

OWH9811

Single-Phase Dual-Channel Digital Power Meter



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

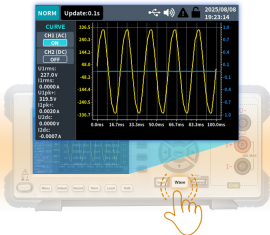
Users can flexibly customize the interface layout with 4, 8, or 16 items displayed on the same screen.

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.

0.2A

1A

4A

20A

INTD

Update: 0.1s



2023/06/10
15:00:39

PARAMETER

CH1

MODE

MANUAL

SET TIME

0000 01 00

CH2

MODE

MANUAL

SET TIME

0000 01 00

INTEGRATION MODE

CH1

RESET

START

STOP

WP1

00.0000 Wh

q1

00.0000 Ah

TEST TIME: 0000-00:01

CH2

RESET

START

STOP

WP1

00.0000 Wh

q2

00.0000 Ah

TEST TIME: 0000-00:01

Auto

More Than a Snapshot, Capture the Entire Process

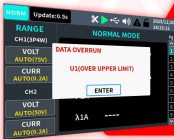
The OWH98 power meter supports **USB screenshots** and **long-term data logging**, recording 8 key electrical parameters for up to **72 hours**. It helps users track power system changes and spot issues early. All data can be easily exported via USB for analysis and reporting.



*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.



Efficiency Measurement

The OWH98 power meter features two independent channels and supports custom efficiency formulas. Users can obtain input power, output power, and efficiency results simultaneously, making efficiency testing simpler and more reliable.

INTD

Update:0.1s



2025/09/10

15:01:30



WIRING AND EFFICIENCY SETTING

WIRING SETTING

ELEMENT1:1P2W ELEMENT2:1P2W

EFFICIENCY EQUATION

$$\eta 1 = \frac{P1}{P2} * 100[\%]$$

$$Udef1 = P1 + P2$$

Applications



Education & Research



Industrial QA



Power Supply Test



Household Appliance Testing



New Energy& Energy Storage



Power Quality

Panel Introduction



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



- 1: CH1 Voltage Terminal
- 3: RS232 Interface
- 5: CH1 Current Terminal
- 2: AC Power Terminal
- 4: Ground 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	CW619211	
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, k, PU, CU, CH, Upk, Ipk, THD	
Measurement method	CH1 1ph-AC	CH2 1ph-AC+DC
Voltage measurement range	3.0V-600Vrms	0V-1000Vpk [†]
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 [†]
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	
Range Switching	Auto/Manual	
Power Range	0-12kW	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	
Communication Protocol	Standard SCPI, Modbus protocol	
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 °C ~ 28 °C, 30% ~ 75% RH (When operating temp. is outside 18 °C ~ 28 °C, add temp. coefficient: 0.05% of reading / °C)	
Storage Environment	-10 °C ~ 50 °C, ± 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
7R232MPS



Optional Accessories

Banana Plug
7A2A_01



Test Junction Box - US Socket
7WHBOX_1U



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