

A new working concept by HT

# PQA820

**NEW** POWER QUALITY ANALYZER

Turn your tablet or smartphone into a unique tester so saving time and energy



## PQA820 analyzer is an ideal tool for maintenance, energy analysis and power quality recording

Data can be recorded into the internal memory for further analysis, as well as easily analyzed in real time thanks to the waveform graphics, phasors and histograms. It is possible to evaluate progress of all parameters such as harmonics, THD%, cosphi, current/voltage RMS values, power and energy, to check power consumption, etc.

Wi-Fi connection enables PQA820 to interface with tablet and smartphone (iPad/iPhone or Android). The powerful App HTanalysis permits to accede the real time data as well as the recordings to perform easy and advanced analysis. It is easy to go through time-based and frequency-based parameters just by a fingertip. For example, touching the voltage graphic opens the time-related histogram of the harmonics. Zoom function of the tablet/smartphone permits to display all quantities in detail. PQA820 can also record voltage anomalies due to load change over, as well as voltage unbalance.



# PQA820

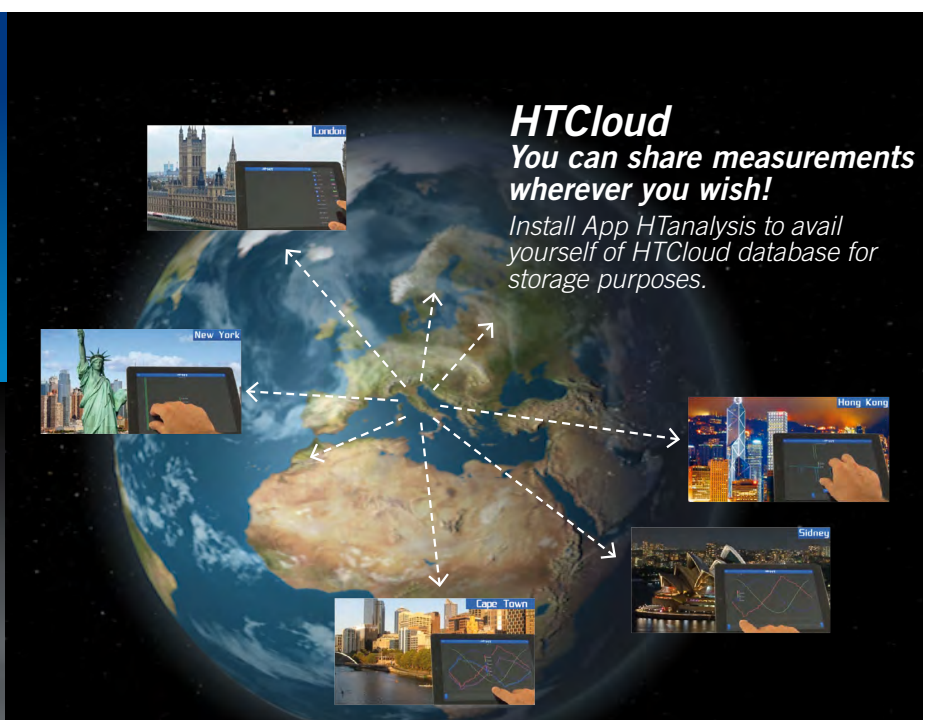
**SELF-POWERED**  
The Li-ION battery gets recharged during working. This special feature grants a virtually unlimited charge.

PQA820 is built in a tough and strong casing making it suitable to **any environmental condition.**

IP65



**HTanalysis** turns tablet or smartphone into a power analyzer.  
Compatible with iOS and Android systems.



**HTCloud**  
You can share measurements wherever you wish!

Install App HTanalysis to avail yourself of HTCloud database for storage purposes.

