GPP-3060/6030/3650/3610H/7250

Single & Triple Channel Programmable DC Power Supply

FEATURES

- 1-CH Models: GPP-3610H/7250; 3-CH Models: GPP-3060/6030/3650
- Programming Resolution: 1 ≤ mV / 0.2 mA or 2 mV / 0.1 mA (Model Dependent)
- Readback Resolution: 0.1 mV / 0.1 mA or 0.1 mV / 0.2 mA (Model Dependent)
- Ripple Noise: ≤ 1 mVrms / ≤ 2 mArms or ≤ 2 mVrms / ≤ 2 mArms (Model Dependent)
- Tracking Series / Parallel: Available on 3-CH Models, No Wiring Needed
- Transient Response: ≤ 100 µs
- Load Modes: CV, CC, CR
- Protections: OVP, OCP, OTP
- Built-in Delay, Monitoring, Recorder, and Sequencing (8 waveforms)
- 10 Memory Sets for User-defined Settings
- Intelligent Fan Reduces Noise
- USB Type-A Front Panel (GPP-3060/6030/3650)
- 4.3" TFT LCD Display
- Interfaces: RS-232, USB, Ext I/O (Standard); LAN, GPIB+LAN (Optional)

GW INSTEK

Simply Reliable

Meet Your Necessity of High Resolution in Multi-Channel Measurement

The GPP-400 W series includes five programmable DC power supply models: the single-channel GPP-3610H (36 V/10 A) and GPP-7250 (72 V/5 A), along with the triple-channel GPP-3060 (30 V/6 A), GPP-6030 (60 V/3 A), and GPP-3650 (36 V/5 A). These models feature high resolution, low ripple noise (≤1 mVrms/≤2 mArms), and fast transient recovery (≤100 µs), making them ideal for precision testing environments.

The triple-channel models provide a maximum output power of 385 W, with CH1 and CH2 supporting different voltage and current ranges, while CH3 uniformly supports 1.8 V, 2.5 V, 3.3 V, and 5.0 V/5 A. The single-channel models offer 36 V/10 A and 72 V/5 A outputs, both equipped with independent output switches.

All models support multiple display modes, allowing users to view settings, measurements, and waveforms. The built-in monitoring function enables users to set conditions for alarms or automatic output shutdown to protect the DUT. Additionally, the output recorder function logs voltage and current data, which can be stored internally or transferred via USB.

For protection, all models include OVP (overvoltage protection), OCP (overcurrent protection), OPP (overpower protection), and OTP (overtemperature protection), implemented via hardware circuits for faster response compared to software-based protection. The rear panel features terminal outputs and remote sensing terminals, allowing users to choose front or rear panel output for standalone or rack-mounted operation.

Each model is equipped with Trigger In/Trigger Out functionality for external device synchronization and an intelligent temperature-controlled fan that adjusts speed based on power component temperature to minimize noise. Additionally, the sequence, delay, and recorder functions provide 10 internal memory slots, accessible via USB. Standard interfaces include RS-232 and USB, with optional LAN or LAN+GPIB interfaces available to meet diverse user requirements.

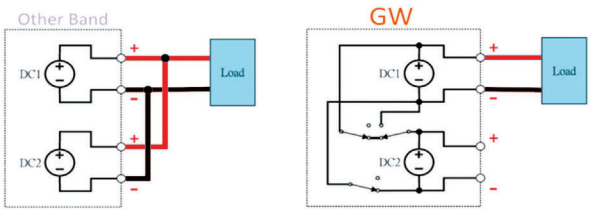
OPERATING RANGE

Model Number	Number of Output	Max. Power	CH1	CH2	CH3	Interface
GPP-3060	3	385 W	0 to 30 V/0 to 6 A	0 to 30 V/0 to 6 A	1.8 V/2.5 V/3.3 V/5 V; 5 A	USB, RS-232, LAN, GPIB
GPP-6030	3	385 W	0 to 60 V/0 to 3 A	0 to 60 V/0 to 3 A	1.8 V/2.5 V/3.3 V/5 V; 5 A	USB, RS-232, LAN, GPIB
GPP-3650	3	385 W	0 to 36 V/0 to 5 A	0 to 36 V/0 to 5 A	1.8 V/2.5 V/3.3 V/5 V; 5 A	USB, RS-232, LAN, GPIB
GPP-7250	1	360 W	0 to 72 V/0 to 5 A	-	-	USB, RS-232, LAN, GPIB
GPP-3610H	1	360 W	0 to 36 V/0 to 10 A	-	-	USB, RS-232, LAN, GPIB

