

# NEW

## MI 2230 VAFMeter

Voltage,  
current, frequency  
and phase angle meter



**MI 2230 VAFMeter is handheld multifunction instrument which can accurately measure voltage, current, power, harmonic distortion and phase angles in single, two and three phase systems.**

### MEASURING FUNCTIONS

- TRMS Two channel voltage measurements, up to 600 Vac
- TRMS Two channel current measurements, up to 3000 Aac
- U-U, I-I, U-I angle measurement, phase diagram
- Support for three-phase (Aaron) systems
- Active, reactive and apparent power, PF,  $\cos \phi$ , THD, frequency
- Continuity/resistance of conductors with 200mA test current with polarity change and with pass/fail functionality

### KEY FEATURES

- Simultaneous measurement and display of voltage, current phase angles and frequency on two or three-phase systems
- Accurate phase angle measurement at low current levels
- Easy to use: large bright LCD display and large buttons enable easy handling of the instrument
- Memory storage for storing up to 1500 measurements
- Safe: built for CAT II / 600V environments
- Portable: rugged carrying case with a handle and lightweight design enable easy moving the instrument between sites.
- Built in charger & rechargeable batteries: instrument has a built-in charging circuit and comes with a set of rechargeable NiMH batteries.
- Downloadable: downloads test results via RS232 or USB cable directly to the PC with the help of the Metrel EuroLink software.

### TYPICAL APPLICATIONS:

- VAFMeter instrument is designed to be used in general electrical systems maintenance and commissioning, protective relay testing, electrical machine repairs or in monitoring power at the electrical service entrance.
- For meter installations, unit measures phase-to-phase voltage and single-phase current amplitudes and phase angles.
- Combined with a voltage or current source, instrument also becomes an excellent tool for testing and calibrating virtually any type of protective relay.

### APPLICATIONS

- Protection relays testing
- Instrument transformers testing
- Power measurement
- Continuity measurement

### STANDARDS

Functionality:

- IEC 61000-4-7
- IEC 61557-12

Electromagnetic compatibility:

- IEC 61326-1
- IEC 61326-2-2

Safety (LVD):

- EN 61010-1
- EN 61010-031

# Technical Specification

Function	Measuring range	Basic accuracy
<b>Voltage</b>	6 V ... 600 V	±(0,5 % of reading + 3 digits)
<b>Current</b> A 1398 - 10 A A 1395 - 30 A A 1395 - 300 A A 1395 - 3000 A	0.1 A ... 20 A 3 A ... 30 A 30 A ... 300 A 300 A ... 3000 A	±(1.5 % of reading + 2 digits) ±(1.5 % of reading + 2 digits) ±(1.5 % of reading + 2 digits) ±(1.5 % of reading + 2 digits)
Phase angle	-180.0 ... +180.0	±0.5°
<b>Power</b> Active Reactive Apparent	0.000 W ... 9999 kW 0.000 VAR ... 9999 kVAR 0.000 VA ... 9999 kVA	±(1.5 % of reading. + 4 digits) ±(1.5 % of reading. + 4 digits) ±(1.5 % of reading. + 4 digits)
<b>PF</b>	-1.00 ... 1.00	±0.04
<b>Cos φ</b>	0.00 ... 1.00	±0.04
<b>THD</b>	0.0 ... 20.0 %	±0.5
<b>Resistance</b>	0.0 Ω ... 19.9 Ω 20.0 Ω ... 199.9 Ω 200 Ω ... 1999 Ω	±(3 % of reading + 3 digits) ±(5 % of reading) ±(5 % of reading)
<b>Continuity</b>	0.0 Ω ... 19.9 Ω 20 Ω ... 1999 Ω	±(5 % of reading + 3 digits) ±(5 % of reading + 3 digits)

## Ordering information


Standard set

MI 2230 F



- Instrument MI 2230 VAFMeter
- Test lead 4 x 1.5 m
- Test probe, 4 pcs
- A 1395 Flexible current clamps 30 A / 300 A / 3000 A
- Crocodile clip, 4 pcs
- Set of NiMH battery cells
- Power supply adapter
- Instruction manual
- Calibration Certificate
- CD with instruction manual, PC Software EuroLink
- Set of carrying straps
- Soft carrying bag

## Optional accessories

Photo	Order No.	Description
	A 1398	10 A current clamps



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