The instrument can be set to three system types (single-phase, 3-wire three-phase Delta connection, 4-wire three-phase Y connection)

Functions

- AC TRMS voltage (4 inputs)
- AC TRMS current (4 inputs)
- Active, reactive, apparent power
- Active, reactive, apparent energy
- Power factor and cosPhi
- Analysis of voltage/current harmonic up to 49<sup>th</sup> order

- Voltage anomalies (sag, swell) with 10 ms resolution
- Voltage unbalance
- LED indication of phase sequence
- Frequency
- Parameter data table, graphs, harmonic histograms, voltage and current phasors with PC or iPad/iPhone and Android device connection
- Max 383 parameters simultaneously selectable
- Recording with integration period ranging between 5s and 60 min.

All PQA820 recordings can be analyzed by your smartphone

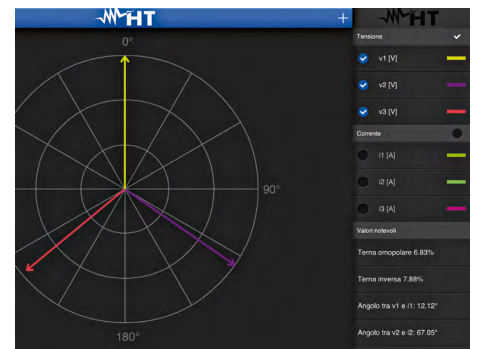
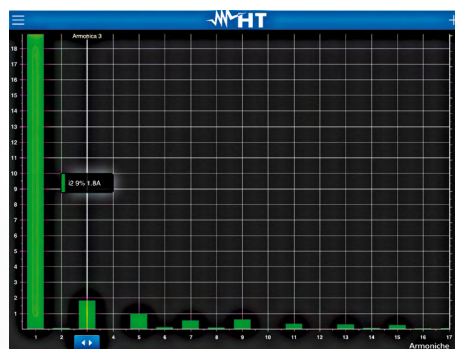


REAL-TIME

Instrument configuration through tablet or smartphone. Quick and detailed display of all waveforms.

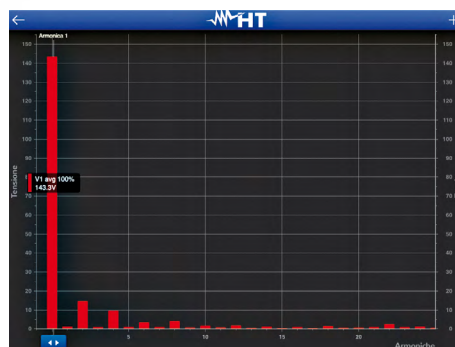
Quick and detailed display of all harmonics relative to the selected quantities.

Real time vector diagrams (phasors), DMM function and THD%.



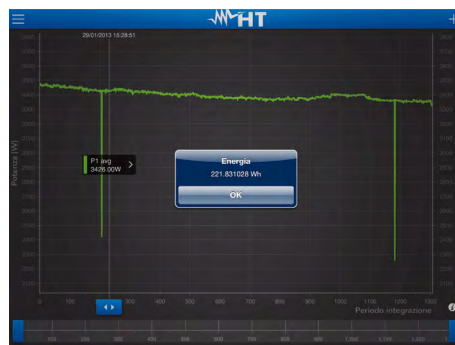
RECORDING OUTCOME

Zoom and quick access to any part of the recording, harmonic analysis at any quantity just through one touch. Trend of all recorded quantities selectable through menu can be displayed, such as frequency, voltages and currents, powers, cosphi, THD%, harmonics up to 49th order and THD%, etc. **Fault tracing and maintenance have never been so easy.**



ENERGY CONSUMPTION

PQA820 can record all active, reactive and apparent powers over a long period, compare all of them with quantities such as cosphi, harmonics and THD%. Thanks to dynamic App HTanalysis it will be easy to find an immediate solution to energy-waste problem.