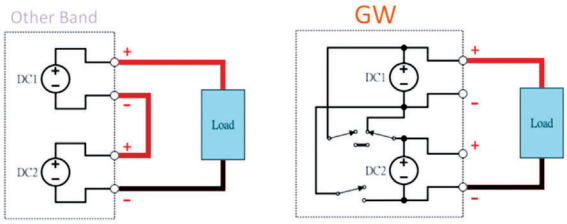
GRA-449-J Rack Mount Kit (JIS)

GRA-449-E Rack Mount Kit (EIA)

A. TRACKING SERIES AND PARALLEL FUNCTION



Output in Parallel Connections



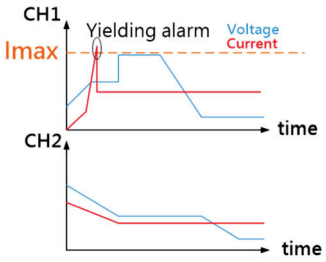
Output in Series Connections

For series and parallel applications of CH1 and CH2, the tracking function of the GPP-Series utilizes the internal circuit to automatically switch the output to serial or parallel output without additional external wiring, providing users with convenience not only in operating procedures but also a more stable output.

The tracking function design of other brands requires additional external wiring connections for the output in series or parallel. However, excessively long, thin or inconsistent external wiring may cause inaccurate voltage or current output.

* This function is supported exclusively by the GPP-3060/6030/3650 models.

B. OUTPUT MONITORING FUNCTION



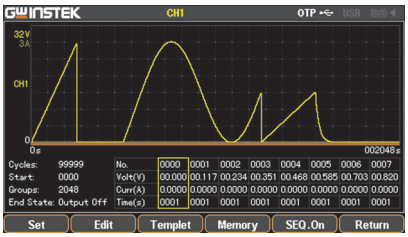
Output Monitoring

Monitoring Function Setting

The output monitoring function allows users to set the monitoring conditions according to the requirements, including the voltage, current, and power greater than or less than the setting and the logical relationship of AND, OR. It also allows users to sound alarms or stop the output during the measurement process, stop the measurement, and protect the customer's DUT. Both Channel could be monitored simultaneously as well.

* Channel 3 does not support the output monitoring function.

C. SEQUENCE OUTPUT FUNCTION

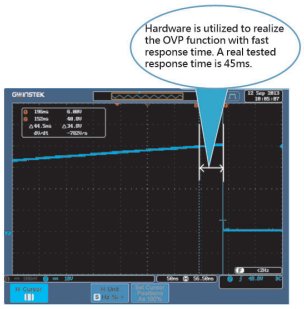


Sequence Output Waveform

The GPP-Series provides a sequential output function on Channel 1 and Channel 2. This function not only allows users to edit the power output waveform, but also allows users to set the sequential constant voltage (CV) or constant current (CC) load waveform, i.e. a serial power output or a simulation test of a dynamic load. The maximum settable points for sequence function are 2048, and interval range of each point can be set from 1 to 300 seconds. In order to simplify the setting of waveform editing, the GPP-Series has 8 built-in Templet waveforms in sequence output function for users to directly apply for output, including Sine, Pulse, Ramp, Stair Up, Stair Dn, Stair UpDn, Exp Rise, and Exp Fall waveforms.

The editing data of the sequence output can be stored in the internal 10 sets of the memory, or to be saved by USB flash drive (Save/Recall) and saved as *.SEQ or *.CSV file; The stored *.CSV can be exported into Excel for editing and analysis. The final edited file can be imported to (Save/Recall) of the power supply using a USB flash drive.

