

POWER QUALITY ANALYZER

POWER QUALITY ANALYZER AND DATA LOGGER



POWER QUALITY ANALYZER

Description

Electrical Power Quality Meters (PQM) are essential items for assessing whether the supply of electrical energy to an installation or specific equipment is suitable for the application. Through a systematic analysis of PQM, for example, overheating and accelerated wear of bearings and motors can be mitigated or eliminated, consequently reducing technical losses and asset replacement.

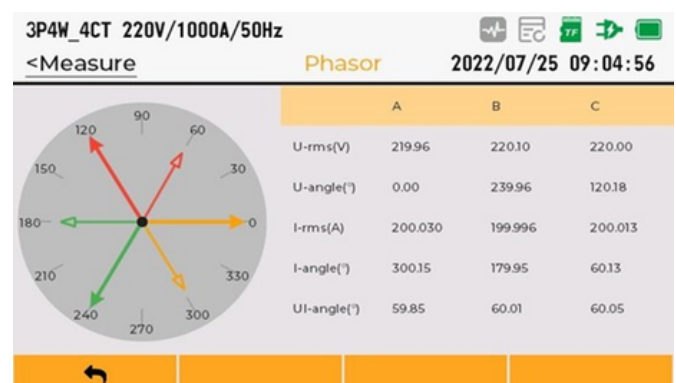
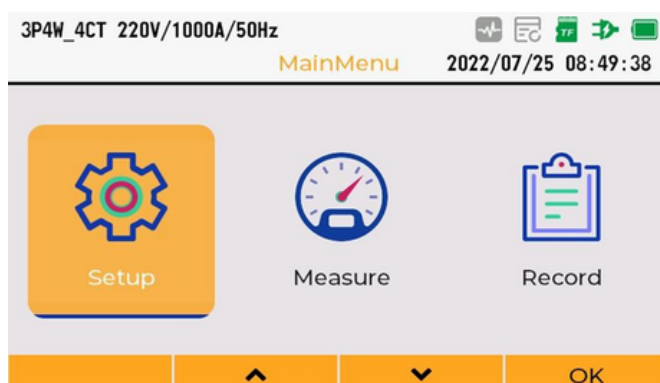
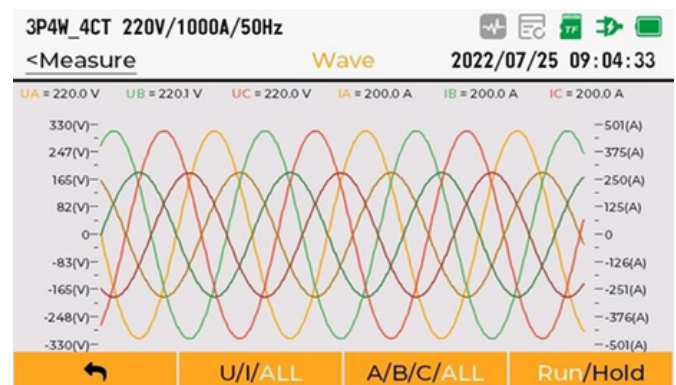
Advantages:

- The Power Quality Analyzer features a USB port for integration with a computer.
- The Power Quality Analyzer allows for the choice between conventional CTs and flexible clamps for measurement and enables applications in production lines and in the field.
- Expandable internal flash memory up to 64GB for up to 1 year of data stored in continuous measurement.

This Power Quality Analyzer is an ideal meter for field measurements, from which it is possible to assess the situation of the electrical system in detail, whether industrial or power, to assist in decision-making aimed at increasing system quality and reliability.

