

SPE15000/SPE30000 Series


Single Output Power Supply

0.05% High Precision

# 5000W



# CORE STRENGTHS



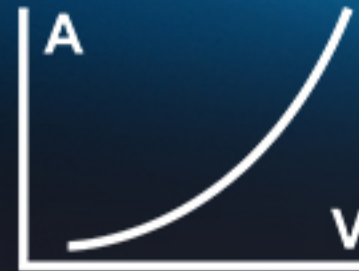
## Mainstream DSP main control chip

24-bit ADC  
High-margin power devices  
Precise measurement, stable output



## List Waveform Editing

Timed output



## Real-time V / A Curve Display

1-min data online recording



## Industrial-grade Interconnection and Control

Easily integrates



## Built-in Discharge Circuit

Safety discharge to prevent risk

# MODEL COMPARISON

Model	SPE15054	SPE15105	SPE30054	SPE30055
Rated Output Voltage	0 - 150V		0 - 300V	
Rated Output Current	0 - 5A	0 -10A	0 - 5A	0 - 5A
Rated Output Power	400W	500W	400W	500W
Setting Resolution	10mV/1mA			
Readback Resolution	10mV/1mA			
Transient recovery time (10%- 100% rated load)	≤5.0ms			
Display	2.8-inch Color LCD Display (IPS Panel)			
Communication Port	USB, DB9: RS232/RS485(optional), LAN (optional), compatible with the SCPI communication protocol			
Dimension	82mm(W)×142mm(H)×226mm(D)			

# FEATURES



## Compact Design • Exceptional Visibility

High resolution, high contrast color LCD display screen.

Portable Body

# DESIGN



## 2.8-inch IPS LCD

Clear display, ensuring ease of operation and readability in both bright and dark environments.

owon

SPE1505S  
150W 5V

ON CV T 00:04:08 00.00 w

300.0v

0.000A

Set

300.00v 01.000A

Limit

310.00v 06.000A



## Precision Comes from the Core

Ensures High-Precision Measurements and Long-term Stable Operation.



Equipped with a mainstream DSP control chip for powerful computing performance, a 24-bit high-precision ADC for measurement accuracy, power and components with ample margin to ensure reliable, stable operation over time.

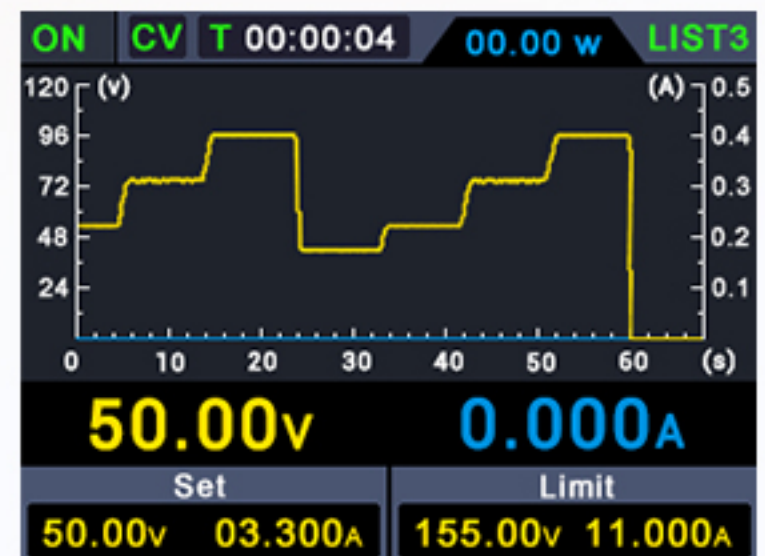


## List Waveform Editing Output

Built-in 10 timed waveforms, expandable to 100 with PC software.



Equipped with LIST waveform editing, allowing users to customize output waveforms for sequential output in CV or CC mode to meet specific test needs.





## 4 Groups of Memory Quick Parameter Recall

The system has 4 preset memory groups for quick one-click recall of outputs, greatly improving operational efficiency.





