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Illustrative Image

# Power Quality Analyzer



#### **Features**

- Class S (IEC 61000-4-30)
- Single-phase or three-phase balanced / unbalanced
- Simultaneous three-phase (real-time) measurement of the three phase currents and the neutral current (with four sensors)
- Voltage measurement up to 500 V
- Current measurement up to 5 A (optional clamps), 600 A or 3000 A (Rogowski coils, flexibles, optionals)
- Active power
- Reactive power
- Power factor
- Frequency
- Phase sequence
- Harmonics (THD)
- Graphic display of 128 x 64 px
- Built-in rechargeable battery
- IP65 protection (with closed lid)

### Description

The **MAR83s** is a portable instrument that measures and calculates the main electrical parameters of industrial networks: voltage, current, frequency, active and reactive power, power factor, total harmonic distortion (THD), neutral current and phase sequence, in balanced / unbalanced single-phase or three-phase networks.

The automatic detection system of the current sensor type (clamps or Rogowski coil) that is being used eliminates the need to program the constant, avoiding operating errors.

The equipment is small, lightweight, robust and easy to transport. For technicians and the electrical maintenance sectors, it is an extremely powerful tool for evaluation the quality of the energy supply, as well as for the design of reactive and harmonic compensation systems in consumption.

#### **Flex Power System**

The **MAR83s** has a Flex Power battery charging system. This system allows the use of any power supply between 5 V and 12 V as long as the output power is at least 10 W.







# Technical specifications

ELECTRICAL	MAR83s
Input	4 voltage / 4 current
Voltage measurement	50 - 500 Vac
Resolution	0.1 V
Accuracy in voltage measurement	0.5 % ± 2 digits
Current measurement	Up to 5 A (optional clamp) Up to 600 A (optional Rogowski coils) Up to 3000 A (optional Rogowski coils)
Resolution	0.01 A (with sensor up to 5 A) 0.1 A (with sensor up to 600 A) 1 A (with sensor up to 3000 A)
Current measurement accuracy	0.5 % ± 2 digits
Frequency measurement	45 - 65 Hz
Active power measurement	Up to 1.5 MW per phase (current sensor dependent)
Resolution	1 W (with sensor up to 5 A)
Reactive power measurement	Up to 1.5 MVAR per phase (current sensor dependent)
Resolution	1 VAR (with sensor up to 5 A)
Accuracy in power measurement	1 % ± 2 digits
Power factor measurement	-1.00 to 1.00
Resolution	0.01
Phase sequence	Direct or inverse sequence indication

FEATURES		
Display	Graphic LCD of 128 x 64 px	
STANDARDS		
Overvoltage protection	CAT III - 1000 V / CAT IV - 600 V	
Safety class	IEC 61010-1	
ENVIRONMENTAL		
IP rating	IP65 (with closed lid)	
Operating temperature	-10 °C to 50 °C	
Storage temperature	-25 °C to 65 °C	
Humidity range	95 % RH (non condensing)	
POWER SUPPLY		
Rechargeable battery	NiMH	
Battery charger	Flex Power, AC Adapter of 5 V - 2 A or 12 V - 1 A	
MECHANICAL (OF THE INSTRUMENT)		
Weight	Approx. 1.7 kg	
Dimensions	221 x 189 x 99 mm	

## **Included accessories**

- 4 voltage test leads
- AC Adapter
- Carry bag
- User manual

#### Available accessories

- Set of 3 clamps to measure phase currents up to 5 A
- Clamp for neutral current measurement up to 5 A
- Set of 3 or 4 Rogowski coils for current measurement up to 600 A
- Set of 3 or 4 Rogowski coils for measurement of currents up to 3000 A



# **Global Presence**

# MEGABRAS equipment are used in more than 40 countries around the world



# Test & Measurement equipment

Digital transformer ratiometer Earth ground testers Hipots Insulating glove tester Insulation testers Kilovoltmeters Micro-ohmmeters Power quality analyzers Vibration meter



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