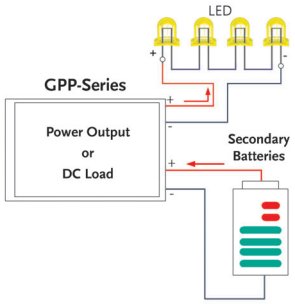
D. HARDWARE PROTECTION FUNCTION(OVP/OCP/OTP)



OVP Trigger

The protection mechanism of OVP/OCP/OTP is implemented by hardware circuit, which has the advantage of faster response time than competitors who use software to achieve protection. When it is detected that the voltage of the DUT exceeds the setting value of the OVP, the output of the power supply can be stopped in a short time to achieve the purpose of protecting the DUT.

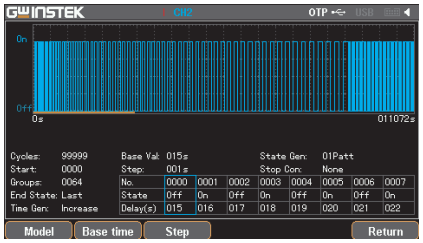
E. DC LOAD FUNCTION



GPP-Series Application

Both CH1 and CH2 of the GPP series are equipped with built-in load functions, allowing a single power supply to meet basic battery charge and discharge testing needs. Each channel can operate as a power output or be configured as a DC electronic load. The load function supports constant voltage (CV), constant current (CC), and constant resistance (CR) modes, eliminating the need for users to purchase an additional electronic load.

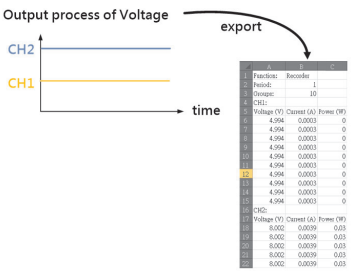
F. OUTPUT DELAY FUNCTION



GPP-Series Delayed Waveform

Output delay function allows users to edit the timing waveform of the power output on/off when the front panel voltage and current settings are unchanged. In order to simplify the setting of waveform editing, the GPP-Series has three built-in timing modes in the delay output function, including Fixtime, Increase, Decline for users to apply directly. The editing data of the output delay can be stored in the internal 10 sets of memory, or to be saved by USB flash drive (Save/Recall) and saved as *.DLY or *.CSV file. The stored *.CSV can be exported into Excel for editing and analysis. The final edited file can be exported to (Save/Recall) of the power supply using a USB flash drive.

G. OUTPUT RECORDER FUNCTION



Schematic Diagram for Recorder Function

Recorder Function Setting

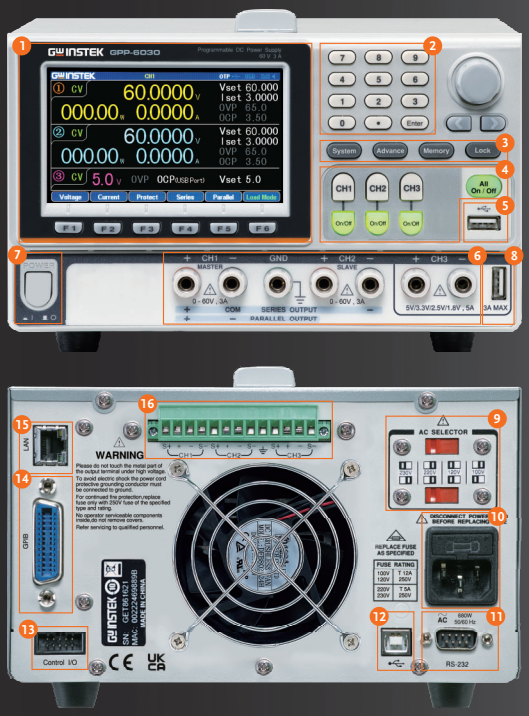
Save as*.REC

The output recorder function records the voltage & current parameters of the output process. The recording interval of each point can be set according to user's requirements, and the shortest interval is 1 second and the longest is 300 seconds. The results can be stored in *.REC or *.CSV format to the power supply or directly saved in the USB flash drive. The stored *.CSV can be exported into Excel to conduct the future analysis. (*.REC can be saved to 2048 records, *.CSV can be saved to 614400 records)

