



OWH67D Series

Dual-channel High-Power Programmable DC Power Supply

The OWH67D Series is a dual-channel high-power programmable DC power supply that supports wide-range constant power output. It includes models OWH67010D-80 (80V/20A, 1000W), OWH67060D-600(600V/10A,6000W) and OWH67060D-150 (150V/30A,6000W), covering diverse high-voltage and high-current testing applications.

Equipped with a 3.95-inch color LCD display, the OWH67D offers a user-friendly interface and excellent performance, with a minimum setting resolution of 10mV / 10mA. It delivers high-precision, stable, and reliable output, with selectable CC/CV priority, programmable LIST waveform output, and a built-in discharge circuit. Comprehensive protections include adjustable OVP, OCP, OPP, input undervoltage, and internal short-circuit protection. Beyond power output, it also provides measurement capability and supports PV simulator functions with built-in EN50530 and Sandia curves for direct evaluation of PV inverter MPPT efficiency.

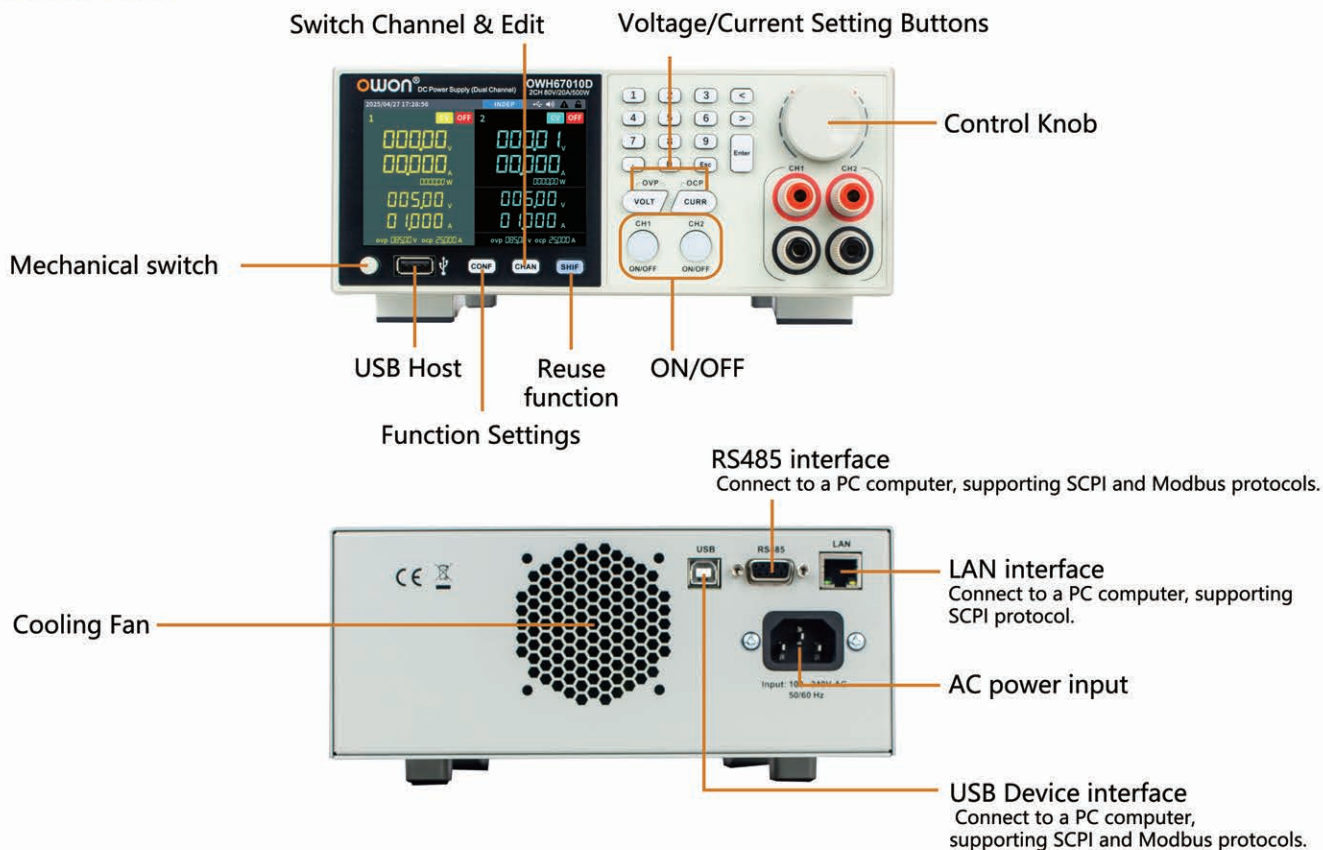
The OWH67D series comes with standard LAN / RS485 / USB interfaces, supporting SCPI and Modbus protocols. It allows remote control via USB communication for real-time monitoring and flexible output configuration. It is widely used in power design validation, general laboratory testing, automotive electronics, and new energy applications.

