## AR6

Three phase network and quality analyzer

## Autonomy

It is the only portable analyzer that ensures 8 hours of battery life.

| Battery | NiMH (Nickel Metal Hydride) |
| :--- | :--- |
| Voltage | 6 V |
| Capacity | $4,200 \mathrm{mAh}$ |
| Charge time | $2 \ldots 2,5 \mathrm{~h}$ |
| Battery life while in use | 4hrs with LCD on |
|  | 8hrs with LCD off |

## Low-pass filter

- It includes the possibility of activating a low-pass filter to verify the difference in response and measurement between the immunized earth leakage relays and those that are not..


## Photo capture

- There is the possibility of activating the automatic photo capture. The photo records the waveforms of 9 channels and the instantaneous values of the main parameters.
- To capture the photo, it's necessary to
 create trigger conditions comparing electrical values from one phase or all of them. It's possible to combine different conditions with "AND" and/or "OR" conditions to capture the photo.
- After the configuration, the user can activate the conditions they require for every registration.


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Customizable and configurable

The device allows the configuration of the number of decimals and units desired by the user for each variable.

- The user can select the background colour and colours for each phase according to regulations.


## Multi circuit

- Allows the configuration for a number of networks. Also shows every way of installing the current sensors according to the network selected. The options are single-phase, twophase, aron, three-phase and three-phase with neutral.


## Harmonic graphs

- The harmonics screen displays the amplitude value information of each harmonic.

The user can scroll to select the desired harmonic to display in the below table the most important values of this harmonic.

## Application

O With the AR6 you can perform a full study of the electrical installation. It is possible to perform an analysis of consumption, load curves, voltage disturbances in the installation and to display waveshapes, study harmonics or measure flicker, as well as other options.

| Menú de for | ámetros |  |
| :---: | :---: | :---: |
| Mestianactive Cinctoer |  |  |
|  | Power Active: KW |  |
| Voltage / V | Decimas 2 |  |
| Decimas 1 | Power Aparent KVA | Energy Active: kWh |
| Frequenoy Hz | Decimals 2 |  |
| Decimas 2 | Power Cepactive: KvarC | Energy Aparent [VVAh |
| Current $\overline{\text { a }}$ | Decimas 2 | Decimals: |
| Decimas: 2 | Power Inductive: KvarL Decimas | Energy Capacitive kvarCh Decimals |
| Harmoric: \% |  |  |
| Decimas: 1 | PF: PF | Energy Inductive: kvarLh Decimals |
| Distartion \% | Decimas |  |
| Decimas: 1 | Cosphi: CosphiDecimas 2 |  |
|  |  |  |  |
|  | Gurcal |  |
| 1 | caones | IR A |



## AR6



## References

| Analyzer | Type | Code |
| :--- | :--- | :--- |
| AR6 | AR6, Portable single and <br> three-phase power analyzer | M82511 |


| AR6 Clamps |  |  |
| :--- | :--- | :--- |
| AR6 | Kit with 3 AM54-FLEX flexible <br> 100-1000-10000 A clamps | M82532 |
| AR6 | Kit with 4 AM54-FLEX flexible <br> $100-1000-10000 ~ A ~ c l a m p s ~$ | M82533 |
| AR6 | CF-5 5 ampere leakage clamp | M81331 |
| AR6 | CF-10 10 ampere leakage clamp | M81334 |


| Analyzer | Type | Code |
| :--- | :--- | :--- |
| AR6, <br> case kit | AR6 (M82511) <br> + Troley transport case Kit | M82512 |
| AR6, <br> case kit <br> CP Clamps | AR6 case Kit (M82512) <br> + 3 CP-5 + 3 CP-2000/200 clamps | M82541 |
| AR6, <br> kit | Complete transport case kit and <br> work cover that also includes a kit <br> with 3 AM54-flex flexible clamps <br> with built-in power supply. | M82522 |
|  | Complete transport case kit and |  |
| AR6, <br> kit | Cork cover that also includes a kit <br> with 4 AM54-flex flexible clamps <br> with built-in power supply. | M82523 |