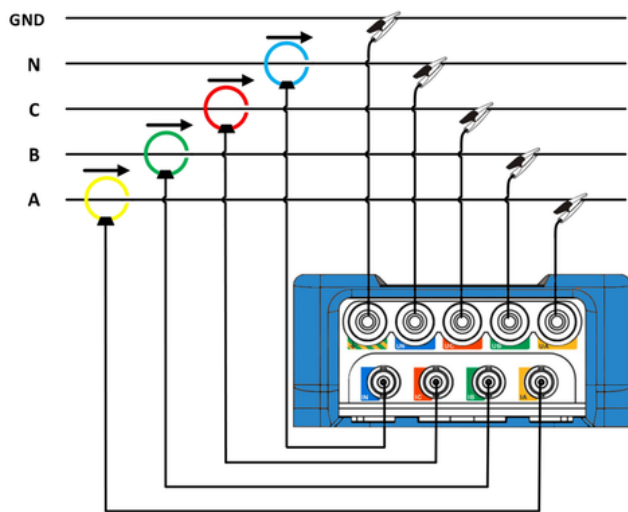
Operation

The HVEX qualimeter is a multifunction meter capable of collecting various data regarding the operation of the grid, either in real-time or stored for a period of time. This equipment is connected to the grid through 5 voltage sensors (1 per phase + 1 neutral + 1 grounding) and 4 Rogowski current sensors (1 per phase + 1 neutral), allowing for the measurement or recording of voltage, current, power, energy, harmonic distortions, phasor diagrams, unbalance, demand, waveform (oscillography). The recorded files can be exported in CSV format for further computational analysis.

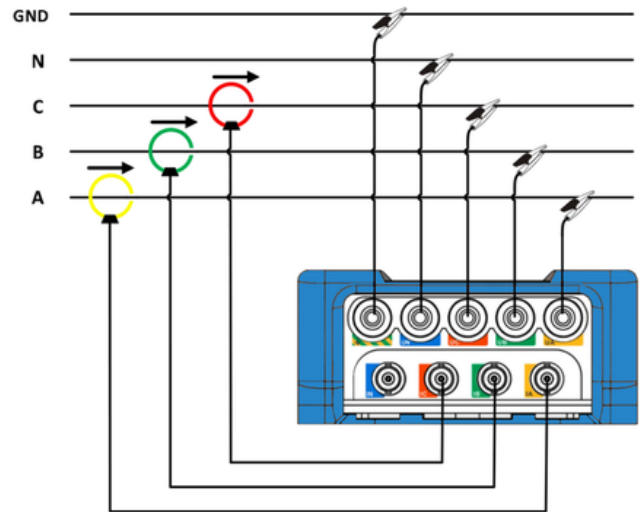


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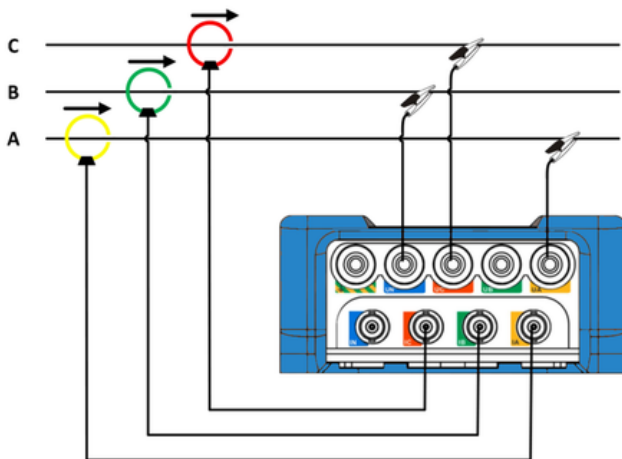
Connection schemes