# PQA820

## POWER QUALITY ANALYZER

### STANDARD ACCESSORIES

<b>KITMPPACW:</b>	set of 4 measuring cables
<b>KITMPPACC:</b>	set of 4 alligator clips
<b>606-IECN:</b>	adapters with magnetic ends, 4 pcs.
<b>HTFLEX33L:</b>	0÷100A, 0÷1000A AC flexible clamp, 174mm, 4 pcs.
<b>TOPVIEW2007:</b>	PC Windows software + USB cable
<b>BORSA2051:</b>	carrying case
Quick user's guide	
User's manual on CD-ROM	
Calibration certificate ISO9000	

### OPTIONAL ACCESSORIES

<b>HP30C2:</b>	clamp transducer 0÷200A, 0÷2000A AC
<b>HT96U:</b>	clamp transducer 0÷1A, 0÷100A, 0÷1000A AC
<b>HT903:</b>	box 3 x 1 - 5A/1V for connection to external CTs



### ELECTRICAL SPECIFICATIONS

<b>AC TRMS Voltage</b>	
Measuring range:	10.0V ÷ 265.0V (L-N) 50.0V ÷ 460.0V (L-L)
Basic accuracy:	±(0.5%reading + 2digits)
Frequency:	42.5Hz ÷ 69.0Hz

#### Voltage anomalies (sags, swells)

Measuring range:	15.0V ÷ 265.0V (L-N)
Basic accuracy:	±(1.0%reading + 2digits)
Time resolution:	10ms @ 50Hz
Time accuracy:	±1/2 period

#### AC TRMS Current – Standard transducer (STD)

Transduced voltage range:	5.0mV ÷ 9999mV
Resolution:	0.1 mV
Basic accuracy:	±(0.5%reading)
Frequency:	42.5Hz ÷ 69.0Hz

#### Active, Reactive, Apparent power

Measuring range:	0.000 ÷ 9999 kW/kVAR/kVA
Resolution:	0.001 kW/kVAR/kVA
Basic accuracy:	±(0.7%reading)

#### Active, Reactive energy

Measuring range:	0.000 ÷ 9999 kWh/kVARh
Resolution:	0.001 kW/kVARh
Basic accuracy:	±(0.7%reading)

#### Power factor (Cosphi)

Measuring range:	0.20 ÷ 1.00
Resolution:	0.01
Basic accuracy:	0.6° ÷ 1.0°

#### Voltage/Current accuracy

Range:	DC ÷ 49 <sup>th</sup> order
Resolution:	0.1V / 0.1A
Basic accuracy:	±(0.5%reading + 2digits) for DC ÷ 25 <sup>th</sup> order
Frequency:	42.5Hz ÷ 69.0Hz

### GENERAL SPECIFICATIONS

#### SIMULTANEOUSLY RECORDED PARAMETERS

- Line to Neutral and Line to Line voltages
- Voltage anomalies (sags, swells)
- Line current, Neutral current
- Voltage / Current harmonics
- Phase and total Active, Reactive, Apparent power
- Phase and total power factor and cosphi
- Phase and total Active energy (class 2 EN61036)
- Phase and total Reactive energy (class 3 IEC1268)
- Maximum number of selectable parameters: 383
- Integration period:  
5, 10, 30s, 1, 2, 5, 10, 15, 60 min
- Recording duration: > 30 days (IP = 10 min)
- Maximum number of voltage anomalies: 65530

**Power supply:** rechargeable Li-ION battery

**External power supply:** 100 ÷ 415V, 50/60 Hz

**PC interface:** USB and WiFi

**Dimensions (L x D x H):** 245 x 210 x 110mm  
9.6 x 8.3 x 4.3in

#### Weight

**(including batteries):** 1.5 kg / 3.3lb

**Safety:** IEC/EN61010-1, double insulation  
2

#### Pollution degree:

2

**Mechanical protection:** IP65

**Measuring category:** CAT IV 300V, max 415V among inputs

**Working temperature:** 0° ÷ 40°C / 32° ÷ 104°F

**Working humidity:** <80%RH

**Storage temperature:** -10° ÷ 60°C / 14° ÷ 140°F

**Storage humidity:** <80%RH



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