

Portable power quality analyzer

Unilyzer 900

UNIPOWER offers a wide range of products for power quality measurements and smart grid solutions. Our product line covers a full range from traditional portable PQ analysers to fully integrated, automated Power Quality Management systems. All UNIPOWER products are developed and manufactured in Sweden.

www.unipower.se

Unilyzer 900 is small, compact and rugged to fit in electrical cabinets and harsh environment all over the world. The innovative design includes sampling at 5000 p/c, integrated Wi-Fi and a free app available at Google Play for real time monitoring. Climbing up the pole or entering a danger zone is no longer required to read your data, just connect with your Windows tablet or Android smartphone/tablet while still in your car. Ease of use and safety cannot be higher. The instrument is light weight - only 700g and fits in your hand.

Applications

Unilyzer 900 is designed for electric power distribution companies to fulfill local standards, but it can be used by anyone wanting to troubleshoot problems or to do optimizations in the power network.

- Fulfill local standards and regulations
- Power Quality troubleshooting
- Delivery point norm compliance
- Grid Code measurements
- Energy savings
- Load analysis
- Fault and transient recording
- Quality of supply

Plug and Play

Just load a pre-defined setting and you are up and running immediately. The display gives you valuable information as well as allows you to modify settings.

Features

Its small size together with the IP65 protection and ruggedness makes Unilyzer 900 an ideal tool for all field measurements. It has no moving parts and has been tested in real, tough environments. The instrument complies with IEC 61000-4-30 Class A for Power Quality measurements, which guarantees highest reliability in every advice and conclusion. Its



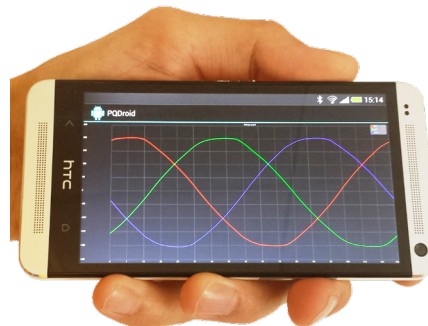
standard memory allows data to be stored for 3 months. In case of a power failure it has an internal battery backup keeping the instrument going.

Examples of measured parameters:

- Voltage (and current) variations
- Sags and swells
- Flicker levels
- Harmonics (up to 100th)
- RVC
- Unbalance
- Transients
- Transformer monitoring
- Environmental conditions

Integrated Wi-Fi

The instrument has integrated Wi-Fi. You easily connect to Unilyzer 900 from any computer, smartphone or tablet. Use your Android Smartphone or Windows tablet to check the voltage in an easy, safe and flexible way



Use your Android smartphone or tablet to check the voltage anywhere, anytime.

Unilyzer 900 - Technical Specification

Voltage Inputs

Voltage channels	4 inputs with automatic transducer identification.
Range	0 - 1000 V RMS. Other range optional.
Resolution	24 bit
Sampling rate	5000 samples/cycle (250 kHz). No time gaps.
Transient detection	Up to 31.000 samples/cycle. Multiple triggers.
Event recording	Waveform and RMS for all channels with multiple triggers.
Bandwidth	40 kHz. Separate inputs for transient detection. Analogue anti-alias filters.
Accuracy	Unilyzer 900: IEC 61000-4-30 Class A (< 0,1% U _{din}). Unilyzer 900c: IEC 61000-4-30 Class S (< 0,5% U _{din}).

Current Inputs

Current channels	4 inputs with automatic transducer identification.
Range	Clamp on ammeters available in the range 0 to 5000 A (iron core and Rogowski coils).
Resolution	24 bit
Sampling rate	5000 samples/cycle (250 kHz). No time gaps.
Transient detection	Up to 31.000 samples/cycle.
Transient resolution	24 bit
Bandwidth	40 kHz. Separate inputs for transient detection. Analogue anti-alias filters.
Accuracy	Unilyzer 900: IEC 61000-4-30 Class A (< 0,1% U _{din}). Unilyzer 900c: IEC 61000-4-30 Class S (< 0,5% U _{din}).

