CF100 miniature photo head for counters with LED and with "start/stop" button,
- AD10 adapter for Load or Printer connection,
- transportation bag,
- Manufacturer Certificate of Calibration.

Optionally Caltest 10 set may be equipped in:

- CT10A miniature electronically compensated clamps up to 10A,
- CT1000A electronically compensated clamps up to 1000A,
- FL3000A electronically compensated flexible clamps in ranges 30/300/3000A,
- DR100 miniature thermal printer,
- CF101 miniature photo head for counting rotation of inductive meters wheel disc,
- WM1000 Resistance Load.

SOFTWARE CALSOFT 10

- reading actual measured values from the Caltest 10 via interface and their visualization on PC screen. The readings can be done automatically by user's defined period of time,
- reading data, earlier stored In meters's memory and their visualization on PC screen,
- export of measured data to Microsoft Excel, which enables later their processing according to user's requirements,
- printing data and charts on the printer,
- saving and reading data to and from files for ma king archives of measurements.



View of Caltest 10 set

MeterTest

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