Features

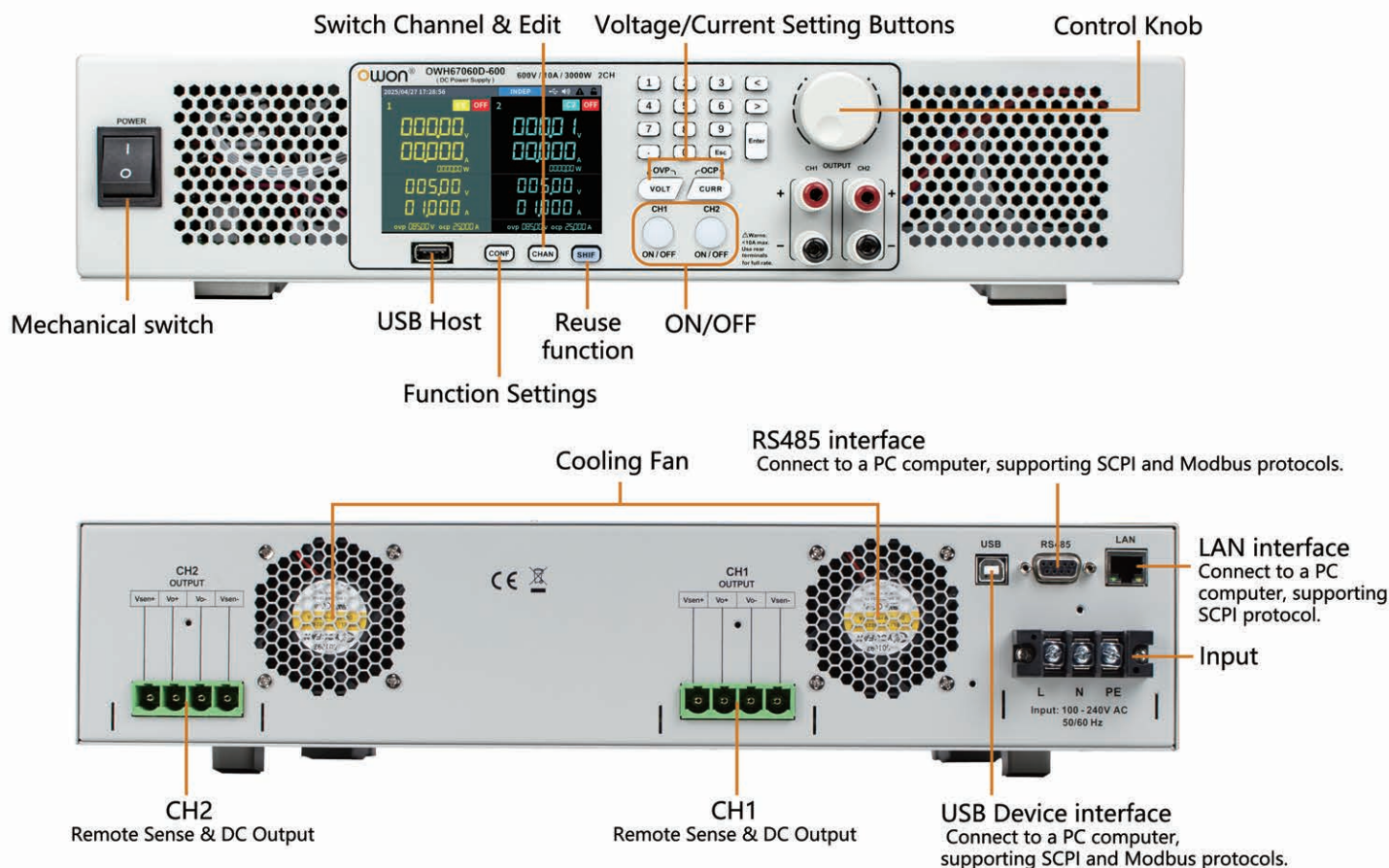
- 2U standard rack size, front and rear panel output, suitable for rack-mounted applications
- Supports wide-range AC input and wide voltage output, with constant power up to 1000W / 6000W.
- 0.05% high-precision output and excellent stability, providing reliable assurance for demanding applications such as precision experiments, testing and measurement, and industrial manufacturing.
- Supports 100-step LIST waveform programmable output
- Selectable CC/CV Priority with smooth startup and no overshoot, adaptable to different load conditions.
- Built-in discharge circuit to eliminate residual high voltage when power is turned off
- Equipped with USB, LAN, and RS485 interfaces, supporting SCPI and Modbus protocols separately. Enables real-time monitoring, flexible output configuration, and easy integration into automation systems.
- Supports photovoltaic simulator output function, embedded with EN50530, Sandia and other PV standard curves for direct evaluation of PV inverter MPPT efficiency (optional)
- 3.95-inch TFT display provides real-time, intuitive visualization of voltage/current waveforms and parameters, making power status monitoring clearer and safer.