## Real-time Voltage/Current Curve Display

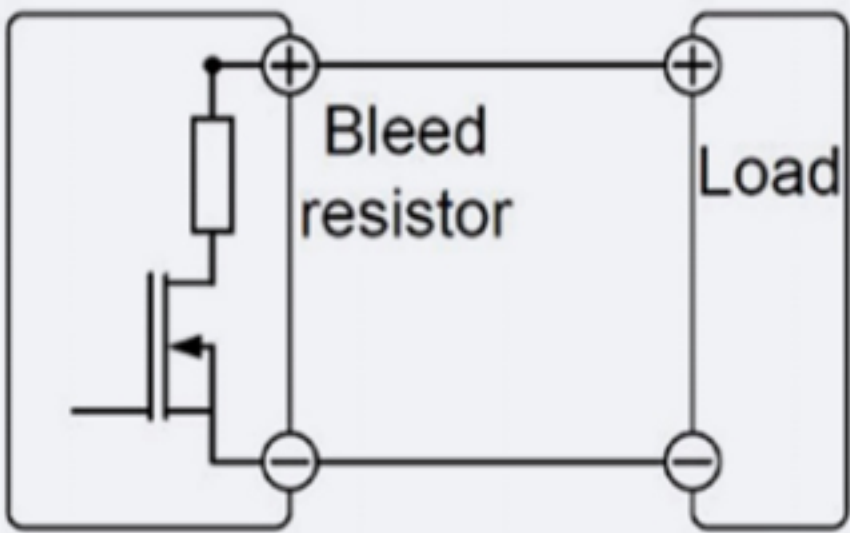
Online data recording for 1 minute, helping users detect abnormal fluctuations in real time.





# Multiple Protection for Enhanced Stability

Full digital control with comprehensive protection



## Built-in Discharge Circuit

When the power is turned off or the load is disconnected, the discharge resistor actively dissipates residual charge in the filter capacitor to prevent safety hazards.

## CV/CC mode switching

The power supply automatically switches to CC mode to protect the circuit when actual current exceeds the preset value.

CV: Constant Voltage output

CC: Constant Current output





# PC Host Control

Support PC host computer programming output, flexibly respond to diverse testing needs.





# Industrial-grade Interconnection & Control

Easily integrates with industrial automation and networking systems.

Supports USB Device, DB9:RS485/RS232 (optional), and LAN (optional) interfaces, compatible with Modbus and SCPI protocols. Easily integrates into automation systems for remote control and multi-device network management.



