



## PRO PA-900

### PORTABLE THREE PHASE POWER QUALITY AND HARMONICS ANALYSER

#### INTRODUCTION

The Metravi PA-900 Portable Three Phase Power Quality Analyser, when externally connected with open type Rogowski coils or voltage type CTs, is capable of non-destructive wire testing with simplified test steps.

It helps save construction costs, and is more convenient for engineering tests as well as aids in the inspection and maintenance of distribution systems.

#### FEATURES & FUNCTIONS

- Support single-phase and three-phase systems. It can measure multiple electrical parameters such as **Current, Voltage, Power Factor, Power, Energy and Power Quality** parameters including **Harmonic, Unbalance degree, Voltage Swell and Voltage Dip**, etc.
- In addition to the measurement function, the PA-900 is equipped with various records, such as waveform records and programmable interval measurement value records. To store and record data, it is internally embedded 32 GB memory card.
- With standard configuration of RJ45 Ethernet communication interface, through standard Modbus TCP protocol, it is compatible with various configuration systems and can transmit the electrical parameters collected by the front end to the system data center in real time.

#### GENERAL SPECIFICATIONS

Display	: 3.97 inches 480*800px IPS Display
Sampling Rate	: User-settable
Operating Environment	: Temperature -20°C to 55°C, Humidity below 90%RH
Storage Environment	: Temperature -40°C to 70°C, Humidity below 95%RH (non-condensing)
Power	: Rechargeable 4000mAh 2xLithium battery Or Mains 5VDC, 2A Adaptor
Battery Charging Time	: ≥5h
Battery Working Time	: ≥6h
Allowable Altitude	: ≤ 2kms
Protection & Certifications	: CAT III 600V
IP Protection	: IP30
Interface	: RJ45- Ethernet
Protocol	: Modbus-TCP
Data Storage	: 32GB TF card
Data Export	: U disk export (U disk file is AT32 system)
Dimensions & Weight	: LxWxD : 215x130x60 mm, 850g (with accessories 2kgs)
Accessories	: 5pcs voltage clamp wires with banana plug (2 meters, 1.5mm <sup>2</sup> ) 85-265 AC to 5V DC Adaptor(default Europe plug) <b>Rogowski coils and Metal Carry Case not included (available at extra cost)</b>



\*Technical specifications and appearance are subject to change without prior notice.



## PRO PA-900

### PORTABLE THREE PHASE POWER QUALITY AND HARMONICS ANALYSER

#### TECHNICAL SPECIFICATIONS

REAL TIME MEASUREMENTS	
Voltage	Phase voltage: Phase ABC N phase to ground voltage Line voltage: UAB, UBC, UCA Voltage peak coefficient: Phase ABC Voltage peak: Phase ABC
Current	Phase current: Phase ABCN Current peak coefficient: Phase ABC K Factor: Phase ABC
Frequency	Line frequency
Power	Active power: Phase ABC and total Reactive power: Phase ABC and total Apparent power: Phase ABC and total
Power Factor	Phase ABC and total
Fundamental Harmonic Power Factor	Phase ABC and total
Electrical Energy	Active Energy: Phase ABC and total (import / export) Reactive Energy: Phase ABC and total (import / export) Apparent Energy: Phase ABC and total CO2 emissions
HARMONIC MEASUREMENT DATA	
Voltage Harmonics	THD (Total harmonic percentage), TOHD (Odd total harmonic percentage), TEHD (Even total harmonic percentage), phase ABC 1-50th harmonic percentage, phase ABC 1-50th harmonic voltage value
Current Harmonics	THD (Total harmonic percentage), TOHD (Odd total harmonic percentage), TEHD (Even total harmonic percentage), phase ABC 1- 50th harmonic percentage, phase ABC 1-50th harmonic current value
WAVEFORM	
Voltage Waveform	Phase ABC voltage waveform or UAB, UBC, UCA line voltage waveform
Current Waveform	Phase ABC current waveform
PHASE ANGLE	
Voltage Phase Angle	Phase ABC
Current Phase Angle	Phase ABC
Phase Angle between Voltage and Current	Phase ABC
UNBALANCE	
Unbalance	Voltage unbalance, current unbalance
DEMAND	
Power Demand & PEAK Demand	Phase ABC active power and total power, phase ABC reactive power and total power, phase ABC apparent power and total power
Current Demand & PEAK Demand	Phase ABC

\*Technical specifications and appearance are subject to change without prior notice.



## PRO PA-900

### PORTABLE THREE PHASE POWER QUALITY AND HARMONICS ANALYSER

#### TECHNICAL SPECIFICATIONS

Wiring System	3P4W 4CT 3P4W 3CT 3P3W 3CT 3P3W 2CT 1P3W 1P2W
Current Sensor	Rogowski Coil Voltage-output Current Clamps
Voltage Access	Direct access Connected through voltage transformer
Voltage	Channel Input Voltage Range: 0-600VAC Measurement Range: 0-600VAC Measurement Accuracy: 0.2%
Current	Channel Input Voltage Range: 0-420mVAC Measurement Range: Different current sensors have different measuring ranges Measurement Accuracy: 0.2%+ Accuracy of current sensor
Frequency	Measurement Range: 45Hz-65Hz Measurement Accuracy: $\pm 0.001\text{Hz}$
Power Factor	Measurement Range: -1-+1 Measurement Accuracy: 0.5%
Power	Active Power Accuracy: 0.5% Reactive Power Accuracy: 1% Apparent Power Accuracy: 0.5%
Energy	Active Energy Accuracy: 0.5% Reactive Energy Accuracy: 1% Apparent Power Accuracy: 0.5%



Note: All accessories shown are not part of the standard package