Panel Introduction

OWH67010D-80:

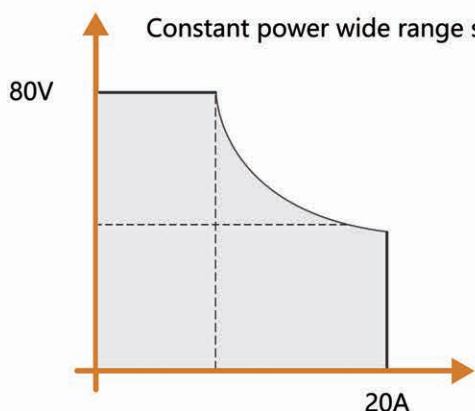


OWH67060D-600 / OWH67060D-150:

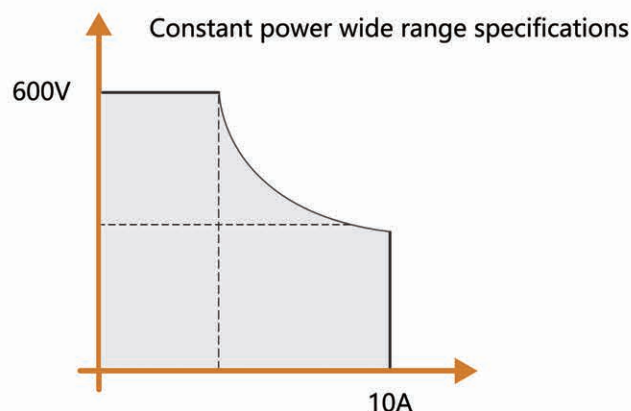


A. Wide-range constant power output, one unit replaces many

Under constant output power limitation, the output voltage and current range can be adjusted. It can deliver high voltage at low current or high current at low voltage, offering a much wider output range. Compared with traditional fixed-range DC power supplies, it gives more flexible voltage and current combinations for users.



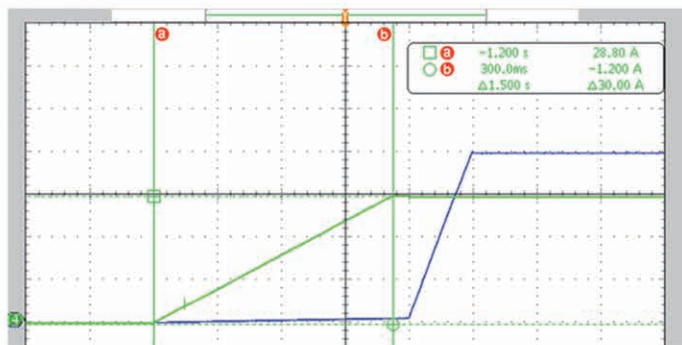
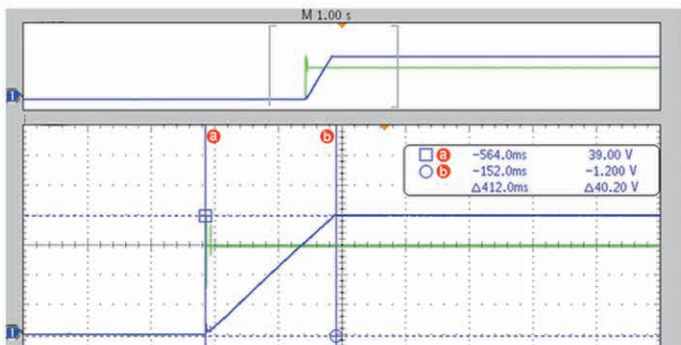
OWH67010D-80 Output Workspace



