



OWH6522

Single-Channel High-Power Programmable DC Power Supply

Key Features

- **2U** form factor, perfectly fits standard 19-inch racks.
- **3000W** wide-range output (**60V/120A**) with up to 0.05% accuracy.
- 10mV/1mA setting and readback resolution.
- Selectable **CV/CC priority mode** for diverse load characteristics.
- Supports up to 100-step LIST sequence programming and PC control.
- Built-in P-V curve simulation to accurately **simulate solar panel I-V characteristics**(Optional).
- Fully digital control with integrated OVP, OCP, and OPP protections.
- Standard **USB Device, RS485, and LAN interfaces**; SCPI compatible.
- 3.9-inch TFT color display for real-time viewing of dynamic waveforms and test parameters.

Product Introduction

OWH6522 is a high-performance **programmable DC power supply** designed for R&D testing and industrial automation. With up to **3000W output (60V/120A)** in a single unit, it combines high precision, versatile programmability, and excellent scalability. Whether for renewable energy simulation or precision component testing, it delivers stable, clean, and highly controllable DC power.

Key Highlights:

Compact Design, Powerful Output: The standard **2U form factor** fits perfectly into 19-inch rack systems. A single unit delivers up to **3000W (60V/120A)** of wide-range output, providing both flexible deployment and strong performance.

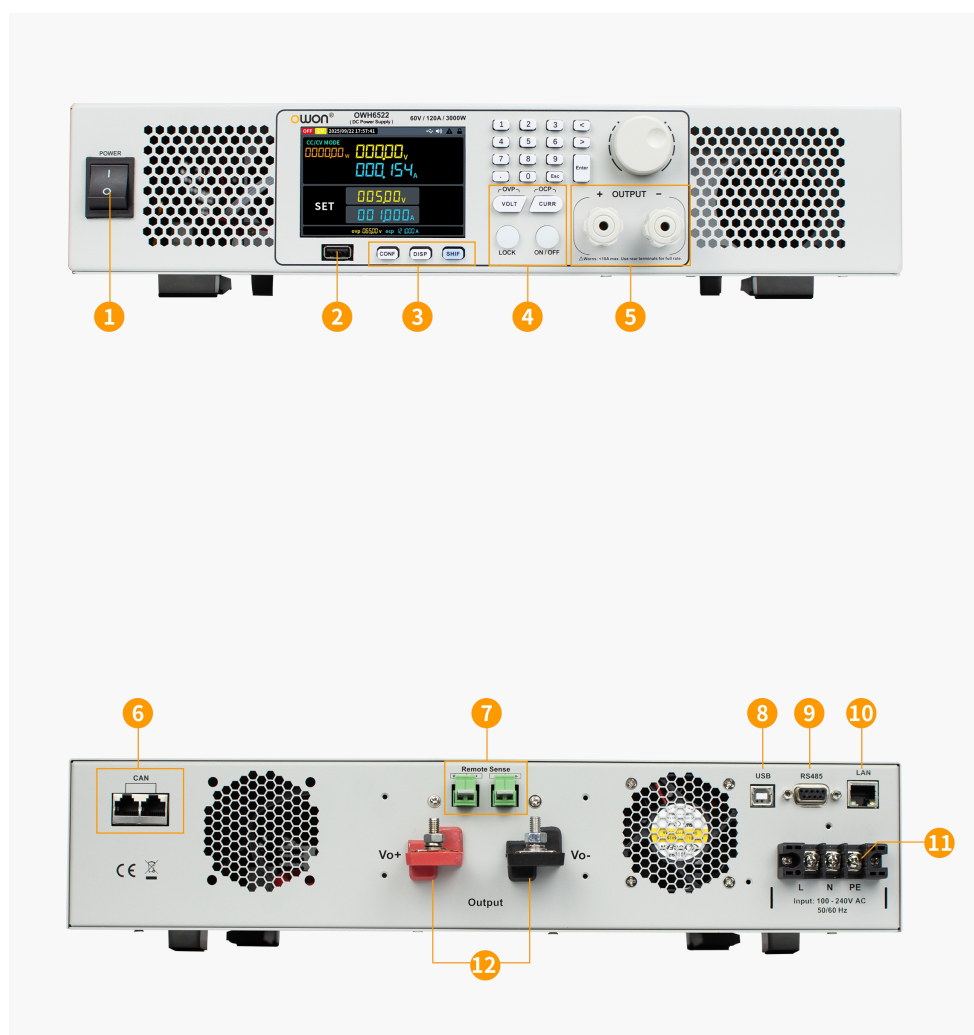
Exceptional Accuracy for Complex Loads: Featuring up to **0.05% output accuracy** and **10mV / 1mA resolution**, the OWH6522 supports **selectable CV/CC priority modes**, enabling reliable operation with a wide variety of load conditions.

Professional Simulation and Automated Testing: Built-in **P-V curve simulation** accurately emulates the I-V characteristics of solar panels. The power supply also supports up to **100-step LIST sequence programming**. Combined with PC control software, it enables fully automated generation of complex output waveforms.

