AR6

Three phase network and quality analyzers

Electrical Safety 600 V **CAT IV**

Electrical Safety 1000 V **CAT III**

Description

- Portable power analyzer for three-phase and single-phase electrical networks with simultaneous measurement of leakage current, power quality and recording of transients.
- AR6 is the best tool for visualizing and analyzing the network's problems regardless of whether it is a single-phase or three-phase network.
- It allows recordings of the most common electrical parameters and also those specifically related to supply quality such as overvoltages, swell, sags and transients.
- Thanks to the graphical display of harmonics, phasors and waveforms, the user can detect anomalies in the installation simply by connecting the device.
- Measurement of the main electrical parameters.
- True root mean square measure (TRMS).
- 5.7" colour graphic screen.
- Includes meter for energy consumed and generated.
- Has 5 voltage measurement inputs and 5 current channels.
- Configurable trigger menu via level and time trigger.
- Multiple languages (Spanish, English, French, German, Portuguese, Italian, Chinese, Russian).
- Recording of voltage-quality events (class B) via configurable menu.
- 600 CAT IV, 1000V CAT III (EN 61010).
- CE marking.
- Analysis of records via Power Vision plus PC software.
- Simple and intuitive menu for device configuration.

Features

AR6	
Class 0.5 in the measurement	
Class B according to UNE-EN 61000-4-30	
Measurement and recording according to EN 50160	
AR6 power supply	
Voltage (external power supply)	100…240 Vac.
Current (external power supply)	3.33 A
Frequency	50 to 60 Hz
Maximum power	40 W
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Nominal voltage	12 Vdc
Current	2 A
Maximum power	24 W
Consumption	30 VA
Operating temperature	0 to 50ºC
Altitude	2000 m
Humidity without condensation	5…95 %
Contamination level	2
Current input features	
Current inputs	I1 , I2 , I3 , IN , Lleakage
Input voltage	0…2 V
Measurement margin	1 to 120 of *I*n%
Maximum current	3*I*n A
Input impedance	10 kΩ
Voltage input features	
Voltage inputs	U1, U2, U3, UN, Earthing
Input voltage	10 to 800 Vrms neutral phase
Maximum voltage admissible	2,500 V
Bandwidth	3.2 kHz
Other features	
Voltage measurement range	10 to 800 Vf-n
Current measurement range	0.01 to 1000 A (depending on clamp)
Transformation ratios	Programmable
Internal memory	1 Gb
Internal memory features	FAT 32

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- List of detected disturbances in tables.
- Display of wave shapes of transients recorded.
- Manual or programmed PHOTO captures (wave shapes of 9 channels along with instantaneous values).
- Compatible with AR5-L pins.
- Automatic detection of clamps.
- Memory download via USB connection.
- Graphic display of phasors, harmonics and wave shapes.

Waveform

· With the waveform visualization, it is possible to detect any waveform defect.

· It is also possible to pause the image and zoom-in on the oscilloscope image any time in order to get a better definition of the image.

Photo

· The device captures the waveform of 9 channels measured together with the instantaneous values of the most important electric variables so that each photo allows a detailed analysis of the installation.

· The photo capture can be programmed with trigger (electrical parameters comparison) or can be taken manually.

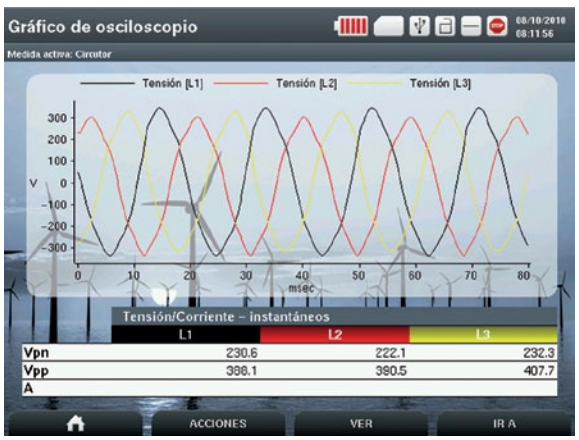
Current clamps

· The current clamps of the AR6 are built with amplifier included. This feature facilitates the transportation and specially the installation of the clamps to make measurements since they do not need extra supply or extra wiring

