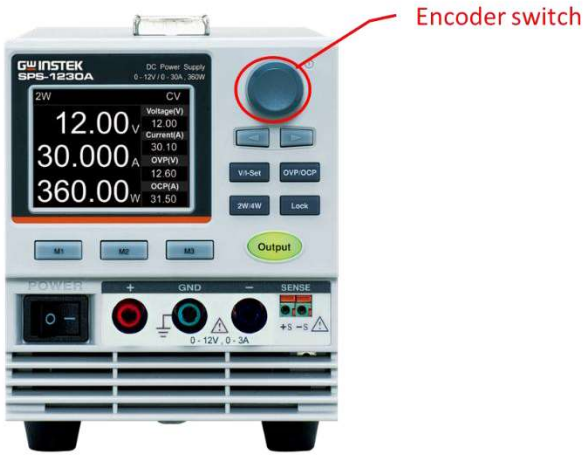
Product Feature Description

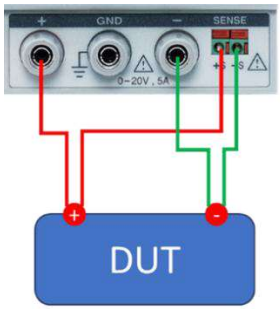
Equipped with an Encoder-switch Digital Control Knob

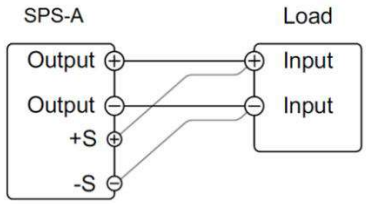
- Provides greater stability and consistency than traditional variable resistors (VR), using digital pulse control instead of analog potentiometers that are prone to wear and temperature drift
- Offers a more durable tactile operating ~~feel~~, finer adjustment control, and support for intelligent functions



Remote Sensing Function with 2-wire/4-wire Switching

- Remote sensing function with 2W/4W wiring mode selection, providing voltage compensation.
- From the power supply output to the load, voltage drop may occur due to the resistance of the test leads. During testing, test leads with a voltage drop smaller than the power supply's compensation capability should be selected.





Multiple Protection Features

The SPS-A series provides the following protection mechanisms:

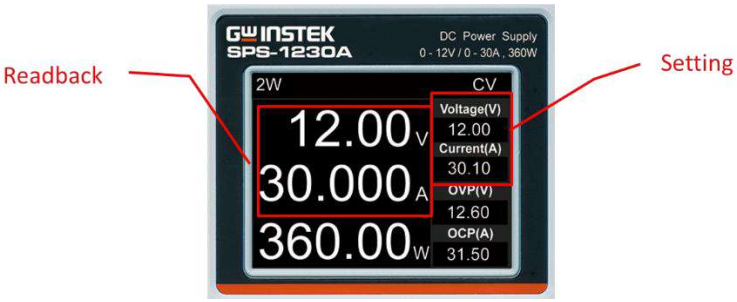
- OVP (Over-Voltage Protection):
  - Prevents damage caused by excessive output voltage. When the voltage level exceeds the OVP threshold, the output is automatically shut down.
- OCP (Over-Current Protection):
  - Prevents damage caused by excessive output current. When the current level exceeds the OCP threshold, the output is automatically shut down.
- OTP (Over-Temperature Protection):
  - A hardware-based protection mechanism that detects abnormal temperature conditions and intervenes immediately to ensure the safety of both the equipment and the load.
- Fuse Protection:
  - Effectively prevents circuit damage caused by overload or short circuits, ensuring the safety of the equipment and the DUT.

Three Preset Memory/Recall Settings

- Three preset memory/recall settings and one power-on state configuration
- The SPS-A provides three memory presets (M1–M3) for storing voltage and current settings. Each preset corresponds to a dedicated front-panel button (M1, M2, M3) for quick and convenient recall.

High Setting/Readback Resolution

- Setting resolution: 10mV / 10mA; Readback resolution: 10mV / 1mA
- Compared with other entry-level power supplies, the SPS-A provides higher voltage and current resolution, enabling more precise settings and more sensitive measurements, thereby improving test quality, reliability, and consistency.

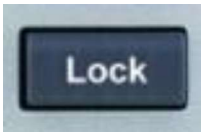


Output On/Off Control

- The Output On/Off control prevents the power supply from delivering output before all wiring is completed, protecting the DUT from potential damage.
- Users can finish all voltage and current settings and complete the wiring first, then safely activate the output from the front panel.

Panel Lock Function

- The SPS-A series provides a panel lock feature that prevents unauthorized changes to settings during long-term output of fixed voltage and current, avoiding potential damage to the DUT.
- Users can simply press and hold the Lock key to quickly secure the panel, preventing accidental touches and ensuring a safe and stable testing environment.



Control I/O Functionality

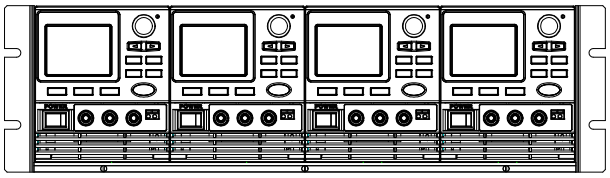
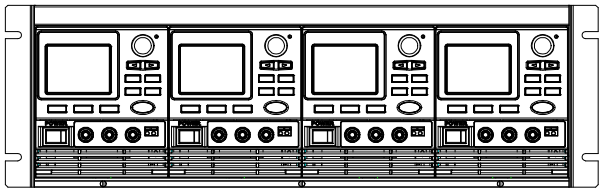
- Provides a simple remote-control function.
- Through this connector, the Output On/Off state can be controlled remotely. The pin definitions are as follows,

Pin name	Pin number	Description
Out ON/OFF Control	1	It is turned on when set to a high CMOS signal, and turned off when set to a low CMOS level signal.

Alarm Status	2	On when a protection function (OVP, OCP, OTP) has been activated or when an output shutdown signal is being applied (open-collector photocoupler output).
Status COM	5,7,8,9,10	This is the common line for the status signal pins 1 to 2.
N.C.	3,4,6	Not connected.

Compatible with GRA-441-J/E Rack Mount Kits

The SPS-A series supports optional rack-mount kits, allowing up to four SPS-A units to be installed in a rack.

GRA-441-E [EIA] Rack mount diagram	
GRA-441-J [JIS] Rack mount diagram	

2.4-inch TFT LCD Display

- Clearly displays both setting values and readback values, providing high-resolution voltage and current information.
- This makes operation more intuitive, speeds up interpretation, reduces accidental misoperation and testing risks, and improves overall efficiency