Smart Connectivity and Comprehensive Protection: Based on a fully digital control architecture, the system integrates multiple protections including **OVP, OCP, and OPP**. Standard **USB Device, RS485, and LAN interfaces** with full SCPI command compatibility ensure easy system integration. The 3.9-inch TFT color display provides clear real-time visualization of dynamic waveforms and key parameters, keeping every test under control.

Panel Overview

1. Power Button
2. USB Data Port
3. System Function Keys:
 - CONF - Configuration
 - DISP - Display
 - SHIF - Multi-function
4. Output Control Keys:
 - VOLT - Voltage Setting
 - CURR - Current Setting
 - LOCK - Panel Lock
 - ON/OFF - Output Switch
5. DC Output Terminals
6. CAN Interface
7. Remote Sense Terminals
8. USB Interface
9. RS-485 Interface
10. LAN Interface
11. AC Power Input Terminals
12. DC Power Output Terminals



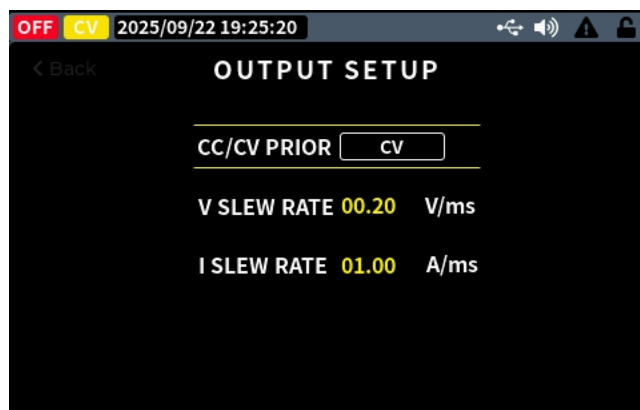
A High-precision voltage and current control

The OWH6522 power supply features a **3000W** wide-range output (**60V/120A**) with high-precision voltage and current control. Combining long-term **stability**, high **reliability**, and **low thermal drift**, it delivers an outstanding setting accuracy of up to **0.05%**.



B CC/CV Priority Mode

In CC/CV mode, users can flexibly select CC or CV priority based on load characteristics to effectively suppress turn-on overshoot. With **adjustable voltage or current slew rates**, it easily satisfies demanding test applications with stringent requirements for voltage/current transition rates.



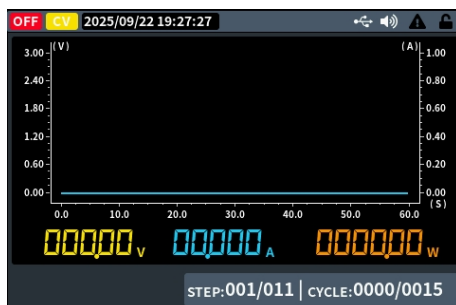
C Programmable LIST Waveform Output

The OWH65 series provides a powerful LIST function, supporting up to **100 programmable steps**. Users can set sequence parameters from the front panel or configure them more conveniently via **PC control software**.

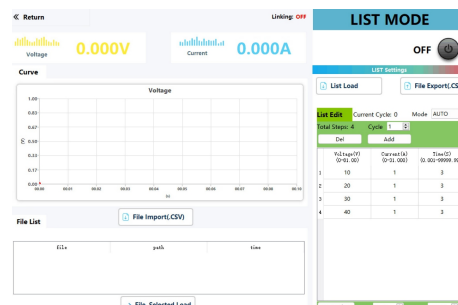
It also supports importing CSV files through the USB interface to run multi-step sequences, allowing flexible generation of complex test waveforms.



LIST Mode Sequence Editing



Local Sequence Output



PC Software Sequence Output

D Real-Time Waveform Display

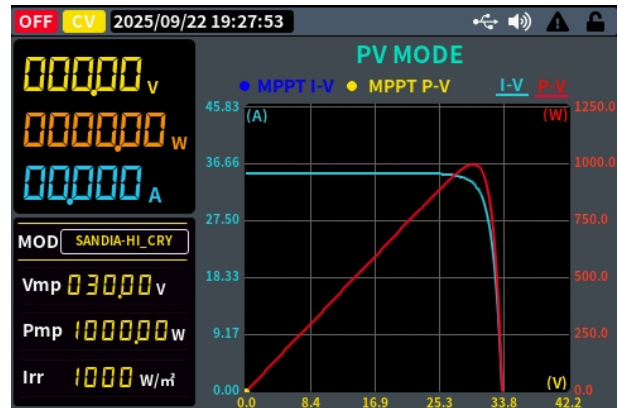
In CC/CV or LIST mode, press the **DISP** key to switch to the **real-time voltage/current waveform display**, allowing intuitive monitoring of output dynamics.



