

PQA700 main features

Display type	Graph, 240 x 64 dots (back lighted)
Display refresh time	500ms
Display language	Selectable: English, Italian, Spanish, German, French
Other indications	Battery recharging by means of a red LED
Accuracy	0.5% RDG + 0.15% F.S. (5 to 120% of the voltage range, resolution: 0.1V), 45 to 65Hz 0.5% RDG + 0.15% F.S. (5 to 120% of the current range), minimum measurable current: 1A (1mV) , 45 to 65Hz 0.05% RDG (frequency) 1% RDG all the other measurements
Sampling frequency	6400Hz @ 50Hz
Sampling time	For instantaneous variables: 20ms / continuous For dips: 10ms
Measuring inputs	Voltage measurements: 4 (not insulated), max. 700V _{LL} RMS Max peak value: 1600Vp for 1s Current measurements: 3 (non insulated, the insulation is achieved by the clamp-on probes) max. 1.4VAC equivalent to 1400A
Type of connections	1-phase, 3-phase balanced load, 3-phase unbalanced load, ARON type
Measuring method	TRMS type, crest factor ≤ 3
Available measurements	Instantaneous single and system variables: W, VA, var, V, A, TPF, DPF, Hz, THD (voltage, current), odd THD, even THD Maximum demand calculation: W, VA, A (system variables), calculation period: programmable from 1 to 60 minutes Automatic calculation of kvar necessary to compensate low PF FRESNEL diagram indication Maximum and minimum calculations (single phase and system variables): W, VA, var, V, A, DPF, TPF, Hz, THD (THD is considered for both current and voltage), odd THD, even THD Energies: + Wh, - Wh, + varh, - varh, +VAh, -VAh (also by time period) FFT analysis (harmonic distortion): histogram indication up to the 50th harmonic, numerical and percentage indication of harmonic contents, of both voltage and current. THD (total, odd, even) and single harmonic measurement. FFT voltage range: 2 to 100% F.S.; FFT current range: 5 to 100% F.S. THD calculation according to EN61000-4-7
Data recording	Type: FIFO or stack Start measuring delay: programmable from 00:00h to 23:59h Data integration time interval (10ms sampling) : programmable from 1 to 999s (15 min.) Type of recording: minimum, maximum and average value or voltage DIPS Data references: date and time (hh:mm:ss) Total available memory: 1Mbyte
Archives function (by means of PqaSoft)	Type: stack measuring period: fully programmable. Data sampling time: programmable from 10 to 999 s. Type of recording: data sampling of up to 20 selectable variables. Data references: date and time (hh:mm:ss)
Other functions (by means of PqaSoft)	Statistic management of the stored variables Time-based curve distribution of variables and loads
Oscilloscope function	Current and voltage (current and voltage of single phase available in the same display page) with automatic trigger
Measurements according to EN50160	Supply voltage dips, slow and fast supply voltage variations, supply interruptions
Outputs (insulated)	RS232: 9 pole connector, programmable baud rate up to 38400
Printer	Impact dot matrix type, paper width: 54mm (numerical and graph data printing)
Power supply	230VAC ±15% (115VAC ±15% on request) and internal rechargeable battery power supply (battery life: 1h)
Installation Category	III / 600V (according to EN61010-1), double insulation
EMC	EN61000-4-2 discharge: 8kV "air" level 3, 4kV "contact" level 2; EN61000-4-3 radiated field: 10V/m level 3; EN61000-4-4 transients: 2kV level 3; EN61000-4-5 surge: 2kV; EN50011 conducted emission, class A
Operating temperature	0 to 55°C (R.H. < 90% non-condensing)
Storage temperature	-10 to 60°C (R.H. < 90% non-condensing)
Carrying case / weight	160 x 340 x 510mm / Instrument: 3.7Kg, the whole set: 10Kg
Standard accessories	4 voltage measuring cables, length 3m 1 RS232 cable + 9-25 pole adapter 1 power supply cable 1 analysis software (PqaSoft) 1 instruction manual (English, Italian, Spanish, German or French) CA 1002: current clamp probe 100-1000AAC, jaw opening 52mm, cable length 2m accuracy: 0.7% @ 100A, 0.5% @ 1000A
Accessories on request	Flex3000Q: current clamp probe 3000AAC, flexible type, sensor length 400mm, measuring range: 0,5A to 3000A, cable length 2m; accuracy: 1.5% @ 150A, 0.75% @ 1600A, 0.5% @ 3000A