

## **OWH9800 Series Single/Three Phase digital power meter**

OWH9811 single phase digital power meter OWH9830 three phase digital power meter



## + Key Highlights:

Supports Single-Phase and Three-Phase Measurement

Meets the testing needs of various power systems.

✓ Auto Ranging with 0.5 Class Accuracy

Ensures high reliability and measurement precision.

☑ Harmonic Analysis up to 63rd Order

Ideal for applications in renewable energy, motor drives, lighting, and more.

- **☑** Dual-Channel Design
  - CH1 (Rear Panel): AC Input Supports 3–600V / 0–20A RMS with  $\pm 0.5\%$  accuracy
  - **CH2 (Front Panel): DC Input** Supports 0–1000V / 0–20A with ±0.05% accuracy
- **✓** Supports Power and Efficiency Calculation

Automatically calculates input/output power and conversion efficiency.

✓ Trend Waveform Display + Real-Time Refresh

Visualizes dynamic parameter changes for easier debugging and analysis.

**☑** 3.95" TFT Color Display

Clear, graphical multi-parameter display for intuitive operation.

✓ Standard Digital Communication Interface (RS232/485)

Enables remote monitoring and data logging, compatible with SCPI commands and Modbus protocol.

**✓** USB Screenshot & Long-Term Data Recording

Minimum record interval of 100ms; supports logging of up to 16 items simultaneously, ideal for data analysis.

## +Application Fields:

- New Energy Power Supply Testing
- Efficiency Testing of Power Electronics Products
- Educational Experiments and R&D Verification
- Lighting Driver& Home Appliance Energy Consumption Evaluation





## + Technical specifications

Model	OWH9811		OWH9830	
Display		3.95" HD TF	Color Screen	
Update rate	0.1s、0.2s、0.5s、1s、2s、5s		0.1s、0.2s、0.5s、1s、2s、5s	
Measurement Items	V, A, W, VA, var, λ, fU, CfU, CfI, Upk, Ipk, THD		V, A, W, VA, var, λ, fU, CfU, Cfl, Upk, lpk, THD	
Measure type	Single phase AC	DC	Three phase AC	DC
Voltage Measurement range	3.0V-600Vrms	0V-1000Vdc	3.0V-600Vrms	0V-1000Vdc
Voltage range	CF=3: 5V/150V/300V/600V CF=6: 37.5/75V/150V/300V	50V/100V/500V/1000V	CF=3: 5V/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)		±(0.4% of reading + 0.1% of range + 1 digit)	
Voltage resolution	0.01V/0.1V		0.01V/0.1V	
Current Measurement range	5.0mA~20.0Arms	5mA-20Adc	5.0mA~20.0Arms	5mA-20Adc
Current range	CF=3: 0.2A/1A/4A/20A CF=6: 0.1A/0.5A/2A/10A	0.2A/1A/4A/20A	CF=3: 0.2A/1A/4A/20A CF=6: 0.1A/0.5A/2A/10A	0.2A/1A/4A/20A
Current accuracy	$\pm (0.4\% \text{ of reading} + 0.1\% \text{ of range} + 1 \text{ digit})$ $\pm (0.4\% \text{ of reading} + 0.1\% \text{ of range})$		1% of range + 1 digit)	
Current resolution	0.001A/0.01A 0.001A/0.01A		/0.01A	
Current range	Auto / Manual			
Power range	1W~12kW	1W~20kW	1W~36kW	1W~20kW
Power accuracy	±(0.4% of reading + 0.1% of range + 1 digit)		±(0.4% of reading + 0.1% of range + 1 digit)	
Power resolution	0.01W/0.1W/1W		0.01W/0.1W/1W	
Power factor	-1.000~1.000	N/A	-1.000~1.000	N/A
Power factor accuracy	±(0.4% + 0.1% of reading + 1 digit)	N/A	±(0.4% + 0.1% of reading + 1 digit)	N/A
Frequency range	40Hz~70Hz	DC	40Hz~70Hz	DC
Frequency accuracy	±(0.1% of reading + 1 digit))	N/A	±(0.1% of reading + 1 digit))	N/A
Harmonic Analysis	Up to 2.8kHz bandwidth, supports up to 63rd orde	N/A	Up to 2.8kHz bandwidth, supports up to 63rd orde	N/A
Harmonic Accuracy	±(0.3% of range + 5% of reading + 1 digit))	N/A	±(0.3% of range + 5% of reading + 1 digit))	N/A
Warm-up Time	>30 min		>30 min	
Peak Current Display	Up to 60A	Up to 30A	Up to 60A	Up to 30A
Max Continuous Input	Voltage: 700V Current: 24A	Voltage: 1100V Current: 24A	Voltage: 700V Current: 24A	Voltage: 1100V Current: 24A
Interface		RS232	2/RS485	
Protocol	Standard SCPI , Modbus			
Baud Rate	4800、9600(default)、19200、38400、57.6K,115200,			
Display Hold function	Yes		Yes	
Mute	Yes		Yes	
Lock	Yes		Yes	



Power supply	Input: 100V~240VAC, 50/60Hz			
Working temperature	18℃–28℃, 30%–75% RH			
	(Add 0.05%/°C correction outside range)			
Storage	-10°C~50°C, 80% RH (non-condensing)			
Altitude	≤2000m			
Dimension	235mm(L) × 110mm(H) × 295mm(W)			
Weight	1.3kg	1.3kg		

<sup>\*</sup> Specifications are subject to change without prior notice. Please refer to our website for the latest updates."

+ Accessories The picture is for reference only, please refer to the actual product





电源线

产品说明书