



OWH80Q Series

Four-Channel Programmable DC Power Supply

Key Features

- 1/2 3U rack cabinet size, suitable for installation in standard 19-inch racks
- High-Performance Power: 600W/1000W/2000W output with 0.05% accuracy. Provides massive 0-80V voltage and huge current up to 20A.
- High setting resolution: 10mV/1mA; readback resolution: 10mV/1mA
- CV/CC priority setting
- Built-in bleed circuit to ensure no residual high voltage at shutdown
- 4.3-inch TFT LCD color screen display with curve output and online 1-minute data logging
- Full digital control integrated with OVP, OCP, OPP, over-temperature, and input undervoltage protection
- Supports LAN, RS485, RS232 serial communication interfaces, and support SCPI

Product Introduction

The OWH80Q series four-channel programmable DC power supply is a versatile and high-precision laboratory / industrial-grade instrument designed for advanced testing and automation applications. Offering adjustable outputs from 0-80V with maximum power ratings of 2000W, this device combines CV/CC dual-mode operation and a 100-step programmable list mode (LIST). Key features include:

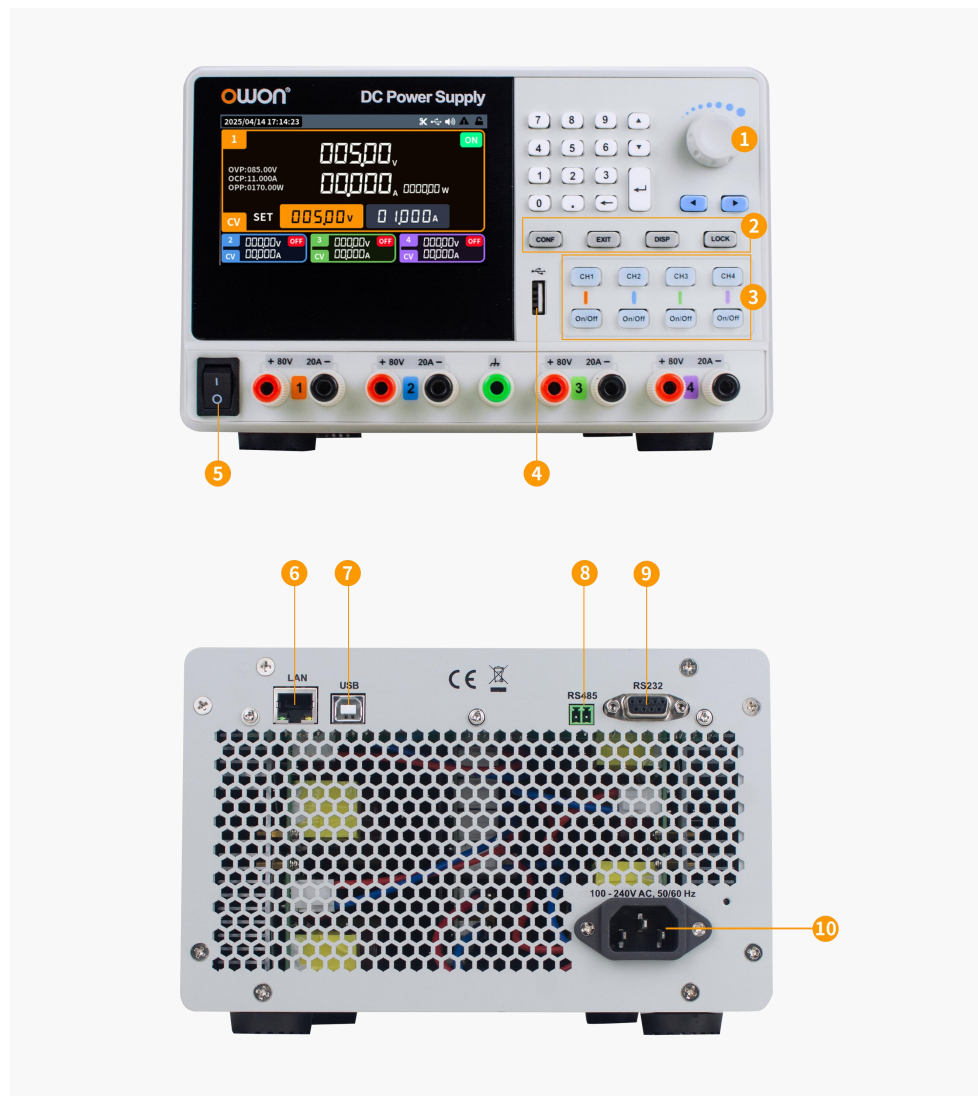
Ultra-Precise Control: 10mV/1mA resolution and $\leq 0.05\%$ accuracy ensure stable voltage/current regulation, while ripple/noise suppression ($< 30\text{mVpp}$) guarantees reliable performance in sensitive environments.

