



Power Quality Analyzer

OHPQ2113

- Measurement and analysis of power system quality: voltage/current/frequency, crest factor, dips and swell, power/energy, unbalance, harmonic, inter-harmonic, transient voltage, inrush current measurement, flicker, interruption, 400 Hz.
- Captures waveforms at high-resolution during a variety of disturbances, maximum 100 events, sample rate 20 kSa/s
- Captures the surge currents that occur in a large or low-impedance load.
- Monitors V_{rms} , A_{rms} , harmonics, flicker, dip, swell, rapid voltage change, interruption, unbalance; time duration of 2 hours to 7 days.
- 8 GB memory card, USB, LAN interface.





Model		OHPQ2113		
Display	Screen	Color TFT LCD		
	Size	5.6-inch		
	Resolution	320 × 240		
	Brightness	Adjustable		
	Housing			
Interface	Protection	Protection shield, strong		
	IP	IP51, accords IEC60529		
Memory	USB Host	Download file to PC by U disk for analyze with PC software		
	LAN	For remote control of the Analyzer and measurement data transmission.		
	Flash Memory	128 MB		
	TF Card	Standard 8G		
	Mechanical			
Environment	Dimension	262 × 173 × 66 mm		
	Weight	1.6 kg		
	Working temperature	0 °C ~ 40 °C		
Power	Storage temperature	-20 °C ~ 60 °C		
	Humidity	90% relative humidity		
Standard	Adapter input	90 ~ 264 V		
	Adapter output	12 V 2 A		
	Battery	Rechargeable NI-MH ion 7.2 V 3.8 Ah		
	Battery Working Time	>7 hours		
	Battery Charge Time	4 hours		
Electrical Safety	Measurement Method	IEC61000-4-30 Class-S		
	Measurement Performance	IEC61000-4-30 Class-S		
	Power Quality Monitoring	EN50160		
	Flicker	IEC61000-4-15		
Wire Combinations	Harmonic	IEC61000-4-7		
	Complies with	IEC61010-1, Safety Degree: 600 V CAT IV 1000 V CAT III		
	Max. voltage at Voltage Input	600 V CAT IV 1000 V CAT III		
Voltage Input	Max. voltage at Current Input	42 Vpk		
	1∅+NEUTRAL	Single phase with neutral		
	1∅ SPLIT PHASE	Split phase		
	1∅ IT NO NEUTRAL	Single phase system with two phase voltages without neutral		
	3∅ WYE	3-phase 4-wire system, Y type		
	3∅ DELTA	3-phase 3-wire system delta (Delta)		
	3∅ IT	3-phase Y type without neutral		
	3∅ HIGH LEG	4-wire 3-phase delta system (Delta) with center tapped high leg		
	3∅ OPEN LEG	Open-delta (Delta) 3-wire system with two transformer windings		
	2-ELEMENT	3-phase 3-wire system without current sensor on phase L2 / B (2 Watt meter method)		
Current Input	2 1/2-ELEMENT	3-phase 4-wire system without voltage sensor on phase L2 / B		
	Input Channels	4 (3 phase + neutral) DC coupling		
	Max. Input Voltage	1000 Vrms		
	Range of nominal voltage	50 to 500 V		
	Max pulse peak voltage	6 kV		
Sampling System	Bandwidth	>3 kHz		
	Input Impedance	4 mΩ / 5 pF		
	Numbers of Input	4 (3 phase + neutral) DC coupling		
	Type	Clamp Current Sensor with mV output		
Measurement	Input Range	1 to 3000 Arms with supplied current clamp		
	Input Impedance	50 kΩ		
	Bandwidth	3 kHz		
	Resolution	8 channels 16 bits AD		
Voltage, Current, Frequency	Sampling Rate	20 kS/s for each channel, 8 channels sample synchronously		
	RMS Sampling	5000 points for 10/12 cycles (according to IEC 61000-4-30)		
	PLL Sync	4096 points for 10/12 cycles (according to IEC61000-4-7)		
	Accuracy	±0.5%		
Voltage, Current, Frequency	Measurement Range	Resolution	Accuracy	
	Vrms (AC+DC)	1 ~ 1000 Vrms	0.1 Vrms	±0.5% of nominal voltage
	Vpk	1 ~ 1400 Vpk	0.1 Vpk	±0.5% of nominal voltage
V (Crest Factor)	1.0 ~ 2.8	0.01	±5%	