Device



RS485/RS232



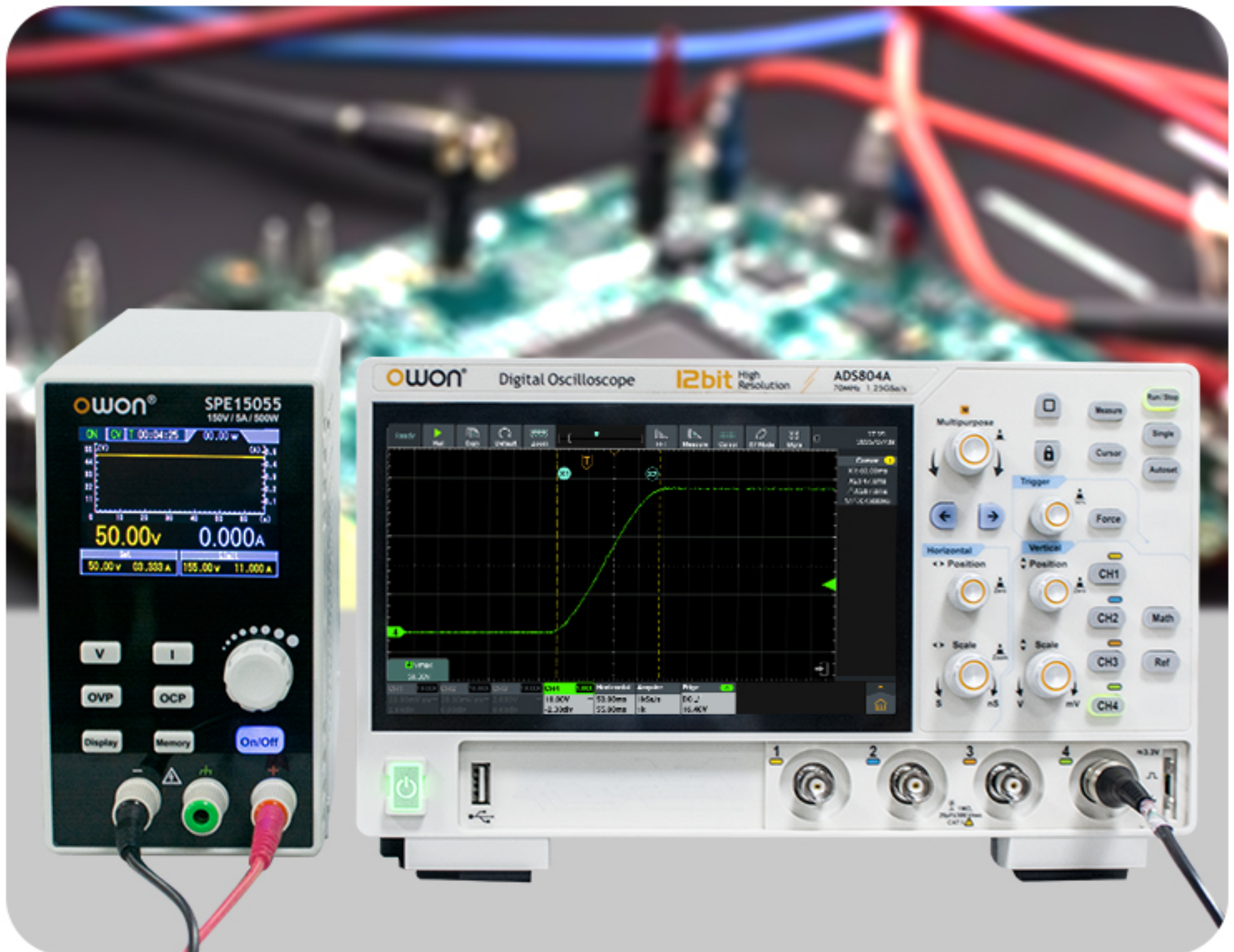
LAN

Note: The interfaces are selectable (RS485/RS232 shared port).



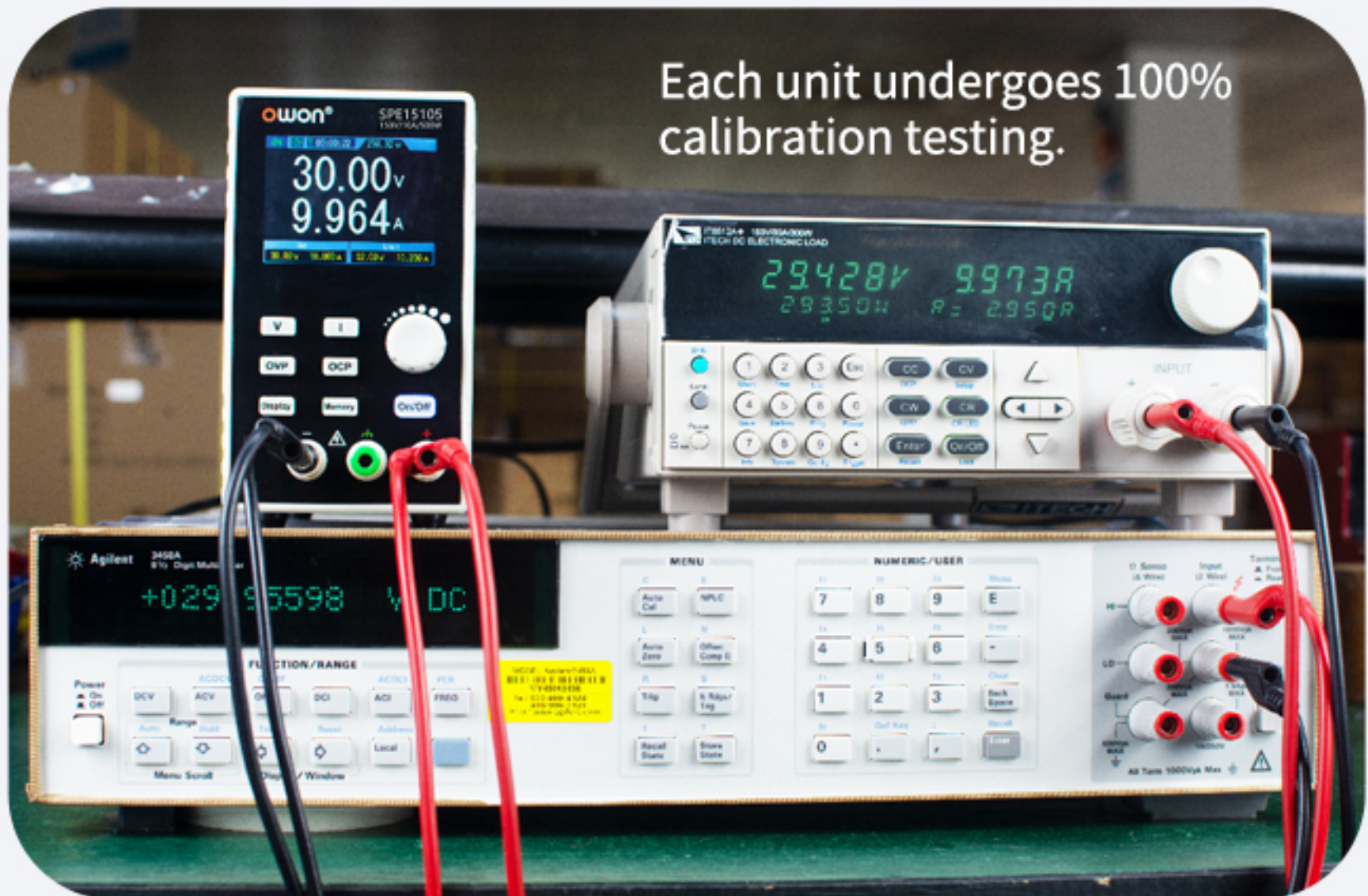
## Stable Power-On, Ensuring Reliability