Intelligent Connectivity: Equipped with USB, LAN, RS485/RS232 interfaces and SCPI protocol support, it integrates seamlessly with PC software for remote operation, data logging, and automated workflows.

Robust Protection: Built-in OVP/OCP/OPP safeguards protect devices under test from overvoltage, overcurrent, and overpower conditions, enhancing safety and reliability.

User-Centric Design: Intuitive controls, real-time waveform visualization, and self-diagnostic fault alerts simplify operation. USB connectivity enables rapid configuration backups or screenshots.

Overview



1. Knob
2. Function Keys
3. Channel & On/Off Button
4. USB Host Port
5. Power Switch
6. LAN Port
7. USB Serial Port
8. RS-485 Interface
9. RS-232 Interface
10. AC Power Input Terminal

A

High-precision voltage / current control

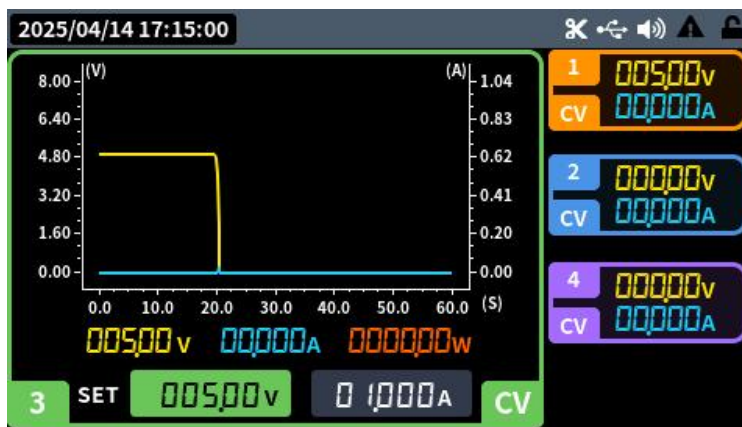
The OWH80Q Series offers a wide-range output (80V/20A/2000W), with all four channels supporting high-power 500W output. It integrates high-precision control, long-term stability, high reliability, and low thermal drift into a single platform, delivering up to 0.05% voltage and current setting accuracy to meet demanding testing applications.



B

Powerful List Mode

The OWH80Q Series is equipped with a powerful LIST function, which supports independent output waveform for each channel and synchronized configuration of multi-channel timing relationships. Through a user-friendly interface, users can flexibly edit and execute sequences of up to 100 steps. USB file import is also supported, greatly simplifying the configuration and management of complex testing processes.



C

Waveform Display

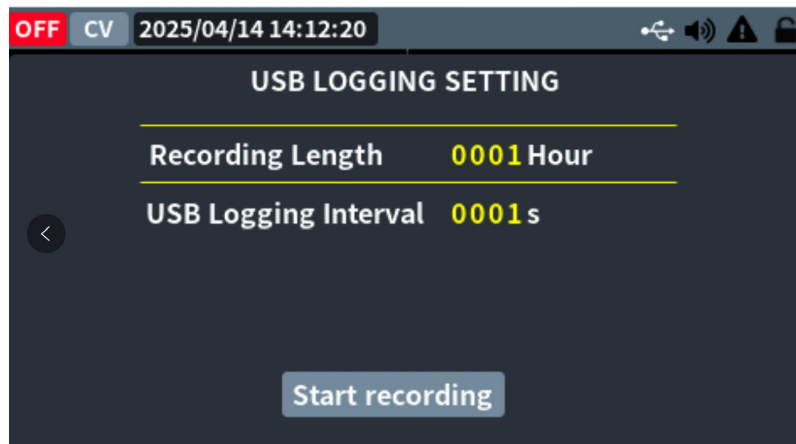
OWH80Q series provide waveform display function, it is convenient for users to capture the abnormal situations and realize power supply and scope functions.