	Arms (AC)	1 ~ 1000 A/3000 A/5000 A	1 A	±1% ± 2 A
		1 ~ 100 A	0.1 A	±1% ± 0.2 A
	Apk	1 ~ 4000 Apk	1 A	±1% ± 2 A
	A (Crest Factor)	1 ~ 10	0.01	±5%
	Frequency	42.5 ~ 57.5 Hz (50 Hz nominal)	0.0 1 Hz	±0.0 1 Hz
51 ~ 69 Hz (60 Hz nominal)		0.0 1 Hz	±0.0 1 Hz	
Measurement		Measurement Range	Resolution	Accuracy
Dips & Swells	Vrms 1/2	0 ~ 200% of nominal voltage	0.1 Vrms	±1%
	Arms 1/2	1 ~ 3000 A	1 A	±1% ± 2 A
	Threshold levels	Threshold is settable according to nominal voltage percentage Detectable events type: Dips, Swells, Interruption, Voltage Rapid Change		
	Duration	Hour-minute-second-microsecond	0.5 period	1 period
Harmonic	Harmonic Number	1 ~ 50		
	Inter-Harmonic	1 ~ 49		
	Harmonic Voltage	0.0 ~ 100.0%	0.1%	±0.1% ± nx0.1%
	Harmonic Current	0.0 ~ 100.0%	0.1%	±0.1% ± nx0.1%
	THD	0.0 ~ 100.0%	0.1%	±2.5%
	DC Relative	0.0 ~ 100.0%	0.1%	±0.2%
	Frequency	0 ~ 3500 Hz	1 Hz	1 Hz
	Phase	-360° ~ 0°	1°	± nx1.5°
Power and Energy	Active Power / Apparent Power / Reactive Power	1.0 ~ 20.00 MW	0.1 kW	±1.5 ±10 digits
	Energy	0.00 kWh ~ 200 GWh	10 Wh	±1.5 ±10 digits
	Power Factor	0 ~ 1	0.01	±0.03
	Flicker			
	Pst (1 min), Pst, Plt, PF5	0.00 ~ 20.00	0.01	±5%
Imbalance	Voltage	0.0 ~ 5.0%	0.1%	±0.5%
	Current	0.0 ~ 20.0%	0.1%	±1%
	Voltage Phase	-360° ~ 0°	1°	±2 digits
	Current Phase	-360° ~ 0°	1°	±5 digits
Voltage Transient	Vpk	±6000 Vpk	1 V	±15%
	Vrms	10 ~ 1000 Vrms	1 V	±2.5%
	Min. Test Time	50 us		
	Sampling Rate	20 kS/s		
Inrush Current	Arms (AC + DC)	0 ~ 3000 Arms	0.1	±1% ± 5 digits
	Inrush Duration	6 s ~ 32 min selectable	10 ms	±20 ms
Logger	Recording	User-defined parameters for 4 phases at the same time		
	Memory	Data stored in TF card, 8GB		
	Duration Time	2 hrs to 1 year		
	Interval	1 s to 1 hrs		

Accessories:

OHPQ2100-A1	Voltage Test Leads (x5)
OHPQ2100-A2	Alligator Clips (x5)
OHPQ2100-A3	CD (Software + User Guide)
OHPQ2100-A4	Power adapter and power patch cord

Options:

Clamp Model	Appearance	Measurement Range	Output Voltage Ratio	Working Frequency	Accuracy	Safety	Clamp Radius	Dimensions (mm)
OHPQ2100-A5		5 A	10 mV/A	45 Hz ~ 55 Hz	0.2%	○	8 mm	158 × 43 × 24
OHPQ2100-A6		50 A	10 mV/A	50 Hz ~ 400 Hz	0.2%	○	8 mm	171 × 46 × 27
OHPQ2100-A7		100 A	1 mV/A	50 Hz ~ 400 Hz	0.2%	○	13 mm	174 × 52 × 27
OHPQ2100-A8		1 A ~ 1000 A	1 mV/A	40 Hz ~ 100 kHz	1%	CAT 600 V	52 mm	111 × 216 × 45

Flexible Probes Mode	OHPQ2100-A9	OHPQ2100-A10
Appearance		
Primary Current Rating	3000 A	5000 A
Output Voltage Ratio	65 mV / 1000 A	50 mV / 1000 A
Measurement Range	15 A ~ 3000 A	20 A ~ 5000 A
Accuracy	±1% + position error	±1% + Position Error
Maximum Allowable Input	100 kA	100 kA
Phase Error	<±1°	<±1°
Noise	<2 mVrms (10 Hz ~ 10 kHz)	<2 mVrms (10 Hz ~ 10 Hz)
Frequency Characteristic	10 Hz ~ 10 kHz (-3 dB)	10 Hz ~ 10 kHz (-3 dB)
Weight	130 g	130 g
Length	200 cm	200 cm
CT Perimeter	50 cm	50 cm
Measurement Position Error	±2%	±2%