OWH9830

Three-Phase Dual-Channel Digital Power Analyzer

1000V/20A
Range

0.5%
Accuracy

IEC
Modes

AC/AC + DC
Harmonic Test

RS232
Interfaces

16 Power Measurement Functions

Evaluate device performance and analyze power quality

True RMS

Reactive Power

Active Power

Apparent Power

Efficiency

Voltage & Current Peak Value

Voltage & Current Phase Angle

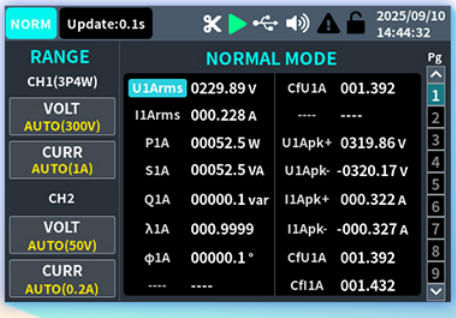
Power Factor

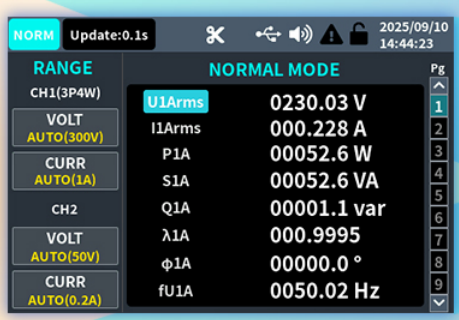
Voltage Frequency

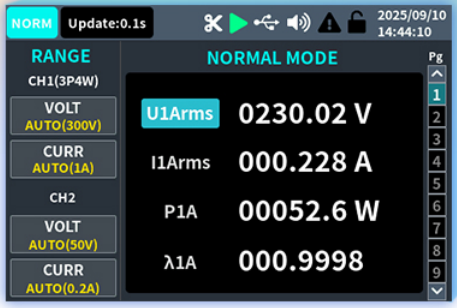
Crest Factor

Customizable Interface Layout

Users can flexibly customize the interface layout
with 4, 8, or 16 items displayed on the same screen.
Key data is clear at a glance, greatly improving monitoring efficiency.