OWH67060D-600 Output Workspace

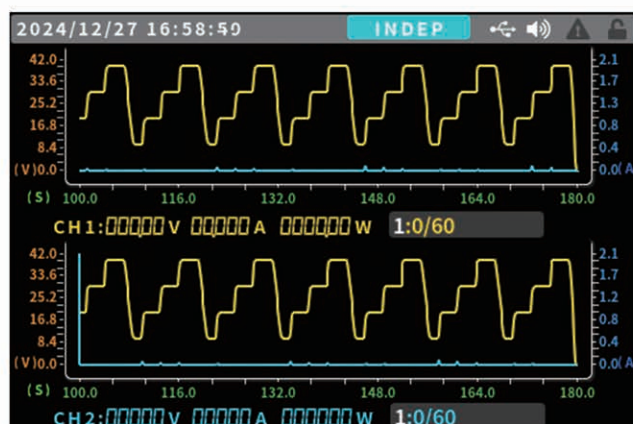
B. CC/CV Priority Mode

The OWH67D series supports CC/CV priority mode to eliminate Voltage/Current overshoot at output startup. In CC-priority mode, the power supply enters constant current operation immediately upon output startup, effectively suppressing inrush current and voltage overshoot. In CV-priority mode, the output voltage quickly rises and stabilizes at the set value. Note that in certain applications (e.g., LED testing), using CV-priority mode may still result in inrush current and voltage overshoot when the output voltage reaches the LED's forward voltage.



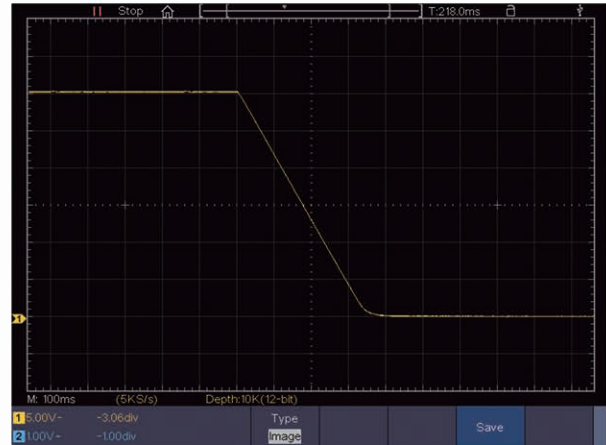
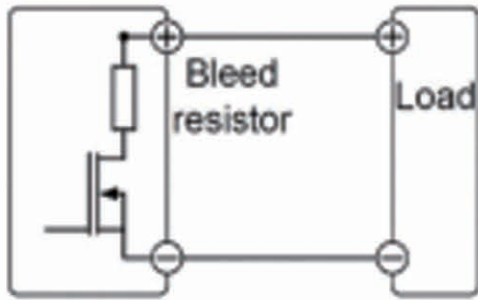
C. Programmable LIST waveform output function.

The OWH67D series supports programmable LIST waveform output with up to 100 steps per channel. Users can set sequence parameters directly from the front panel or more conveniently via PC control. In LIST mode, each step's voltage, current, and duration can be defined, along with steps, cycles, and trigger mode. It also supports USB file import for multi-step execution, allowing flexible generation of complex sequences to meet diverse testing needs.



