

HF-PQ-205

Handheld Power Quality analyzer



This portable handheld power quality analyzer integrates complete power quality measurement functions. Adopting high-precision sampling technology, it records various power disturbance data. Easy to carry and operate, it is ideal for on-site grid inspection, troubleshooting and grid-connected acceptance projects worldwide.

Key features

- It accurately measures diverse electrical parameters: voltage, current, active power, reactive power, phase angle, power factor, frequency and more.
- Vector diagrams of measured voltage and current can be displayed, enabling users to verify the wiring correctness of metering devices via vector graph analysis.
- It analyzes AC power quality supplied by public grids to end users, covering frequency deviation, voltage deviation, permissible three-phase voltage unbalance and grid harmonics.
- It displays single-phase voltage/current waveforms as well as three-phase voltage and current waveforms simultaneously.
- All testing pages support screen lock function for easy data reading and analysis.

Technical specifications

Parameter	Value
1. Input Characteristics	Voltage Measuring Range 0~800 V, automatic range switching
Current Range (Clamp CT)	Standard: 5A/25A Optional: 100A/500A, 1000A/2000A
Phase Angle Measuring Range	0 ~ 359.99°
Frequency Measuring Range	45 ~ 65 Hz
Voltage Channels	3 channels (UA, UB, UC)
Current Channels	3 channels (IA, IB, IC)
Maximum Analyzable Harmonic Order	63rd harmonic
Continuous Storage Duration (1min interval)	Up to 18 months
2. Measurement Accuracy	Voltage $\pm 0.2\%$
Frequency	± 0.01 Hz
Current & Power	$\pm 0.5\%$
Phase Angle	$\pm 0.2^\circ$
Fundamental Voltage Error	$\leq 0.5\%$ F.S.
Fundamental Current Error	$\leq 1\%$ F.S.
Fundamental Voltage-Current Phase Difference Error	$\leq 0.2^\circ$
Harmonic Voltage Ratio Error	$\leq 0.1\%$
Harmonic Current Ratio Error	$\leq 0.2\%$
Three-phase Voltage Unbalance Error	$\leq 0.2\%$
Voltage Deviation Error	$\leq 0.2\%$
Voltage Fluctuation Error	$\leq 0.2\%$
3. Working Conditions & Power	Operating Temperature $-10^\circ\text{C} \sim +40^\circ\text{C}$
Charging Input	AC 220V, 45Hz~55Hz

Parameter	Value
Main Unit Power Consumption	≤3 VA
Max Battery Runtime	8 hours
4. Insulation Performance	Insulation Resistance (Input to Chassis) ≥100 Mohm
Withstand Voltage Test	AC 1.5kV (RMS), 1 minute power frequency withstand test
5. Physical Dimension	Overall Size 320mm × 240mm × 130mm
Net Weight	2.0 kg

Standard scope of supply

No.	Item	Qty	Notes
1	Handheld Power Quality Analyzer Main Unit	1 Set	Original standard unit
2	Three-phase Current Clamps	3 Pcs	Standard range 5A/25A
3	4-core Voltage Test Cables & Alligator Clips	1 Set	Yellow / Green / Red / Black
4	USB Flash Drive	1 Pc	For data storage & software
5	AC Power Adapter Charger	1 Pc	220V charging input
6	User Manual & Certificate	1 Set	English version
7	Portable Carrying Case	1 Pc	For field carrying & protection

Compliance and documents

Applicable standards	[TO BE CONFIRMED] standard applied to this model
Calibration certificate	[TO BE CONFIRMED]
Optional accessories	[TO BE CONFIRMED]

Warranty and support

12-month warranty on every exported instrument. English operation manual and remote video guidance at commissioning. T/T, L/C at sight and deposit terms for bulk orders; sea, air or rail shipping.