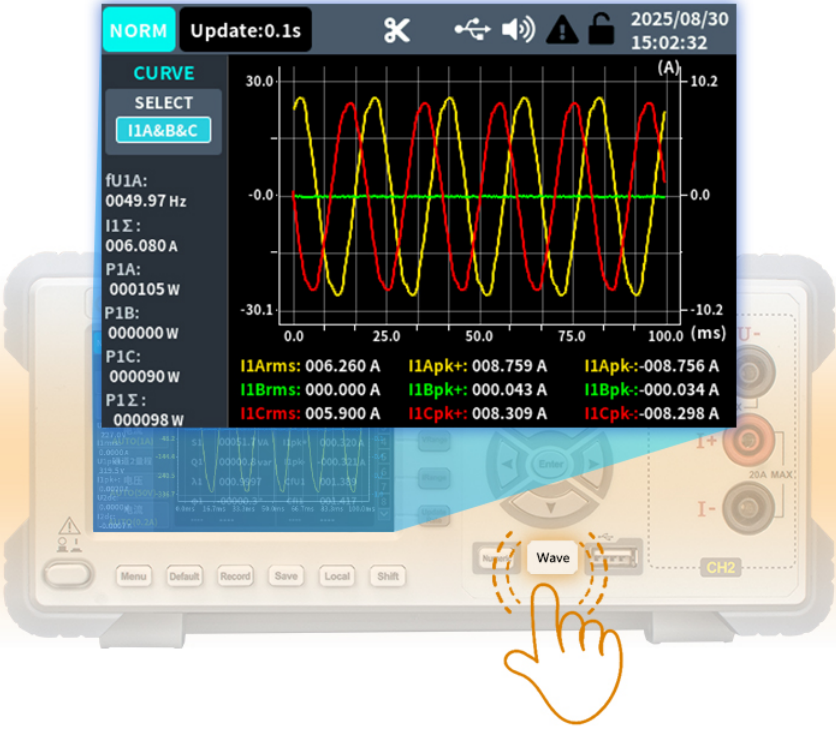






Real-Time Waveform Display

With one-click switching to the real-time waveform view, signal trends become clear and intuitive. It is an essential feature for analyzing harmonic distortion, evaluating switching transients, verifying phase relationships, and diagnosing power quality issues.



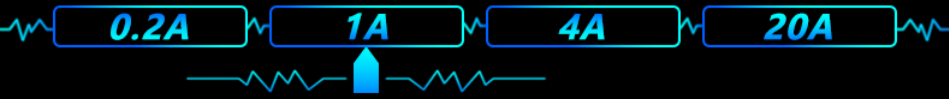
IEC Harmonic Measurement & Analysis

Complies with IEC 61000-4-7 international harmonic measurement standards, supporting up to the 63rd harmonic with a fundamental error of <1%.

It provides comprehensive measurement of voltage, current, and harmonic-related active/reactive power, power factor, and THD. Multiple display modes—including list, numeric, and bar chart—make analysis results clear and easy to interpret.

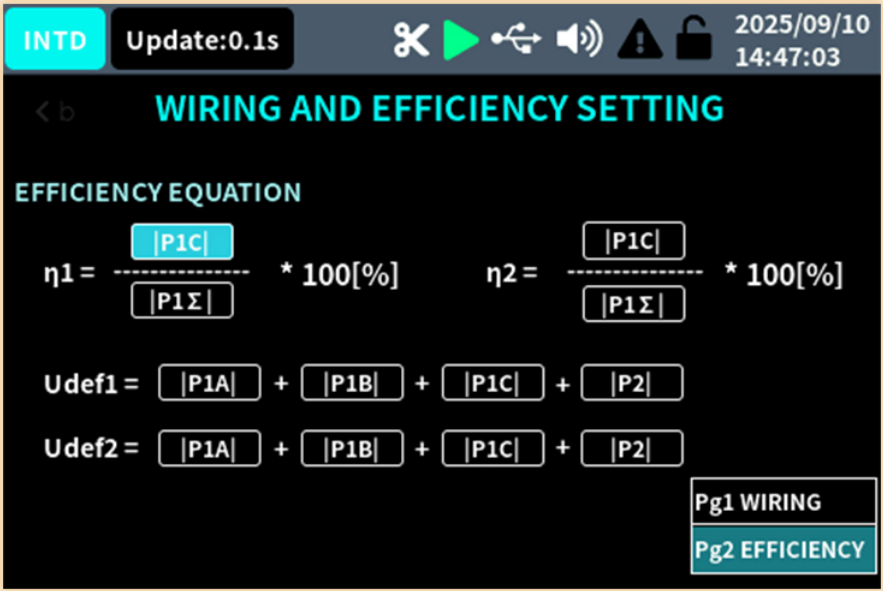
Supports Current and Power Integration

Both CH1 and CH2 support active power integration (Wh) and current integration (Ah), with options for auto or fixed range settings. This makes it easy to measure appliance energy use, battery charge/discharge, and power efficiency.



Efficiency Measurement

The OWH9830 power meter features two independent channels and supports custom wiring configurations and efficiency formulas. Users can simultaneously obtain input power, output power, and efficiency results, making efficiency testing simpler and more reliable.



