

P Q A 8 2 0



Artificial Intelligence.

Thanks to the creation of App HTanalysis it is possible to interface HT last generation instruments with tablets and smartphones. **HTanalysis** is a professional software allowing to display and look at measurements or recordings on your devices then sharing them on HTCloud database.

HTanalysis permits to create professional reports complete with pictures, texts, video and voice notes. Interfacing the instrument with your device's display you can look at a fast and detailed tracking of the recorded quantities on touch-screen.

PQA820

- › It enables you to display recordings of voltage, current, power, harmonics, THD%, cosphi and frequency.
- › It enables you to display all waveforms, vector diagrams and harmonics instantly.
- › It enables you to store all recordings into HTCloud database sharing them through mail as well.

MacroTestG3

- › It enables you to create reports complete with pictures, videos, text and voice notes, store them into HTCloud database and share them through mails.





Share.
**Whenever, whatever
and wherever.**

Install App HTanalysis to avail yourself of **HTCloud** database and **share** measurement results and recordings with your colleagues **from any place on the planet.**



Power analysis and energy saving evolve. In one finger.



383 parameters
recorded
simultaneously



Suitable
to any
environment



Self-powered



Wi-Fi
and USB



HTanalysis
App for iOS™
and Android™



Share.
Any style,
place and time*



Multimedia
notes



100%
"Made in Italy"
technology
and quality

- › **Turn your smartphone or tablet into the most advanced power and energy consumption analyzer in the world.**
- › **3 system types:** Single-phase, 3-wire Three-phase, 4-wire Three-phase.
- › **Easy to set up** directly **from Smartphone or Tablet.**
- › **Technology and straightforwardness.** Immediate display of all recordings and simple analysis thanks to rapid gestures and detailed zoom on all quantities.

* Using HTanalysis App for iOS™ or Android™ on Tablet or Smartphone. The App can be downloaded for free on AppStore™ or Playstore™

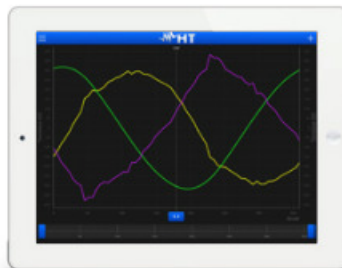
- › **Real Time.** Instant display of all wave forms, harmonics, vector diagrams and summary function for a prompt reading of the most important parameters.
- › **Energy saving.** Discover absorption capacity of all your equipment with one click and save energy.
- › **383 parameters which can be displayed simultaneously.**
- › **Jump function.** Relation between time and frequency domains or between power and energy consumed available instantly.



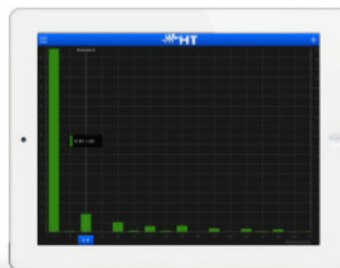
P Q A 8 2 0

Live. Real time analysis.

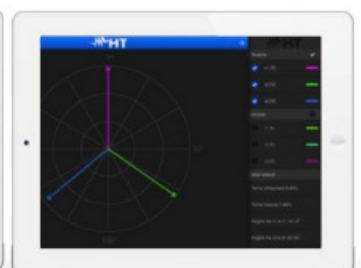
Using Wi-Fi connection you can display wave forms, vector diagrams, harmonics and all electrical parameters for each phase on your tablet/smartphone/PC.



Voltage and current wave forms



Current and voltage harmonics



Voltage and current vector diagram



Zoom, Zoom, Zoom! Enlarge, jump, analyze. Two fingers needed.

PQA820 helps to dispel the myth that recording analysis is quite complex.

App HTanalysis makes it simple and clear.

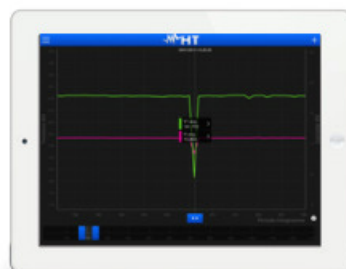
Using **ZOOM Functions** you can thoroughly display all the recorded quantities. **JUMP Function** permits to display harmonics in any recording step just by clicking on the quantity.

HTanalysis App can be downloaded for free on AppStore™ or Playstore™

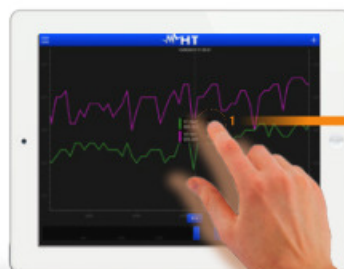
Unstoppable.

UNLIMITED battery life.

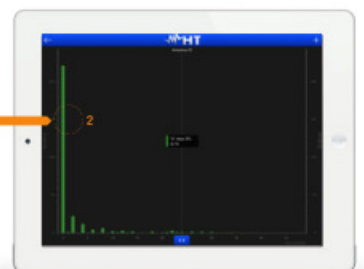
PQA820 gets self-powered during measurement recordings. This features eliminates all problems related to limited life of standard batteries so avoiding employment of external power supplies.



Zoom on voltage and current drop.



Jump Function
1. Click on arrow close to the value under test.



Jump Function
2. Go to real time harmonic values.

We see everything.

