



GPE-3060/6030

Triple-Channel DC Power Supply

FEATURES

- 1/2/3 Independent Isolated Output Channels
- GPE-3060 Provides CH1/CH2: 0 ~ 30V/0 ~ 6A Output; CH3 Supports 5.0V at 5A
- GPE-6030 Supports CH1/CH2: 0 ~ 60V/0 ~ 3A Output; CH3 Supports 5.0V at 5A
- Series/Parallel Tracking Function
- Setting/Read back Resolution :
Voltage (4digits) : 10mV (GPE-3060) / 20mV (GPE-6030)
Current (4digits) : 2mA (GPE-3060) / 1mA (GPE-6030)
- Output On/Off Function
- Simple Analog Control Interface
- Multiple Protection Apparatuses Such as Overvoltage and Overload Protection Functions

The GPE-3060/6030 are high-resolution linear DC power supplies. Their primary aim is to replace the existing GPC-3060D/6030D models. The GPE-3060/6030 deliver 385 watts of output power and feature three independent isolated output channels. The GPE-3060 offers CH1/CH2 outputs of 0 to 30V and 0 to 6A, while the GPE-6030 supports CH1/CH2 outputs of 0 to 60V and 0 to 3A. Both models feature CH3 outputs 5.0V at 5A.

Series/Parallel Operation Function - In addition to the independent output between each channel, GPE-3060/6030 can perform series/parallel automatic connection tracking function. Through the parallel or series function, the output of the power supply can be controlled at 30V/12A (parallel) (GPE-3060) or 120V/3A (series) (GPE-6030) and this function can be used on CH1/CH2.

With respect to high resolution, GPE-3060 provides 10mV/2mA and GPE-6030 offers 20mV/1mA. GPE-3060/6030 adopts a new hybrid power supply design, which can save 13% of power consumption compared with the wattage of the conventional linear power supplies, and the volume and weight are significantly reduced.

PANEL INTRODUCTION



1. 4.3-inch LCD Display
2. Power Button
3. Output Terminal (CH1/CH2/CH3)
4. Voltage Knob
5. Current Knob
6. OVP/Panel Lock Key
7. Output On/Off Function
8. Series/Parallel Operation Keys
9. CH1/CH2 Channel Switching Keys
10. AC Input Voltage Selector
11. Remote Control Terminal
12. AC Input Power Terminal

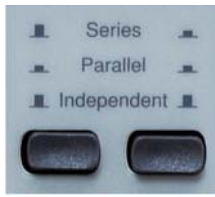
A. DIGITAL PANEL CONTROL



The GPE-3060/6030 linear DC power supplies have a built-in digital panel control design. By long pressing and short pressing a single button, they provide efficient and user-friendly OVP (overvoltage protection) function. The OVP function provides overvoltage protection, and the panel lock function prevents voltage/current parameters from being tampered with

by a third party to improve the protection of the DUT. The voltage and current setting knobs are changed to Encoder Switches to make the setting more accurate. In addition, the On/Off output button has a backlight display, which makes it easier for users to identify the current operating status of the power supply.

B. SERIES/PARALLEL OPERATION FUNCTION



In addition to the independent output between each channel, GPE-3060/6030 can perform series/parallel automatic connection tracking function. Through the parallel or series function, the output of the power supply can be controlled at 30V/12A (parallel) (GPE-3060) or 120V/3A (series) (GPE-6030) and this function can be used on CH1/CH2.

C. OPTIMIZATION OF HEAT DISSIPATION



There are air inlet ducts in front of the panel to efficiently dissipate heat. Temperature controlled fan can effectively reduce fan noise.

D. HIGH MEASUREMENT RESOLUTION (SETTING AND READBACK FUNCTIONS)



With respect to high measurement resolution, GPE-3060 provides 10mV/2mA and GPE-6030 offers 20mV/1mA with a readback accuracy of 30mV/10mA. GPE-3060/6030 ensure that the power output is pure and stable.

Users can easily apply the series to simulate the DUT with very small voltages or currents. Conventional low-resolution linear DC power supplies cannot achieve this function.

E. PANEL OUTPUT ON/OFF OR REAR PANEL REMOTE CONTROL OUTPUT ON/OFF FUNCTION

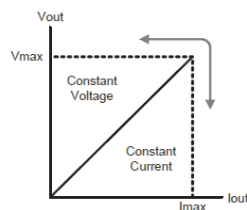


GPE-3060/6030 provide the output On/Off function. This function can avoid unnecessary damage caused by pre-output when the DUT is connected to the power supply. Users can set the voltage and current parameters in advance and confirm all connections have been completed, and manually execute output On/Off function through the front panel. Furthermore, the series provides a simple analog control function to control external output On/Off through the Remote Control terminal on the rear panel.

F. OPERATING MODE

C.V. and C.C Operation Mode

In constant voltage (CV) mode, the current limit must be set to determine its crossover point, and in constant current (CC) mode, the voltage limit must be set to determine its crossover point. When the current exceeds the crossover point, the power supply mode will switch to constant current (CC) mode.

