Calport 100 electricity meters tester

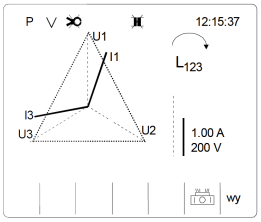
ISO 9001:2000

- Vector chart of three phase power network
- Measure of power network parameters (class 0,1 or 0,2)
- Range 0,001… 10(100)(1000)(30/300/3000)A and 10… 480V
- Testing of energy meters
- Voltage, current and power harmonics analysis
- Powering from measurement network

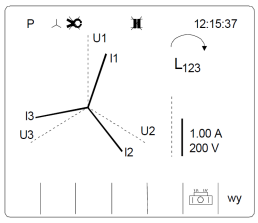
The Analyser Calport 100A (version with 10A direct current range) is a portable electronic device that combines:

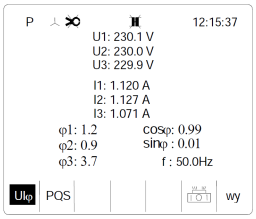
- multifunction - verification of power network wiring, measure of power network parameters, harmonics analysis, checking of energy meters,
- wide current range 0,001..3000A,
- high accuracy 0,1% or 0,2%,
- multi - variant data entering - digital and graphical display, internal memory, local printing, transmission by interface and analysis on PC computer).

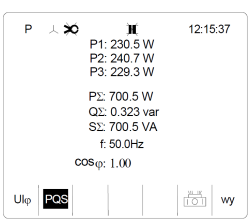
Verification of power network wiring in "star" and "delta" connection - graphical display of three phase voltage and current vector.

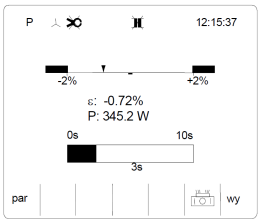


Measure of three phase power network parameters - digital measure of voltages, currents, active, reactive and apparent power one and three phase, phase shifts and cos φ , active and reactive energy, frequency. Programming of voltage and current transformers ratios.



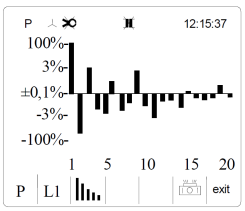


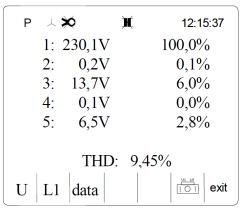


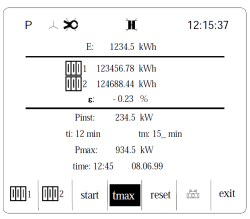


Testing of active and reactive energy meters directly on site - functions of computing meter error directly in percentages with method of setting time of measurements or number of impulses. Input in S0 standard is used to testing energy meters with impulse output. Miniature photo head CF101 is used to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

Full harmonics analysis of phase voltages and currents as well as up to 20th harmonic analysis of active and reactive power for diagnostic of distortion sources. Graphical and numerical presentation of results.







Measure of active and reactive energy with method of setting time periods for verification of energy meter counters and testing of maximum power meters as well as measure maximum powers.

Technical specification

TECHNICAL PARAMETRS OF THE CALPORT 100

Function / parameter	Range	Error **	
		class 0,1	class 0,2
Voltage	10,00...480,0V 40,00...480,0V 10,00...40,00V	±0,1% ±0,1%*	±0,2% ±0,2%*
Line voltage	17,00...832,0V 70,00...832,0V 17,00...70,00V	±0,1% ±0,1%*	±0,2% ±0,2%*
Direct current	0,0010...10,000A 0,0500...10,000A 0,0010...0,0500A	±0,1% ±0,1%*	±0,2% ±0,2%*
Current with clamps 100A	0,05...100,0A 5,00...100,0A 0,05...5,00A	±0,2% ±0,2%*	±0,2% ±0,2%*
Current with clamps 1000A	5,0...1000A	0,5%	0,5%
Current with flex	0...30A/300A/3000A	±1% of range	±1% of range
Power and energy direct measure	0,1...10A / 40...480V 0,001...0,1A / 10...40V	±0,1% ±0,1%*	±0,2% ±0,2%*
Power and energy measurement by clamps	5...100A / 40...480V 0,05...5A / 10..40V	±0,2%@cos=1 ±0,3%@cos=0,5 ±0,2%*@cos=1 ±0,2%*@cos=0,5	±0,2%@cos=1 ±0,3%@cos=0,5 ±0,2%*@cos=1 ±0,2%*@cos=0,5
Power and energy measurement by clamps	5...1000A / 40...480V	0,5%	0,5%
Resolution of energy meter error measurement "ε"		0,01%	0,01%
Phase shift direct connection with clamps	0,0...±360,0°	±0,4° ±0,5°	±0,4° ±0,5°
Power factor cos φ and sin φ	0,00...±1,00	±0,01	±0,01
Frequency	45,0...65,0Hz	±0,1Hz	±0,1Hz
Ambient temperature	0...+40°C operating, -25...+60°C transportation		
Power supply	85..230..265 / 45..65Hz / 8VA (12VA with printer)		
Dimensions and weight of analyser		270 / 240 / 180 mm / 4,5 kg	
Dimensions and weight of analyser set		420 / 280 / 370 mm / 8,2 kg	

*) of range
**) power and energy errors with respect to apparent power