D

USB Data Logging & Screenshot

OWH80 series provide USB screenshot and recording local storage function, it is convenient for user to monitor the abnormal data up to 72 hours long-term.



E

PC software support

OWH80 series support full communication interface, RS232, RS485, Ethernet, and also provide PC software for users to easily remote control the model.



F

Series/Parallel Operation Enabled — One Unit, Multiple Applications

The OWH80Q Series features flexible series and parallel operation modes, providing versatile power supply configurations within a single compact unit — ideal for a wide range of laboratory and industrial applications.

The fanless model (-F series) combines ultra-quiet operation with industry-leading power density, delivering up to 1000W and 40A without the need for cooling fans. This makes it exceptionally suitable for noise-sensitive environments such as research labs, automated test systems, and audio/video production facilities.

○ Main Specifications

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

Model		OWH8080Q-2000	OWH8040Q-600F	OWH8020Q-1000F
Channel		4		
Rated output (0°C-40°C)	Voltage	0 - 80V	0 - 80V	0 - 80V
	Current	0 - 20A	0 - 10A	0 - 5A
Power		4*500W	4*150W	4*250W
Input power		198V-240Vac; 45Hz-65Hz		
Load regulation (%of output+offset)	CV	≤0.05%+20mV	≤0.03%+20mV	≤0.03%+20mV
	CC	≤0.1%+30mA	≤0.05%+30mA	≤0.05%+30mA
Input power regulation (%of output+offset)	CV	≤0.05%+20mV	≤0.03%+20mV	≤0.05%+20mV
	CC	≤0.1%+30mA	≤0.05%+30mA	≤0.05%+30mA
Setting resolution		10mV/1mA		
Readback resolution		10mV/1mA		
Setting accuracy	Voltage	≤0.05% ± 20mV	≤0.05% ± 40mV	≤0.05% ± 40mV
	Current	≤0.1% ± 30mA	≤0.1% ± 0.1%FS	≤0.1% ± 0.1%FS
Readback accuracy	Voltage	≤0.05% ± 20mV	≤0.05% ± 40mV	≤0.05% ± 40mV
	Current	≤0.1% ± 30mA	≤0.1% ± 0.1%FS	≤0.1% ± 0.1%FS
Ripple noise	Voltage	≤50mVp-p	≤100mVp-p	≤100mVp-p
	Current	≤30mArms	≤100mArms	≤120mArms
Output temp drift coefficient (0°C-40°C)		100ppm/°C (Voltage) ; 200ppm/°C (Current)		
Readback temp drift		100ppm/°C (Voltage) ; 200ppm/°C (Current)		
Transient response (10%-90% rated load)		≤5.0ms		
Working temperature		0-40°C		
Display		USB, LAN, RS485, RS232		
Interface		4.3-inch TFT LCD screen		
Dimension (W*H*Dmm)		215.0 x 133.0 x 446.2		
Weight (kg)		Approx. 6kg		

*: Input voltage: 100-120Vac, output power reduced by half.

Specifications subject to change without prior notice.

○ Ordering Information

Ordering Information	Order NO.
Main Unit Models	
0-80V, 0-20A, 2000.0W, 4CH	OWH8080Q-2000
0-80V, 0-10A, 600.0W, 4CH, Fanless	OWH8040Q-600F
0-80V, 0-5A, 1000.0W, 4CH, Fanless	OWH8020Q-1000F
Standard Accessories	
Quick Guide	_____
Power cord	_____
Data cable	7ULD10
Options Accessories	
Banana plug to crocodile clip test leads	7B2A-16
Warranty	
Main unit: 1-year warranty (excluding accessories)	