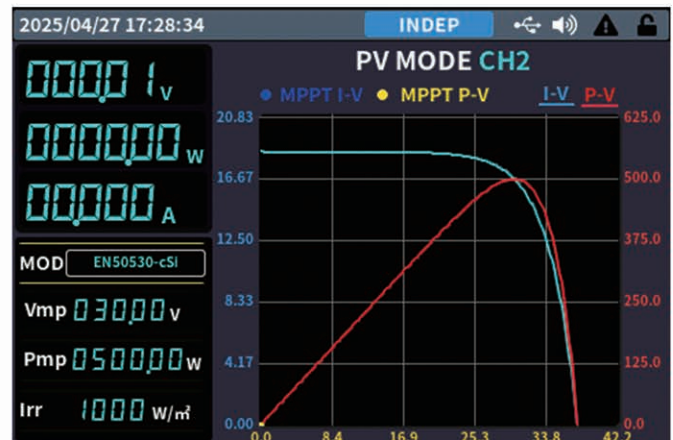
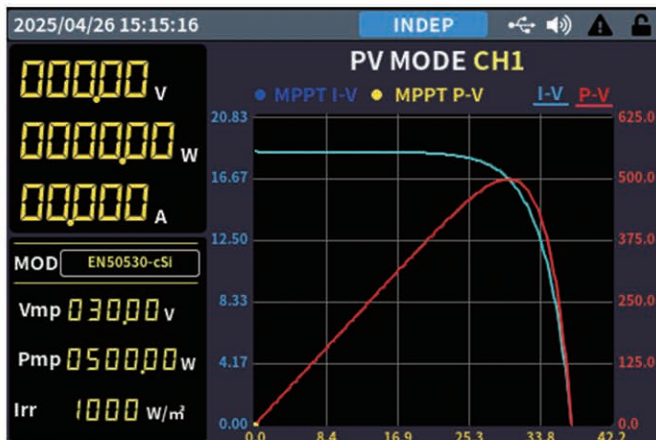
D. Built-in Discharge Circuit

The power supply has a built-in discharge resistor connected in parallel with the output. When the power is turned off or the load is disconnected, the resistor safely discharges the energy stored in the filter capacitors. Without it, the capacitors could remain charged and pose a potential hazard.



E. Output and Testing Capabilities

The OWH67D series can simulate P-V curves, showing the IV characteristics of solar panels under different conditions. It supports static MPPT efficiency tests and includes EN50530 and Sandia PV models. With its built-in PV curve software, multiple units can be controlled together for MPPT tracking tests. Suitable for grid-tied inverters, string inverters, PV-storage systems, and energy storage converters.



In addition, the host software provides more complete PV functionalities, including panel parameter settings and static MPPT testing.



F. Series and Parallel Function

Supports series and parallel connection between channels. In series mode, up to **1200V** output can be achieved; in parallel mode, up to **60A** output is available. This enables stable and reliable power expansion to meet various voltage and current requirements for different testing scenarios.



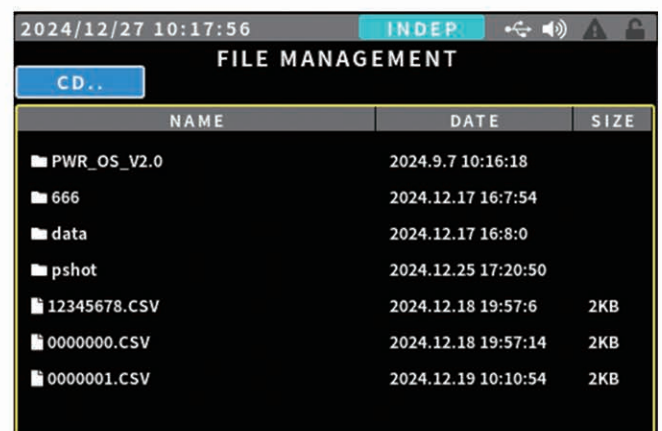
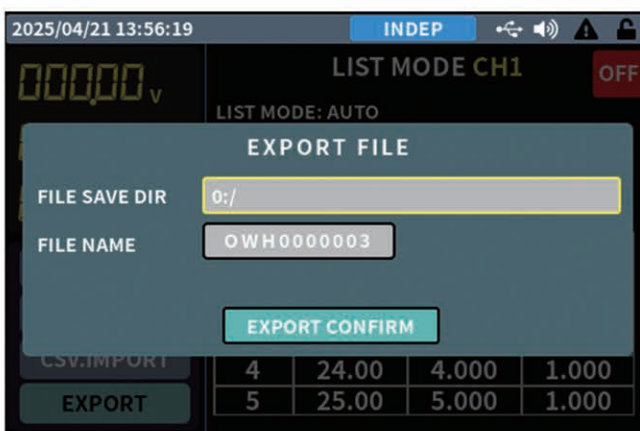
G. Comprehensive Protection

Adjustable overvoltage, overcurrent, and overpower protection, as well as input undervoltage, internal short-circuit, and fault protection.