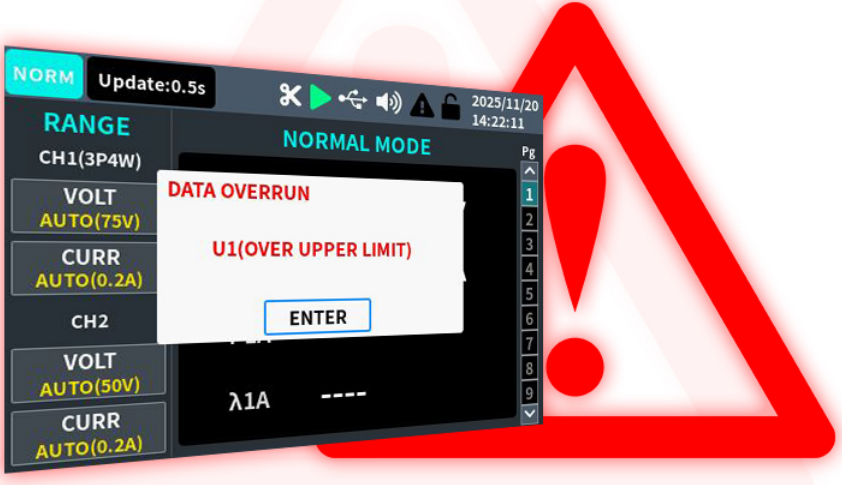
More Than a Snapshot, Capture the Entire Process

The OWH9830 power meter supports USB screenshots and long-term data logging, recording 8 key electrical parameters for up to 72 hours. It helps users track power system changes and spot issues early. All data can be easily exported via USB for analysis and reporting.

*USB drive required for data recording and screenshots.

Upper/Lower Limit Alarm Function

The OWH9800 series supports upper and lower limit alarms for multiple parameters such as voltage, current, and power. When a value exceeds the set limits, the meter triggers an immediate alert, enabling efficient automated testing, fast pass/fail judgment on production lines, and enhanced equipment safety.