* Channel 3 does not support the output recorder function

PANEL INTRODUCTION

CE | RS-232 | GPIB | USB | LAN | Ext I/O



GPP-3060/6030/3650

1. LCD Display
2. Number Pad
3. Function Keys
4. Output Buttons
5. USB Host
6. Front Panel Output Terminals
7. Power Button
8. Power Output Terminal(Ch3, USB type)
9. AC Selector Switch
10. AC Input Socket and Line Fuse
11. RS-232 Port
12. USB Device Port
13. Ext I/O Port
14. GPIB Port
15. LAN Port
16. Rear Output Terminals

GPP-3610H/7250

1. LCD Display
2. Number Pad
3. Function Keys
4. Output Buttons
5. USB Host
6. Front Panel Output Terminals
7. Power Button
8. AC Selector Switch
9. AC Input Socket and Line Fuse
10. RS-232 Port
11. USB Device Port
12. Ext I/O Port
13. GPIB Port
14. LAN Port
15. Rear Output Terminals

ORDERING INFORMATION

GPP-3610H	360 W Single Channel Programmable DC Power Supply (36 V / 10 A)
GPP-7250	360 W Single Channel Programmable DC Power Supply (72 V / 5 A)
GPP-6030	385 W Triple-Channel Programmable DC Power Supply (60 V / 3 A * 2; 5 V / 5 A *1)
GPP-3060	385 W Triple-Channel Programmable DC Power Supply (30 V / 6 A * 2; 5 V / 5 A *1)
GPP-3650	385 W Triple-Channel Programmable DC Power Supply (36 V / 5 A * 2; 5 V / 5 A *1)

ACCESSORIES

Standard Type Jack Terminal:

GPP-3610H/7250 Power Cord x 1, Test Lead GTL-104A x 1

GPP-6030/3060/3650 Power Cord x 1, Test Lead GTL-104A x 3

European Type Jack Terminal:

GPP-3610H/7250 Power Cord x 1, Test Lead GTL-204A x1, GTL-201A x1

GPP-6030/3060/3650 Power Cord x 1, Test Lead GTL-204A x 3, GTL-201A x 1

OPTION (Manufacturer Installed Only)

LAN Interface, GPIB + LAN Interface

OPTIONAL ACCESSORIES

GTL-104A	Test Lead, U-type to Alligator Test Lead, Max. Current 10 A, 1000 mm
GTL-201A	Ground Lead, Banana to Banana, European Terminal, 200 mm
GTL-204A	Test Lead, Banana to Alligator, European Terminal, Max. Current 10 A, 1000 mm
GTL-246	USB Cable(USB 2.0 Type A-Type B Cable, 4P
GRA-449-J	Rack Mount kit (JIS)
GRA-449-E	Rack Mount kit (EIA)