Features

Accuracy class	
Voltage	0.5% ±2 digits
Current	0.5% ±2 digits
Active power	1% ±2 digits
Reactive power	1% ±2 digits
Build features	
Enclosure	Double insulation
Keyboard	Movement and function keys
Screen	5.7“ colour VGA
Dimensions	283 x 168 x 80 mm
Weight	1.640 kg
Communications	USB

Safety	Category III - 600 V, in accordance with 61010
	1000 V CAT III/600 V CAT IV for altitudes lower than 2000 m
	1000 V CAT III/600 V CAT III/300 V CAT IV above 2000 m
Standards	
EN 61000-6-4 (2002), Industrial emissions. **EN 55011 (1994), Driven (EN 52022 – Class B)** **EN 55011 (1994), Radiated (EN 55022 – Class A)**	
EN 61000-6-2 (2022), Industrial immunity **EN 61000-4-2 (1995), Electrostatic discharge** **EN 61000-4-8 (1995), Rapid transient bursts**	
EN 61000-6-1 (2002), Domestic immunity **EN 61000-4-11 (1994), Power supply outages**	
(*) Accuracy is given by the following measurement conditions: Exclusion of errors produced by the clamps and external voltage transformers, with a temperature range of 5 to 45ºC and power factor 0 to 1	



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Three phase network and quality analyzer

Display

· 5,7" high resolution VGA colour screen allows graphical and numerical representation values showing the information in a clearer way.

Measurement channels

· The analyzer has 5 voltages inputs that corresponds to the 3 phases, neutral and ground, [U1, U2, U3, UN, UEARTH]]

· Has 5 current inputs that corresponds to the (3 phases, neutral and leak current simultaneously [I1, I2, I3, IN, IK].

Visualization

· Information on screen easy to understand and to read considering that the numerical information is represented in tables grouped under the measured variables and their corresponding phases. Moreover, each phase is shown with the colour selected by the user.

· The graphical screens provide the information on the graph on X / Y axes and autoscale for full representation of the measured variable.

Display

Panel size	5.7" (diagonal)
Active area of the LCD	Width 116.16 mm x Height 87.12 mm
No. of Pixels	Horizontal (640x3) x Vertical 480
Resolution type	VGA
Pixel size	Horiz. 0.1815 mm x Vert. 0.1815 mm
Pixel colour	RGB vertical lines
Display colour	White
No. of colours	262K
Back-lighting	LED

Measurement channels

5 voltages inputs that corresponds to the 3 phases, neutral and ground, (U1, U2, U3, UN, UEARTH)	
Inputs for voltage measurement	U1 U2 U3 UN Earth
Input margin	Un= 10 to 800 Vrms phase-neutral
Number of inputs	5
Peak voltage	2,500 V
Crest factor	1.0…1,875
Bandwidth	3.2 kHz
Input impedance	10 MΩ
Permanent overvoltage	1.000 Vrms
Transient overvoltage <1s	2,500 V
Absolute maximum voltage	6 kV
Consumption	≤0.04 VA
Maximum voltage in the voltage measurement circuit	1000 V CAT III/600 V CAT IV for altitudes lower than 2000 m
	1000 V CAT II/600 V CAT III/300 V CAT IV for above 2000 m
Measurement margins	10.00 to 800.00 Vrms
Resolution	0.01 Vrms
Accuracy	± 0.5 % of Vnom
Has 5 current inputs that correspond to the (3 phases, neutral and leak current simultaneously (I1, I2, I3, IN, IK)	
Inputs for current measurement	I1 I2 I3 IN ILeak
Input voltage	0…2 V
Measurement margin	from 1 to 120% of *In*
Primary current measurement In	Depends on clamp
Allowable overload	3 *In*
Consumption	≤ 0.0004 VA
Special features	Leakage current measurement via low-pass filter option activated/deactivated
Input impedance	10 kΩ