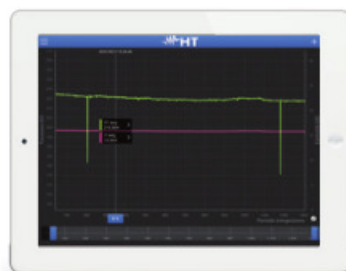
PQA820 is capable of recording 383 parameters simultaneously on THREE-PHASE and SINGLE-PHASE 3 or 4 Wire systems. Thanks to softwares TopView and HTAnalysis (App for tablet and smartphone) you can display the tracking of all the recorded quantities, which can be selected from menu such as: voltages, currents, frequencies and powers, THD%, harmonics up to 49th, cosphi and voltage breaks. Trouble-shooting and pre-emptive service have never been achieved so easily and immediately.

IP65. Rain doesn't scare us.

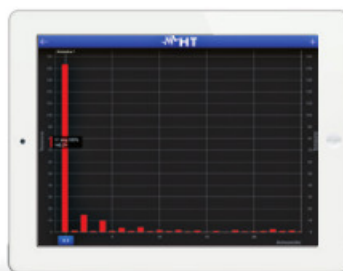
PQA820 is not afraid of the weather. Thanks to its heavy-duty and waterproof case the instrument is well protected and can be used in any environment.

We work, you save up.

PQA820 is capable of recording all active, reactive and apparent powers over a long period, comparing them with cosphi, THD%, harmonics and power factor. Reduction of energy dissipation will be possible thanks to the HTAnalysis App.



Tracking of the main quantities.



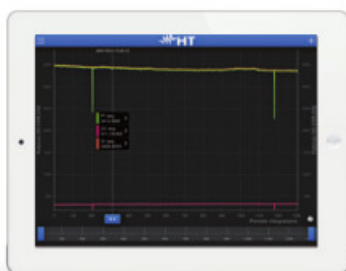
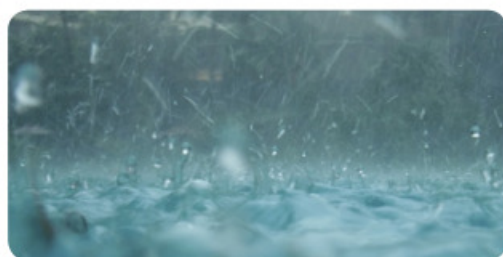
Harmonics up to 49th.



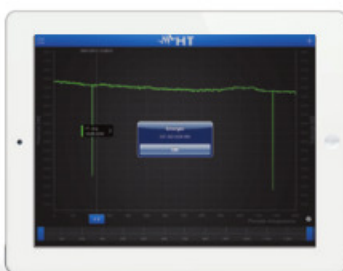
Tracking of all harmonics.



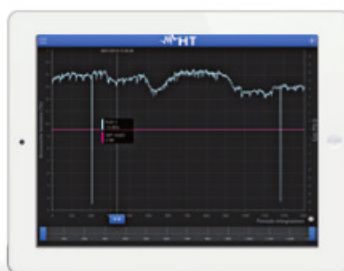
IP65 - Waterproof and resistant to extreme weather conditions.



Tracking of powers.



Jump function to check how much energy was consumed.



Example of analysis on THD% and power factor.

Functions

- DC/AC TRMS voltage (4 inputs)
- DC/AC TRMS current (4 inputs)
- DC and AC active, reactive, apparent power
- Active, reactive, apparent energy
- Power factor and $\cos\phi$
- Analysis of voltage/current harmonic up to 49th 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

Electrical Specifications

AC TRMS Voltage

Measuring range: 10.0V ÷ 265.0V (L-N)
50.0 ÷ 460.0V (L-L)
Basic accuracy: ±(0.5% reading + 0.2V)
Frequency: 42.5Hz ÷ 69.0Hz

Voltage anomalies (sags, swells)

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

AC/DC 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

DC and AC 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 kW/kVAR/kVA
Resolution: 0.001 kW/kVAR/kVA
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 harmonics

Range: DC ÷ 49th order
Resolution: 0.1V / 0.1A
Basic accuracy: ±(5.0% reading + 2 digits) for DC ÷ 25th order
Frequency: 42.5Hz ÷ 69.0Hz

General Specifications

Simultaneously recorded parameters

- Line to Neutral and Line to Line voltages, DC voltage
- Voltage anomalies (sags, swells)
- Line current, Neutral current, DC current
- Voltage/Current harmonics
- Phase and total Active, Reactive, Apparent power
- Phase and total power factor and $\cos\phi$
- Phase and total Active energy (class 2 EN61036)
- Phase and total Reactive energy (class 3 IEC1268)
- Maximum number of selectable parameters: 383
- Maximum number of voltage anomalies: 65530
- Integration period: 5, 10, 30s, 1, 2, 5, 10, 15, 60 min
- Recording duration: > 30 days (IP = 10 min)
- 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
- Pollution degree: 2
- Mechanical protection: IP65
- Measuring category: CAT IV 300V, max 415V among inputs
- Reference standards: EN50160
- Working temperature: 0° ÷ 40°C / 32° ÷ 104°F
- Working humidity: <80%RH
- Storage temperature: -10° ÷ 60°C / 14° ÷ 140°F
- Storage humidity: <80%RH



Standard accessories

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



Optional accessories

- **HP30C2** Clamp transducer 0÷200A, 0÷2000A AC, diameter 70mm
- **HT96U** Clamp transducer 0÷1A, 0÷100A, 0÷1000A AC, diameter 54mm
- **HT98U** Clamp transducer 1000A/1V DC, diameter 50mm
- **HP30D1** Clamp transducer 1000A/1V DC, diameter 83mm
- **HT903** Box 3 x 1 5A/1V for connection to external CTs
- **ACONBIN** Adapter for clamp transducers







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