With excellent dynamic response and output stability, there is no voltage or current overshoot during power-on, effectively protecting sensitive components and improving system safety and reliability.



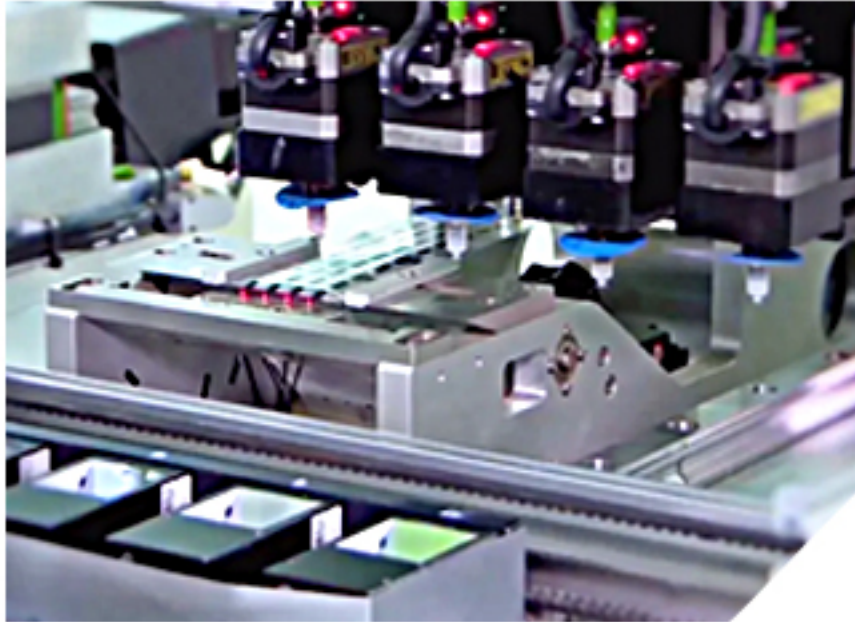
# Rigorous Factory Testing, Consistent Quality

Million Calibration Test Equipment



Safe to use, worry free quality!