## Accessories

See page M.8-38

Parameters measured

| Parameter | L1 | L2 | L3 | LN | LIII | LK | Max.I <br> Min. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Phase-Neutral Voltage | Yes | Yes | Yes | Yes | Yes | - | Yes |
| Phase-Phase Voltage | Yes | Yes | Yes | - | Yes | - | Yes |
| Current | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Consumed Active Power | Yes | Yes | Yes | - | Yes | - | Yes |
| Consumed Inductive Power | Yes | Yes | Yes | - | Yes | - | Yes |
| Consumed Capacitive Power | Yes | Yes | Yes | - | Yes | - | Yes |
| Consumed Apparent Power | Yes | Yes | Yes | - | Yes | - | Yes |
| Consumed Power Factor | Yes | Yes | Yes | - | Yes | - | Yes |
| Cosine j Consumed | Y | Yes | Yes | - | Yes | - | Yes |
| Generated Active Power | Yes | Yes | Yes | - | Yes | - | Yes |
| Generated Inductive Power | Yes | Yes | Yes | - | Yes | - | Yes |
| Generated Capacitive Power | Yes | Yes | Yes | - | Yes | - | Yes |
| Generated Apparent Power | Yes | Yes | Yes | - | Yes | - | Yes |
| Generated Power Factor | Yes | Yes | Yes | - | Yes | - | Yes |
| Cosine j Generated | Yes | Yes | Yes | - | Yes | - | Yes |
| Crest factor | Yes | Yes | Yes | - | - | - | Yes |
| K - Factor | Yes | Yes | Yes | - | - | - | Yes |
| THD Voltage | Yes | Yes | Yes | Yes | - | - | Yes |
| THD Voltage even | Yes | Yes | Yes | Yes | - | - | Yes |
| THD Voltage odd | Yes | Yes | Yes | Yes | - | - | Yes |
| THD Current | Yes | Yes | Yes | Yes | - | - | Yes |
| THD Current even | Yes | Yes | Yes | Yes | - | - | Yes |
| THD Current odd | Yes | Yes | Yes | Yes | - | - | Yes |
| Flicker Inst. (WA) | Yes | Yes | Yes | Yes | - | - | - |
| PST Flicker | Yes | Yes | Yes | Yes | - | - | - |
| Frequency | Yes | - | - | - | - | - | Yes |
| Voltage Imbalance | - | - | - | - | Yes | - | Yes |
| Voltage Asymmetry | - | - | - | - | Yes | - | Yes |
| Current Imbalance | - | - | - | - | Yes | - | Yes |
| Current Asymmetry | - | - | - | - | Yes | - | Yes |
| Voltage Harmonics (1-50) | Yes | Yes | Yes | Yes | - | - | - |
| Current Harmonics (1-50) | Yes | Yes | Yes | Yes | - | - | - |
| Active Power Maximum Demand | - | - | - | - | Yes | - | - |
| Apparent Power Maximum Demand | - | - | - | - | Yes | - | - |
| Average current maximum demand | - | - | - | - | Yes | - | - |
| Maximum current demand L1, L2, L3 | Yes | Yes | Yes | - | - | - | - |
| Active energy consumed | - | - | - | - | Yes | - | - |
| Consumed Inductive Energy | - | - | - | - | Yes | - | - |
| Consumed Capacitive Energy | - | - | - | - | Yes | - | - |
| Consumed Apparent Energy | - | - | - | - | Yes | - | - |
| Active energy generated | - | - | - | - | Yes | - | - |
| Generated Inductive Energy | - | - | - | - | Yes | - | - |
| Generated Capacitive Energy | - | - | - | - | Yes | - | - |
| Generated Apparent Energy | - | - | - | - | Yes | - | - |
| Wave shapes | Yes | Yes | Yes | Yes | Yes | Yes | - |
| Phasor representation | Yes | Yes | Yes | Yes | Yes | Yes | - |