Applications

Three-Phase Motor

Industrial QA

Frequency Converters

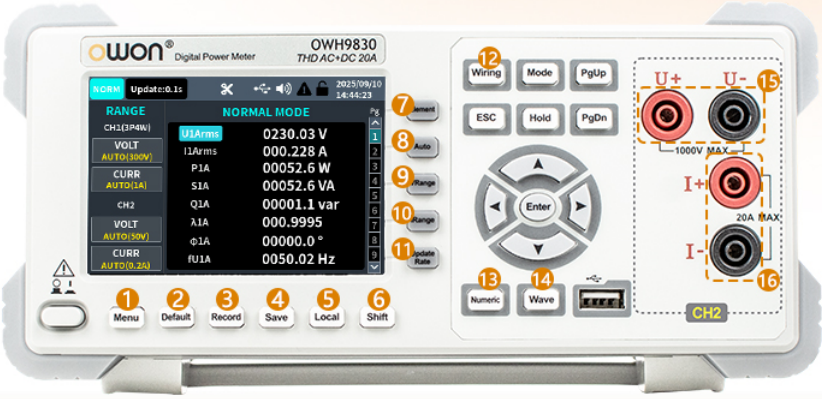
Solar Inverters

Energy Storage Systems

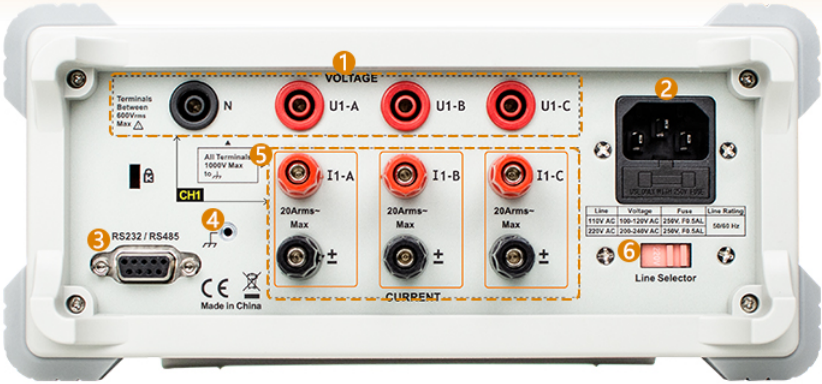
Factory Equipment

Power Quality

Panel Introduction



1: Enter Menu
2: Return to Factory Home
3: USB Data Logging
4: Waveform Save
5: Remote Connection/Key Lock
6: Multi-function Key
7: Channel Switch
8: Auto Range Setup
9: Voltage Range Setting
10: Current Range Setting
11: Data Update Rate
12: Wiring & Efficiency Setup
13: Digital Display View
14: Waveform Display View
15: CH2 Voltage
16: CH2 Current



1: CH1 Voltage Terminal
2: AC Power Terminal
3: RS232 Interface
4: Ground Terminal
5: CH1 Current Terminal
6: 110V/220V AC Selector

Specifications

The instrument must be operated continuously for more than 30 minutes at the specified operating temperature to meet the following specifications:

Model	OWH9830	
Display	3.96-inch TFT LCD Display	
Update rate	0.1s、0.2s、0.5s、1s、2s、5s	
Measurement items	V, A, W, VA, var, λ, fU, CfU, CfI, Upk, Ipk, THD	
Measurement method	CH1 3ph-AC	CH2 1ph-AC+DC
Voltage measurement range	3.0V-600Vrms	0V-1000Vpk*1
Voltage range	CF=3：75V/150V/300V/600V CF=6：37.5/75V/150V/300V	50V/100V/500V/1000V
Voltage accuracy	±(0.4% of reading + 0.1% of range + 1 digit)	
Voltage resolution	0.01V/0.1V	
Current measurement range	0~20.0Arms	0-20Apk*1
Current range	CF=3：0.2A/1A/4A/20A CF=6：0.1A/0.5A/2A/10A	0.2A/1A/4A/20A
Current accuracy	±(0.4% of reading + 0.1% of range + 1 digit)	
Current resolution	0.001A	
ange Switching	Auto/Manual	
Power Range	0~36kW	0~20kW
Power accuracy	±(0.4% of reading + 0.1% of range + 1 digit)	
Power Resolution	0.01W/0.1W/1W	
Power Factor Range	-1.000~1.000	
Power Factor Accuracy	±(0.4% of reading + 0.1% of range + 1 digit)	----
Frequency Accuracy	±(0.1% of reading + 1 digit)	----
Harmonic Analysis	2.8 kHz bandwidth, up to 63rd order	----
Integration Function	Watt-hour (Wh), Ampere-hour (Ah)	
Warm-up Time	>30 min	
Peak Current	60A	30A
Maximum Continuous Input	Vrms=700V; Irms=24A	Vpk=1100V; Ipk=24A
Interface	RS232/RS485	
Communication Protocol	Standard SCPI ， Modbus protocal	
Baud Rate (bps)	4800、9600(default)、19200、38400、57600，115200	
Display Hold	YES	
Mute	YES	
Key Lock	YES	
Power Supply	AC 100V~240V, 50/60Hz	
Operation environment	18 ℃ ~ 28 ℃, 30% ~ 75% RH (When operating temp. is outside 18 ℃ ~ 28 ℃, add temp. coefficient: 0.05% of reading / ℃)	
Storage Environment	-10 ℃ ~ 50 ℃, ≤ 80% RH (non-condensing)	
Operating Altitude	≤2000 meters	
Weight	1.3kg	
Dimensions	295mm(W) × 110mm(H) × 235mm(L)	

*1：Refers to the maximum DC peak value.

Adjustment Interval: A calibration interval of one year is recommended.

Packing List

Standard Accessories

Main Unit

Power Cord

User Manual

Banana-to-Alligator Clip
7B2A-10

RS232 Cable
7R232MFS

Optional Accessories

Banana Plug
7A2A_01

Test Junction Box - US Socket
7WHBOX_3

Images for reference only. Please refer to the actual product.