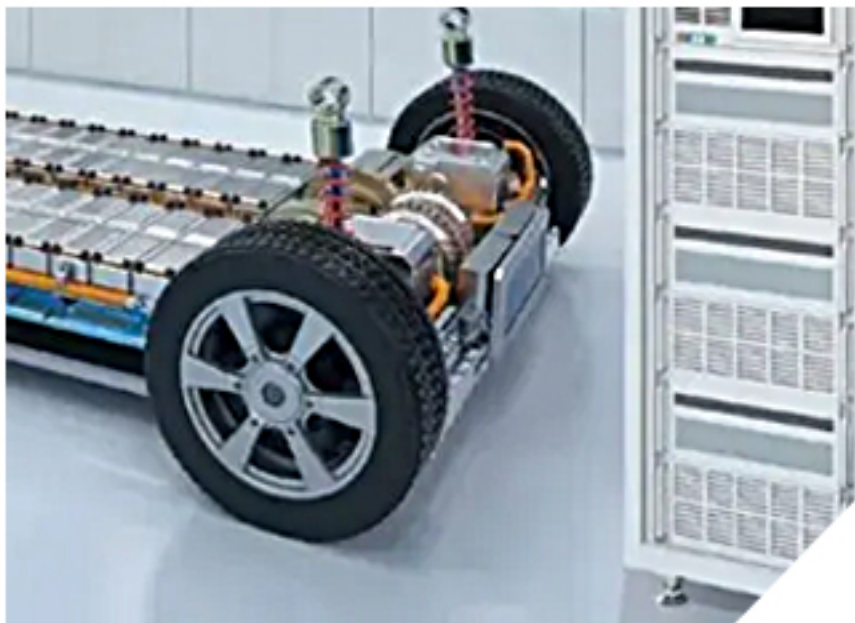
# APPLICABLE FIELDS



**Product R&D and Testing**



**System and Industrial Control Power Supply**



**Charge and Discharge Testing**



**Educational Experiments**

# LEARN MORE

## Product Mix



Shortcut output button, long press to enter the List waveform timing output interface

Voltage setting button

Overvoltage protection setting

Curve display switch button

2.8-inch LCD

Current setting button

Adjustment knob

Overcurrent protection setting

Channel output on/off button, long press to turn on the automatic output function

Channel output terminals



Intelligent temperature control fan

Power cord socket

Fuse

Power switch

USB Device Interface (default)  
Optional: DB9/LAN



Voltage	Fuse
100-240V AC	250V, F10A

# Product Dimension



**82mm x 142mm x 226mm (W x H x D)**  
**approx. 1.5 kg**

# Specifications

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

Model		SPE15054	SPE15105	SPE30054	SPE30055
Rated Output (0°C -40°C)	Voltage	0 - 150V	0 - 150V	0~300V	0~300V
	Current	0 - 5A	0 - 10A	0~5A	0~5A
	Power	400W	500W	400W	500W
Input Characteristics	Supply Voltage	100V- 240V			
	Input Frequency	45- 65Hz			
	Input Fuse	250V, F10A			
Regulation (CV)	Load	≤20mV		≤30mV	
	Line	≤20mV		≤30mV	
Regulation (CC)	Load	≤10mA			
	Line	≤10mA			
Ripple & Noise	Voltage (Vpp)	≤150mVpp	≤150mVpp	≤300mVpp	≤300mVpp
	Current (rms)	≤30mA	≤30mA	≤30mA	≤30mA
Setting Resolution		10mV/1mA			
Readback Resolution		10mV/1mA			
Setting Accuracy	Voltage	≤0.05%±20mV		≤0.05%±200mV	
	Current	≤0.05%±20mA			
Readback Accuracy	Voltage	≤0.05%±20mV		≤0.05%±200mV	
	Current	≤0.05%±20mA			
Transient recovery time (10%- 100% rated load)		≤5.0ms			
OVP		0 - 155V	0 - 155V	0 - 310V	0 - 310V
OCP		0 - 6A	0 - 11A	0 - 6A	0 - 6A
OTP		85°C	85°C	85°C	85°C
Temperature coefficient of output	Voltage	100ppm/°C			
	Current	200ppm/°C			
Temperature coefficient of readback value	Voltage	100ppm/°C			
	Current	200ppm/°C			
Display	Display Type	2.8-inch Color LCD Display (IPS Panel)			
	Resolution	240 x 320 pixels			
	Color	65536 color, TFT			
Temperature		Working Temperature: 0°C- 40°C; Storage Temperature: -20°C ~ 60°C			
Relative Humidity		≤90%RH; no condensation			
Height		2,000 meters			
Cooling		Fan cooling, temperature intelligent speed control			
Communication Port		USB, DB9: RS232/RS485(optional), LAN (optional), compatible with the SCPI communication protocol			
Dimension		82mm(W)× 142mm(H)×226mm(D)			
Weight		Approx. 1.6kg			

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

Specifications subject to change without prior notice.

# Accessory

Host



Manual



Power Cord



Banana head to alligator clip  
(Order No.7B2A-16)



USB Cable  
(Order No.7ULD10)