FREE DOWNLOAD

PC Software, LabVIEW Driver

SPECIFICATIONS

		GPP-3610H	GPP-7250	GPP-6030	GPP-3060	GPP-3650
OUTPUT RATING						
Total Channel		1	1	3	3	3
Voltage / Current Range	CH1	0 V to 36.000 V / 0 A to 10.0000 A	0 V to 72.000 V / 0 A to 5.0000 A	0 V to 60.000 V / 0 A to 3.0000 A	0 V to 30.000 V / 0 A to 6.0000 A	0 V to 36.000 V / 0 A to 5.0000 A
	CH2	-	-	0 V to 60.000 V / 0 A to 3.0000 A	0 V to 30.000 V / 0 A to 6.0000 A	0 V to 36.000 V / 0 A to 5.0000 A
	CH3 *1	-	-	1.8 V/2.5 V/3.3 V/5.0 V, ± 5 % (USB Port Volt ± 0.35 V); 5 A (USB Port 3 A)		
Total Power		360 W	360 W	385 W	385 W	385 W
CONSTANT VOLTAGE OPERATION						
Line Regulation		≤ 0.01 % + 3 mV				
Load Regulation		≤ 0.01 % + 5 mV				
Ripple & Noise (5 Hz to 1 MHz)		≤ 2 mVrms		≤ 1 mVrms		
Transient Recovery Time		≤ 100 µs (50 % load change, minimum load 0.5 A)				
Maximum Remote Sensing Compensation Voltage (Single Line)		1 V (only for rear terminal output)				
Temperature Coefficient		≤ 300 ppm/°C				
CONSTANT CURRENT OPERATION						
Line Regulation		≤ 0.01 % + 3 mA				
Load Regulation		≤ 0.01 % + 3 mA				
Ripple & Noise		≤ 2 mArms				
RESOLUTION						
Voltage	Programming/Readback	1 mV / 0.1 mV	2 mV / 0.1 mV	2 mV / 0.1 mV	1 mV / 0.1 mV	1 mV / 0.1 mV
Current	Programming/Readback	0.2 mA / 0.2 mA	0.1 mA / 0.1 mA	0.1 mA / 0.1 mA	0.2 mA / 0.1 mA	0.2 mA / 0.1 mA
TRACKING OPERATION (CH1/CH2) *2						
Tracking Series Voltage/Current *3		-		0 V to 120.000 V / 0 A to 3.0000 A	0 V to 60.0000 V / 0 A to 6.0000 A	0 V to 72.0000 V / 0 A to 5.0000 A
Tracking Parallel Voltage/Current *3				0 V to 60.0000 V / 0 A to 6.0000 A	0 V to 30.0000 V / 0 A to 12.000 A	0 V to 36.0000 V / 0 A to 10.000 A
Tracking Error				≤ 0.2 % + 20 mV of Master	≤ 0.1 % + 10 mV of Master	≤ 0.1 % + 10 mV of Master
Parallel Regulation	Line			(No Load, with load add load regulation ≤ 200 mV) ≤ 0.01 % + 3 mV		
	Load			≤ 0.01 % + 5 mV (rating current ≤ 10 A) ≤ 0.02 % + 5 mV (rating current > 10 A)		
Series Regulation	Line			≤ 0.01 % + 5 mV		
	Load			≤ 200 mV		
Ripple & Noise				≤ 2 mVrms (5 Hz to 1 MHz)		
METER						
Full Scale	Voltage/Current	36.5000 V / 10.200 A	72.5000 V / 5.2000 A	62.0000 V / 3.2000 A	32.0000 V / 6.2000 A	36.5000 V / 5.2000 A
Programming	Voltage/Current	5 digits / 6 digits		5 digits / 5 digits		
Readback Resolution	Voltage/Current	6 digits / 6 digits		6 digits / 5 digits		
Setting Accuracy	Voltage	± (0.03 % of reading + 10 mV)				
	Current	± (0.3 % of reading + 10 mA)				
Readback Accuracy	Voltage	± (0.03 % of reading + 10 mV)				
	Current	± (0.3 % of reading + 10 mA)				
DC LOAD MODE						
Display	Voltage	1 V to 36.50 V	1 V to 72.50 V	1 V to 62.00 V	1 V to 32.00 V	1 V to 36.50 V
	Current	0 A to 10.200 A	0 A to 5.200 A	0 A to 3.200 A	0 A to 6.200 A	0 A to 5.200 A
	Power	0 W to 100.00 W	0 W to 100.00 W	0 W to 50.00 W	0 W to 50.00 W	0 W to 50.00 W
CV Mode	Setting Range	1.500 V to 36.50 V	1.500 V to 72.50 V	1.500 V to 62.00 V	1.500 V to 32.00 V	1.500 V to 36.50 V
	Setting/Readback	≤ ± (0.1 % + 30 mV)	≤ ± (0.1 % + 30 mV)	≤ ± (0.1 % + 30 mV)	≤ ± (0.1 % + 30 mV)	≤ ± (0.1 % + 30 mV)
	Resolution	10 mV	10 mV	10 mV	10 mV	10 mV