Miscellaneous

Measurements	Algorithms and methods according to Unilyzer 900: IEC 61000-4-30 Class A. Unilyzer 900c: IEC 61000-4-30 Class S. More than 2500 parameters calculated.
Storage intervals	Individual settings for each parameter group, from 3 sec or more. Standard setting 10 min.
Storage capacity	32 MB flash memory (standard). With standard settings the memory can store more than 100 days of measure data. Optional 2 GB memory available equalling 17 years of storage.
Communication	USB 2.0 (standard). Ethernet. WLAN router(Unilyzer 900).
Time synchronisation	Synchronisation with configuring computer. Unilyzer 900: Optional built-in GPS receiver.
Degree of protection	IP65 dust and splash proof.
Insulation class:	CAT III / 1000 V, CAT IV / 600V.
Transducer identification	Automatic.
Size W x H x D	109 x 187 x 50
Operational temperature	-10 °C to +55 °C. Optional extended range available.
Weight	0,7 kg.
Personal safety	EN 61 010-1.
EMC	IEC 61000-6-2 and IEC 61000-6-3.
Power supply	90 - 600 VAC. 100-300 VDC. Internal UPS 1,5 hour (extended time on request).

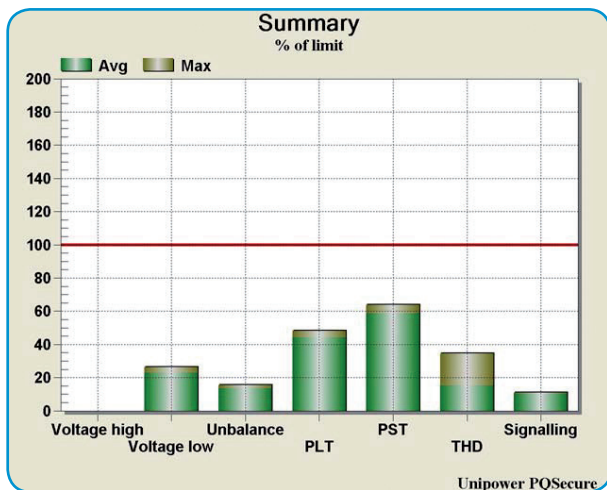


More Features

Gapless measurements and algorithms in accordance with IEC 61000-4-30 Class A. Measures power and energy in all 3-phase Wye and Delta configurations. Unique method for data compression and storage saving memory usage and thus saving transfer times and costs. 100 days of measurements with 32 MB standard memory.

Real-time Possibilities

Independent of measurement mode realtime values are shown on the display and can be read from an external PC or via modem simultaneously.



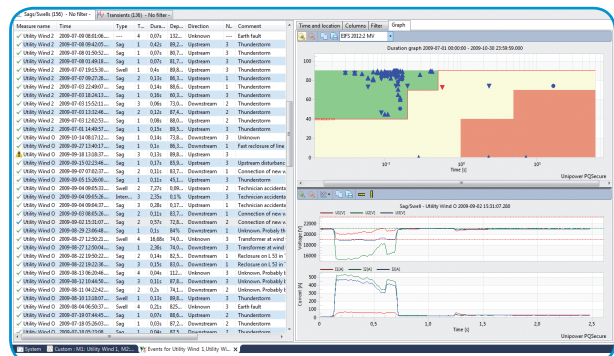
The PQ Secure automatic report generator provides comprehensive reports in accordance with a variety of norms like EN 50160, IEC 61000-2-2 etc.

Accessories

All accessories are designed for practical field use from years of experience. Small, flexible Rogowski type clamps for currents up to 5000A available as well as magnetic core clamps and Hall effect clamps for DC measurements in a wide range of currents. Transducers have automatic range and type identification (no user action needed). There is a variety of practical instrument bags available that are approved as cabin baggage on airplanes. Magnetic holder available.

Evaluation and Analysis

Powerful evaluation software PQ Secure included. Unilyzer 900 can be integrated into full size PQ Secure PQ Management System allowing full automatic PQ administration and analysis.



Evaluation of voltage sags with norm classification according to different standards and planning levels.



- Your power quality partner