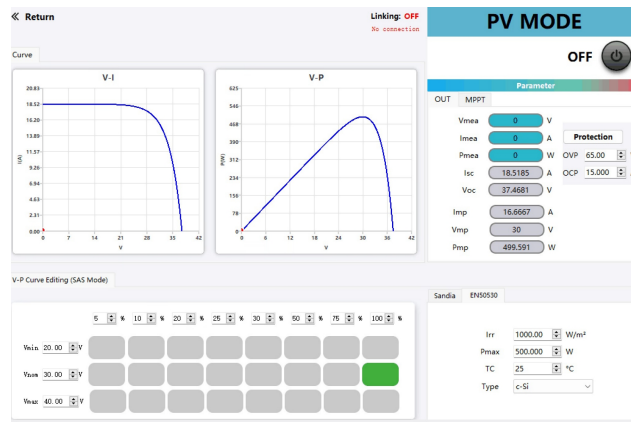
E P-V Curve Simulation (Optional)

The OWH65 series supports **P-V curve simulation**, which can simulate the I-V characteristics of solar panels under different conditions. It supports Static MPPT testing and includes EN50530 and Sandia PV models.

With the optional PV simulation software, multiple power supplies can be controlled for **MPPT tracking tests**, suitable for testing grid-tied inverters, string inverters, hybrid systems, and energy storage converters.

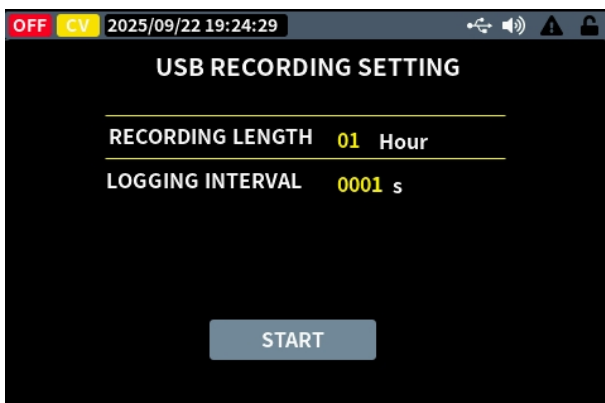


Full P-V curve simulation requires PC software. In addition to panel parameter settings, the PC software also supports static MPPT testing.



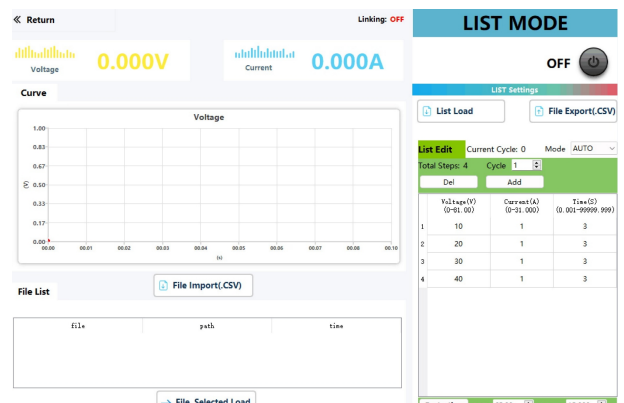
F USB Data Logging and Screenshot

The OWH65 series supports USB **screenshots** and **local data logging**, allowing users to easily capture and save test results. It also enables up to **72 hours** of abnormal data monitoring, improving analysis and troubleshooting efficiency and reliability.



G PC Software Support

The OWH65 series provides **USB Device, RS485, and LAN interfaces**. It also provides dedicated PC software with an intuitive and user-friendly interface, supporting remote monitoring, parameter configuration, and data logging, improving testing convenience and efficiency.



○ Main Specifications

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

Model		OWH6522
Channel		1
Rated output (0°C-40°C)	Voltage	0 - 60V
	Current	0 - 120A
Power		3000W
Input power		100V-240Vac ^{*1} ; 45Hz-65Hz
Load regulation ^{*2}	CV	≤30mV
	CC	≤60mA
Input power regulation	CV	≤30mV
	CC	≤60mA
Setting resolution		10mV/1mA
Readback resolution		10mV/1mA
Setting accuracy	Voltage	≤0.05% ± 30mV
	Current	≤0.1% ± 120mA
Readback accuracy	Voltage	≤0.05% ± 30mV
	Current	≤0.1% ± 120mA
Ripple noise	Voltage	≤80mVp-p
	Current	≤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		3.9-inch TFT LCD screen
Interface		USB, LAN, RS485
Dimension (W*H*D mm)		428mm * 88.0mm * 446mm
Weight (kg)		Approx. 13kg

*1: Output power is derated at low input voltage. Max input current ≤16 A.

*2: The detection point of this indicator is the voltage compensation terminal.

Specifications subject to change without prior notice.

○ Ordering Information

Ordering Information	Order NO.
Main Unit Models	
0-60V, 0-120A, 3000.0W, 1CH	OWH6522
0-60V, 0-120A, 3000.0W, 1CH, PV Simulation Function	OWH6522-S
Standard Accessories	
Quick Guide	_____
Power cord	7Power-1/7Power-4(EU)
Data cable	7ULD10
Pluggable Terminal	7Term-1
Copper Shorting Bar	7Short-1
Warranty	
Main unit: 1-year warranty (excluding accessories)	



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