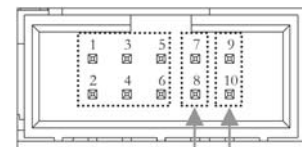


Series and Parallel Mode

When the CH1/CH2 of GPE-3060/6030 linear DC power supply are in parallel connection, the total output current will increase. While in series conditions, the total output voltage will increase to twice the original single channel rated output (maximum value). Users only need to press the required series or parallel button on the front panel to perform series or parallel operation.

Remote Control Settings

GPE-3060/6030 provide a simple Remote Control function. Remote Output On/Off control can be performed through this connector. The pin definitions are as follows:



- 7 & 8 Short circuit is the setting of remote control. At this time, the On/Off on the front panel will keep flashing.
- 9 & 10 Open circuit is the status of remote control Output On.
- 9 & 10 Short circuit is the status of remote control Output Off.

Key Lock Function

When users output voltage and current under fixed conditions to the power supply for a long time, users can start the panel lock function to protect the safety of the DUT in order to prevent a third party other than the user from arbitrarily changing the setting parameters and causing damage to the DUT.

SPECIFICATIONS

Model		GPE-3060 / GPE-6030	
Channel		CH1&CH2	CH3
Output	Voltage	0 ~ 30.00V*2 (GPE-3060) / 0 ~ 60.00V*2 (GPE-6030)	5V,±5%
	Current	0 ~ 6.000A*2 (GPE-3060) / 0 ~ 3.000A*2 (GPE-6030)	5A
	Voltage/Current(MAX)	32V, 6.2A (GPE-3060) / 62V, 3.2A (GPE-6030)	
	Tracking Series	0 ~ 60V, 0 ~ 6A (GPE-3060) 0 ~ 120V, 0 ~ 3A (GPE-6030)	
	Tracking Parallel	0 ~ 30V, 0 ~ 12A (GPE-3060) 0 ~ 60V, 0 ~ 6A (GPE-6030)	
Load Regulation	Voltage	≤ 0.01%+5mV ≤ 0.02%+5mV (≥10A)	≤ 5mV
	Current	≤ 0.1%+3mA	
Line Regulation	Voltage	≤ 0.01%+3mV	≤ 3mV
	Current	≤ 0.1%+3mA	
Ripple & Noise	Constant Voltage	≤ 1mVrms (5Hz-1MHz)	≤ 1mVrms (5Hz-1MHz)
	Constant Current	≤ 2mArms	
Setting /Read back Resolution	Voltage(4digits)	10mV (GPE-3060) / 20mV (GPE-6030)	
	Current(4digits)	2mA (GPE-3060) / 1mA (GPE-6030)	
Setting /Read back Accuracy	Voltage	±(0.1% of reading+30mV) (4digits) ±(0.1% of reading+200mV) (3digits)	
	Current	±(0.3% of reading+10mA) (4digits) ±(0.3% of reading+20mA) (3digits)	
Recovery Time		≤ 100μs (50% load change, minimum load 0.5A)	≤ 100μs
Temperature Coefficient		≤ 300ppm/°C	
Tracking Operation	Series Regulation	Tracking error: ≤ 0.1% +10mV of Master (GPE-3060) ≤ 0.2% +20mV of Master (GPE-6030) (No Load, with load add load regulation ≤ 200mV)	--
		Line : ≤ 0.01% + 5mV Load : ≤ 200mV	
	Parallel Regulation	Line : ≤ 0.01% + 3mV Load : ≤ 0.01% + 5mV ≤ 0.02% + 5mV (≥10A)	
		Ripple & Noise	≤ 2mVrms(5Hz~1MHz)
OVP	Voltage	OFF,ON (1V ~ 35.0V) (GPE-3060) OFF,ON (1V ~ 65.0V) (GPE-6030)	5.5V
	Resolution	1V	--
	Setting Accuracy	≤ ±1V	
Protection	OVP	●	
Insulation	Chassis and Terminal 20MΩ or above (DC 500V) Chassis and AC cord 30MΩ or above (DC 500V)		
Features	Display	4.3" monochrome LCD	
	Inter-channel Isolation	●	
	Independent Output	●	
	Key Lock	●	
	Intelligent Cooling Fan	●	
	Power ON/OFF State Setting	●	
	EXT I/O Control	●	
	Display	4.3" single color LCD	
Power	Consumption	900VA,680W	
	AC Input	100V/120V/220V/230Vac±10%, 50/60Hz	
Dimensions & Weight	210 (W) x 155 (H) x 362 (D) mm, 10kg		

Specifications subject to change without notice. GPE-60303060_E_ID1BH

ORDERING INFORMATION

- GPE-3060** 3-channel, 385W linear DC Power Supply
- GPE-3060** 3-channel, 385W linear DC Power Supply (European type)
- GPE-6030** 3-channel, 385W linear DC Power Supply
- GPE-6030** 3-channel, 385W linear DC Power Supply (European type)

ACCESSORIES

- Quick Start Manual, Power Cord
- Test Lead: GTL-104A x 3
- European Test Leads: GTL-204A x 3, GTL-201A x 1

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