Portable power analyzer

## AR6

Three phase network and quality analyzer

| Clamps | CF-5 | CF-10 | CP-5 | CP-100 | CPR-500 | CPR-1000 | CP-2000/200 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
| Measurement range | 1... 1000 A ac | 0.2 mA ... 10 A ac | 0.05..0.5 A ac | 1... 100 A ac | 1... 500 A ac | 1... 1000 A ac | $\begin{aligned} & \text { 1... } 200 \mathrm{~A} \text { ac } \\ & 10 \ldots 2000 \mathrm{~A} \text { ac } \end{aligned}$ |
| Nominal frequency | $48 . .65 \mathrm{~Hz}$ | 48... 65 Hz | $48 . .65 \mathrm{~Hz}$ | $48 . .65 \mathrm{~Hz}$ | $48 . .65 \mathrm{~Hz}$ | $48 . .65 \mathrm{~Hz}$ | $48 . .65 \mathrm{~Hz}$ |
| Output voltage | 2 V ac | 2 V ac | 2 Vac | 2 V ac | 2 V ac | 2 V ac | 2 V ac |
| Dielectric rigidity | $\begin{aligned} & 5200 \mathrm{~V}, \\ & 50 \mathrm{~Hz}, 1 \mathrm{~min} \end{aligned}$ | $\begin{aligned} & 5200 \mathrm{~V}, \\ & 50 \mathrm{~Hz}, 1 \mathrm{~min} \end{aligned}$ | $\begin{aligned} & 5200 \text { V, } 50 \\ & \mathrm{~Hz}, 1 \mathrm{~min} \end{aligned}$ | $\begin{aligned} & 5200 \text { V, } 50 \\ & \mathrm{~Hz}, 1 \text { min } \end{aligned}$ | $\begin{aligned} & 5200 \mathrm{~V}, 50 \mathrm{~Hz} \text {, } \\ & 1 \mathrm{~min} \end{aligned}$ | $\begin{aligned} & 5200 \text { V, } 50 \\ & \mathrm{~Hz}, 1 \text { min } \end{aligned}$ | 5200 V, 50 Hz, 1 min |
| Scale base error | 1 \% (up to 0.1 A ) <br> 0.5 \% (Up to 5 A) | -0,35\% | 1 \% | 0,5 \% | 0,7\% | 0,7\% | Scale 200: 0.5 <br> \% (+70 mA) <br> Scale 2000: 0.5\% <br> (+100 mA) |
| Maximum conductor diameter | 20 mm | 100 mm | 20 mm | 20 mm | 52 mm | 52 mm | 64 mm |
| Maximum busbar | $\begin{aligned} & 1-50 \times 5 \mathrm{~mm} \text { or } \\ & 4-30 \times 5 \mathrm{~mm} \end{aligned}$ | $\begin{aligned} & 5-80 \times 5 \mathrm{~mm} \text { or } \\ & 3-80 \times 10 \mathrm{~mm} \end{aligned}$ | $20 \times 5 \mathrm{~mm}$ | $20 \times 5 \mathrm{~mm}$ | $\begin{aligned} & 1-50 \times 5 \mathrm{~mm} \text { or } \\ & 4-30 \times 5 \mathrm{~mm} \end{aligned}$ | $\begin{aligned} & 1-50 \times 5 \mathrm{~mm} \text { or } \\ & 4-30 \times 5 \mathrm{~mm} \end{aligned}$ | $\begin{aligned} & 5-125 \times 5 \mathrm{~mm} \text { or } \\ & 3-100 \times 10 \mathrm{~mm} \end{aligned}$ |
| Description / Code | CF-5 <br> Code M81331 | CF-10 <br> Code M81334 | 3 CP-5 Kit <br> Code M81041 | 3 CP-100 Kit <br> Code M81042 <br> 1 CP- <br> 100Neutral <br> clamp (blue) <br> Code M81036 | 3 CPR500 Kit <br> Code M81043 <br> 1 CPR-500Neutral clamp (blue) Code M81037 | 3 CPR-1000 Kit Code M81044 <br> 1 CPR-1000 Neutral clamp (blue)Code M81038 | 3 CP-2000/200 Kit <br> Code M81045 |