CC Mode	Setting Range	0 A to 10.200 A	0 A to 5.200 A	0 A to 3.200 A	0 A to 6.200 A	0 A to 5.200 A
	Setting/Readback	≤ ± (0.3 % + 10 mA)	≤ ± (0.3 % + 10 mA)	≤ ± (0.3 % + 10 mA)	≤ ± (0.3 % + 10 mA)	≤ ± (0.3 % + 10 mA)
	Resolution	1 mA	1 mA	1 mA	1 mA	1 mA
CR Mode *4	Setting Range	1 Ω to 1 kΩ	1 Ω to 1 kΩ	1 Ω to 1 kΩ	1 Ω to 1 kΩ	1 Ω to 1 kΩ
	Setting/Readback	≤ ± (3 % + 1 Ω)	≤ ± (3 % + 1 Ω)	≤ ± (3 % + 1 Ω)	≤ ± (3 % + 1 Ω)	≤ ± (3 % + 1 Ω)
	Resolution	1 Ω	1 Ω	1 Ω	1 Ω	1 Ω
CH3 SPECIFICATION *5						
Output Voltage		-		1.8 V/2.5 V/3.3 V/5.0 V, ± 5 %		
Output Current				5 A		
Meter				1.8 V/2.5 V/3.3 V/5.0 V		
Line Regulation				≤ 3 mV		
Load Regulation				≤ 5 mV		
Ripple & Noise				≤ 2 mVrms		
Transient Recovery Time				≤ 100 µs (50 % load change, minimum load 0.5 A)		
USB Port	Output			1.8 V/2.5 V/3.3 V/5.0 V, ± 0.35 V, 3 A		
	OCP			3.1 A (USB port)		
PROTECTION						
OVP	Power Mode	OFF,ON (0.5 V to 38.0 V)	OFF,ON (0.5 V to 75.0 V)	OFF,ON (0.5 V to 65.0 V)	OFF,ON (0.5V to 35.0 V)	OFF,ON (0.5 V to 38.0 V)
	Load Mode	OFF,ON (1.5 V to 38.0 V)	OFF,ON (1.5 V to 75.0 V)	OFF,ON (1.5 V to 65.0 V)	OFF,ON (1.5V to 35.0 V)	OFF,ON (1.5 V to 38.0 V)
	Setting Accuracy	± 100 mV				
	Resolution	100 mV				
OCP	Power Mode	OFF,ON (0.05 A to 10.5 A)	OFF,ON (0.05 A to 5.50 A)	OFF,ON (0.05 A to 3.50 A)	OFF,ON (0.05 A to 6.50 A)	OFF,ON (0.05 A to 5.50 A)
	Load Mode	OFF,ON (0.05 A to 10.5 A)	OFF,ON (0.05 A to 5.50 A)	OFF,ON (0.05 A to 3.50 A)	OFF,ON (0.05 A to 6.50 A)	OFF,ON (0.05 A to 5.50 A)
	Setting Accuracy	± 20 mA				
	Resolution	10 mA				
Insulation Resistance		Between chassis and terminal : 20 MΩ or above (DC 500V) Between chassis and DC power cord : 30 MΩ or above (DC 500V)				
ADVANCED FUNCTION						
Status Signal Output	Output ON/OFF Status	Turns on when the output is on				
	CV Status	Turns on during CV operation				
	CC Status	Turns on during CC operation				
	ALM Status	Turns on when an alarm has been activated				
	PWR ON Status	Turns on when the power is turned on				
GENERAL SPECIFICATIONS						
Display		4.3-inch TFT LCD				
Interface		Standard RS-232, USB (CDC), Ext. I/O, Optional (manufacturer installed only): LAN, GPIB+LAN				
Operation Environment		Indoor use, Altitude: ≤ 2000 m; Ambient temperature: 0 °C to 40 °C / Relative humidity: ≤ 80 %; Installation category: II / Pollution degree: 2				
Storage Environment		Temperature: -10 °C to 70 °C, Humidity: ≤ 70 %				
Power Input		AC 100 V/120 V/220 V/230 V ± 10 %, 50 Hz or 60 Hz				
Power Consumption		900 VA, 680 W				
Dimensions & Weight		213 mm x 145 mm x 362 mm (W x H x D), Approx. 10 kg				

Note:
*1. Warning : The CH3 output current from the 2 terminals should Not exceed 5A.
*2. Tracking is not supported in LOAD mode, and not supported in 1 channel model.
*3. Only Channel 1 and Channel 2 can perform series and parallel functions.
*4. Setting/feedback accuracy requirements: voltage ≥ 0.1 V, current ≥ 0.1 A.
*5. The CH3 specification is only suitable for GPP-3060/6030/3650.

Specifications subject to change without notice. GPP-Series_GD1BH_202603

Website Facebook Catalog

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Simply Reliable