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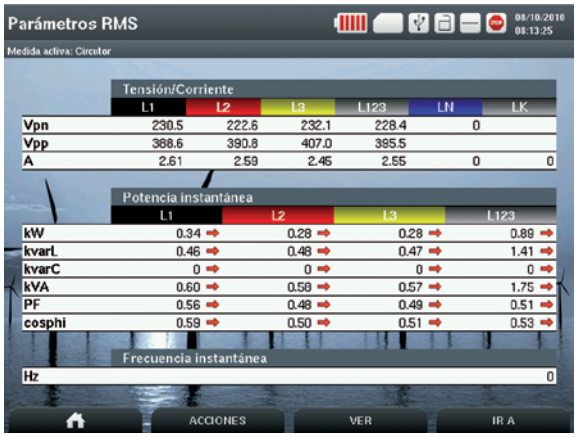
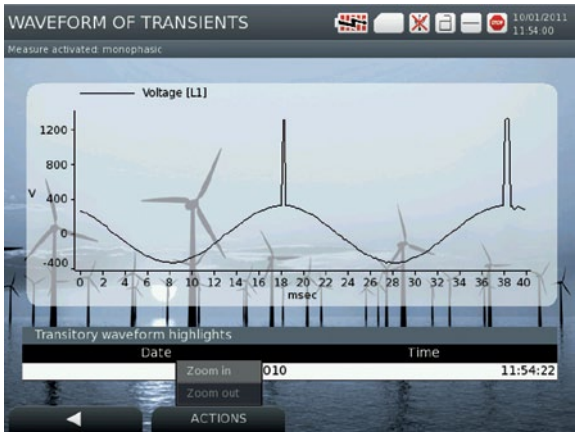
Easy configuration menu

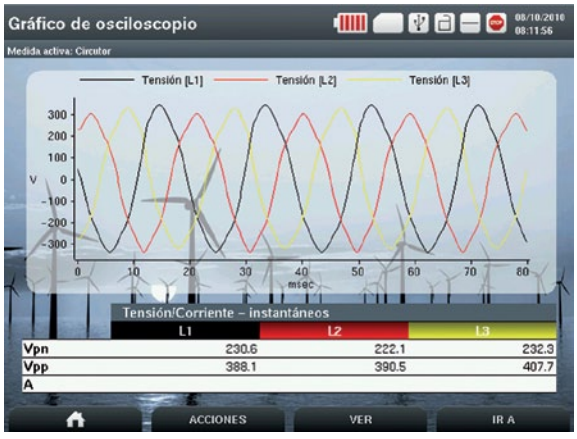
- AR6 has an intuitive main menu and large icons that makes the equipment very easy to navigate and configure.

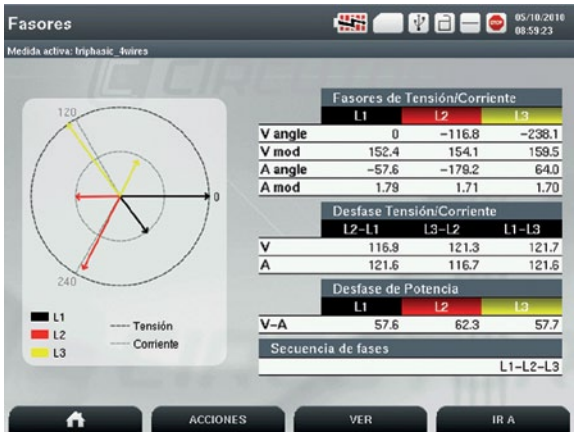
Quality

- It is possible to activate and configure the detection and registration of quality events such as over-voltages, swells, dips and transients. The events are shown in a table with the most important parameters of the event. The user can select any event and visualize the waveform and values of the event.









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