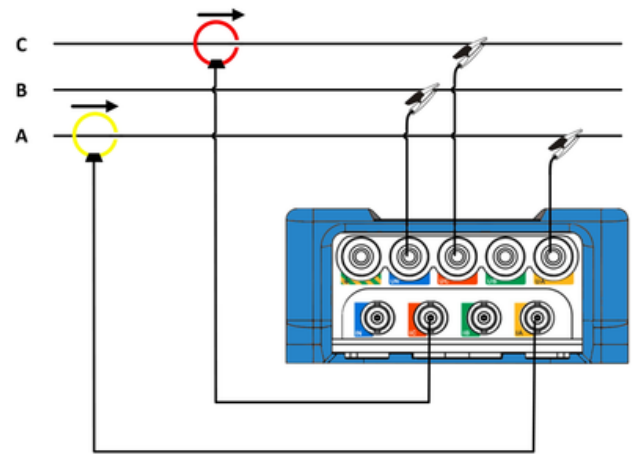
3P4W_4CT



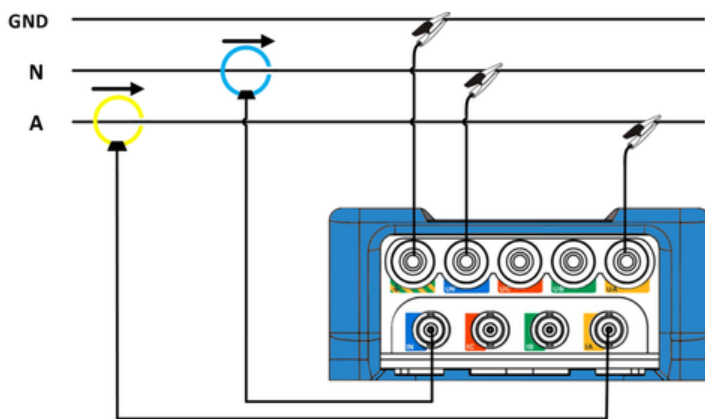
3P4W_3CT



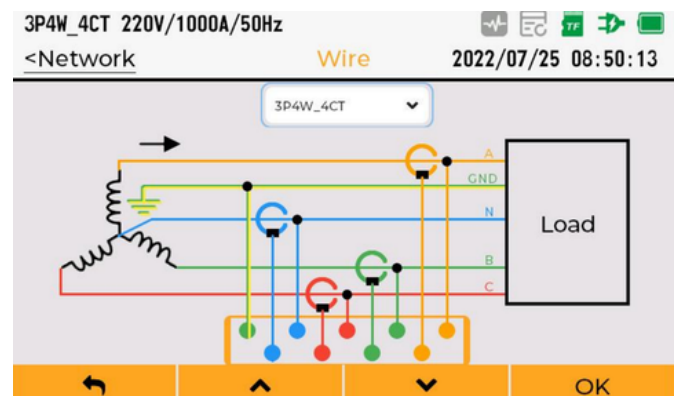
3P3W_3CT



3P3W_2CT



1P2W



Connection selection screen

Technical Specifications

General

Meter CategoryCAT III 600V

IP CodeIP30

Display size3,97 "

TypeIPS Display

Resolution480 x 800 p

Power Supply

Input5 VDC 2 A

BatteryLithium, rechargeable | Model N° 18650 | 4000mAh

Battery working time≥ 6h

Battery charging time≤ 5h

Energy economyAdjustable brightness and screen activity time

Storage

TypeTF Card

Storage capacity32 Gb

ExportU Disc (FAT32); CSV

Communication

InterfaceRJ45 (Ethernet)

ProtocolModbus - TCP

USBUSB Port

Technical Specifications

Voltage

Current

Active power

Reactive power

Apparent power

Classical measured quantities

Power factor

Active energy

Reactive energy

Apparent energy

Active demand

Reactive demand

Fundamental voltages and currents

Voltage and current harmonics up to the 50th order

Powers

Power factor

Quantities defined by IEEE Std. 1459-2010

Voltage and current harmonic distortions

Voltage and current unbalances

Harmonic pollution factor

Load unbalance factor

Positive, negative and zero sequence components of voltages and currents

Technical Specifications

Range and accuracy of input signals

Voltage	Range	0 VAC to 600 VAC
	Accuracy	0,2%
Current	Range	0 to 420 mVAC (Depends on the sensor)
	Accuracy	0,2% + Sensor accuracy
Frequency	Range	45 Hz to 60 Hz
	Accuracy	$\pm 0,001$ Hz
Power factor	Range	-1 to +1
	Accuracy	$\pm 0,005$
Power accuracy	Active	0,5%
	Reactive	1%
	Apparent	0,5%
Energy accuracy	Active	0,5%
	Reactive	1%
	Apparent	0,5%

Technical Specifications

Environmental Conditions

Operating Temperature	-20 °C to +55 °C
Storage Temperature	-40 °C to +70 °C
Operating humidity	≤ 90% (without condensation)
Storage humidity	≤ 90% (without condensation)
Altitude	≤ 2000m

Dimensions

Height	215 mm
Width	130 mm
Length	60 mm
Weight	850 g

We provide solutions for improvement of eletrical energy generation, transmission and distribution efficiency, quality and reliability. With a highly specialized and experienced team in research, delvelopment and innovation, HVEX develops tailor-made solutions for brazilian and foreign markets. Wide range of products with solutions focused on signal transduction, measurement, monitoring and protection.



Driving Innovation



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