H. File Management

Supports management and invocation of CSV file formats. Users can save files to internal or external storage and quickly read or load saved files when needed.



The specifications based upon the instrument having run for at least 30 minutes continuously, under the specified operating environment

Model		OWH67010D-80	OWH67060D-150	OWH67060D-300	OWH67060D-600
Channel		2			
Rated Output (0°C-40°C)	Output Voltage Range	0-80V; 0-80V	0-150V; 0-150V	0-300V; 0-300V	0-600V; 0-600V
	Output Current Range	0-20A; 0-20A	0-30A; 0-30A	0-15A; 0-15A	0-10A; 0-10A
Power		1000W	6000W	6000W	6000W
Power Supply		100V-240Vac; 45Hz-65Hz			
Load Regulation±(% of Output+Offset)	CV	≤0.05% ± 20mV	≤0.03% ± 20mV	≤0.03% ± 20mV	≤0.03% ± 20mV
	CC	≤0.05% ± 20mA	≤0.1% ± 30mA	≤0.1% ± 30mA	≤0.1% ± 30mA
linear Regulation±(% of Output+Offset)	CV	≤0.05% ± 20mV	≤0.05% ± 20mV	≤0.05% ± 20mV	≤0.05% ± 20mV
	CC	≤0.05% ± 20mA	≤0.1% ± 30mA	≤0.1% ± 30mA	≤0.1% ± 30mA
Settings Resolution		10mV/1mA			
Readback Resolution		10mV/1mA	1mV/1mA	1mV/1mA	1mV/1mA
Settings Accuracy	CV	≤0.05% ± 20mV	≤0.05% ± 20mV	≤0.05% ± 50mV	≤0.05% ± 50mV
	CC	≤0.05% ± 20mA	≤0.1% ± 30mA	≤0.1% ± 20mA	≤0.1% ± 30mA
Readback Accuracy	CV	≤0.05% ± 20mV	≤0.05% ± 20mV	≤0.05% ± 50mV	≤0.05% ± 50mV
	CC	≤0.05% ± 20mA	≤0.1% ± 20mA	≤0.1% ± 20mA	≤0.1% ± 30mA
Noise/Ripple(*)	CV	≤50mVp-p	≤150mVp-p	≤250mVp-p	≤500mVp-p
	CC	≤15mArms	≤50mArms	≤50mArms	≤50mArms
Temperature Coefficient (0°C-40°C)		100ppm/°C (Voltage) ; 200ppm/°C (Current)			
Readback Temperature Coefficient		100ppm/°C (Voltage) ; 200ppm/°C (Current)			
Recovery Time (10%~90% rated load)		≤5.0ms			
Operation Temperature		0-40°C			
Interface		USB / LAN / RS485			
Display		3.95 inch LCD			
Size (W*H*D mm)		215.0 x 88.0 x 453.0	430.0 x 88.0 x 453.0		
Weight (kg)		5	13		

Specifications subject to change without prior notice.

Ordering Information		Order NO.
Main Unit Models		
0-80V, 0-20A, 1000.0W, 2 Channels		OWH67010D-80
0-150V, 0-30A, 6000.0W, 2 Channels		OWH67060D-150
0-300V, 0-15A, 6000.0W, 2 Channels		OWH67060D-300
0-600V, 0-10A, 6000.0W, 2 Channels		OWH67060D-600
0-80V, 0-20A, 1000.0W, 2 Channels, Solar Panel Simulator		OWH67010D-80S
0-150V, 0-30A, 6000.0W, 2 Channels, Solar Panel Simulator		OWH67060D-150S
0-300V, 0-15A, 6000.0W, 2 Channels, Solar Panel Simulator		OWH67060D-300S
0-600V, 0-10A, 6000.0W, 2 Channels, Solar Panel Simulator		OWH67060D-600S
Standard Accessories		
Quick Guide		_____
Power cord		_____
Data cable		7ULD10
Optional Accessories		
L-shaped mounting bracket		7L-Bracket
Warranty		
Main unit: 1-year warranty (excluding accessories)		

*Noise bandwidth 20MHz, ripple bandwidth 1MHz, connect 10uF electrolytic capacitor in parallel with 0.1uF ceramic capacitor to eht output terminal for testing.



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