### TRIPLE-CHANNEL PROGRAMMABLE DC POWER SUPPLY



GPP-3060 and GPP-6030 triple-channel programmable DC power supplies are extension models of the GPP-X323 series. The maximum output power of these two models is 385W. GPP-3060 supports CH1/CH2: 0 ~ 30V / 0 ~ 6A output; GPP-6030 supports CH1/CH2: 0 ~ 60V / 0 ~ 3A output; CH3 of both models supports 1.8V, 2.5V, 3.3V, 5.0V/5A.

GPP-3060 and GPP-6030 inherit the high program resolution (1mV/0.1mA) and read back resolution (0.1mV/0.1mA) of the GPP series with low-ripple noise characteristics  $\leq 1$ mVrms/ $\leq 2$ mArms and  $\leq 100\mu$ s output transient recovery ability. An independent output on-off switch is provided for each channel.

For series and parallel applications of CH1 and CH2, the tracking function can automatically switch to series or parallel output without additional external wiring. Multiple display modes including single channel or multi-channel setting value, measurement value and waveform display to collocate with the built-in output monitoring function allow users to set the monitoring conditions according to their needs so as to generate an alarm or stop the output during the measurement process in order to stop the measurement and protect the customer's DUT. The output recorder function can record the voltage/current of the output process in the internal memory, and save the result as a (\*.REC) or (\*.CSV) file, and then save it to a USB flash drive. The unique load function of the GPP series can arbitrarily set CH1/CH2 as power supply or load function. For example, one channel is set as power output, and the other channel is set as load function to consume the power of the DUT to satisfy simple battery charging and discharging or load characteristic test by a single power supply. The sequence output function allows users to edit the power output waveforms by themselves, and also allows users to set the sequential constant voltage (CV) or constant current (CC) load waveforms such as serial power output or dynamic load simulation test. Channel 3 (CH3) incorporates 3A USB (Type A) output terminal, which can be used for USB charging test.

Pertaining to measurement protections, OVP/OCP/OPP/OTP protection functions are provided. The protection mechanism of OVP/OCP/OTP is implemented by hardware circuits, which has a faster response time to protect equipment or DUT while comparing with competitors who use software for protection. The OVP and OCP functions allow users to set the protection action point according to the conditions of the DUT. OPP only provides protection during the operation of the load function.

In addition, GPP-3060 and GPP-6030 incorporate terminal output on the rear panel, and include a voltage remote sensing terminal. Users can choose front panel or rear panel terminal output, which is convenient for stand-alone or rack operation. Output value setting and Sequence/ The Delay/Recorder functions provide 10 sets of internal memory, which can be uploaded/stored by a USB flash drive.

#### **OPERATING RANGE**

Model Number	Number of Output	Max. Power	СН1	CH2	CH3	Interface
GPP-3060	3	385W	0-30V/0-6A	0-30V/0-6A	1.8V/2.5V/3.3V/5V; 5A	USB, RS-232, LAN, GPIB
GPP-6030	3	385W	0-60V/0-3A	0-60V/0-3A	1.8V/2.5V/3.3V/5V; 5A	USB, RS-232, LAN, GPIB

\* GPIB interfaces cannot be retrofitted after the shipment. When ordering the model, please confirm whether to order GPIB. \* Model ordering varies by region.

## GPP-3060/6030(Europe)

#### **FEATURES**

- \* 4.3"TFT LCD Display
- \* Setting Resolution: 1mV/0.1mA; Read Back Resolution: 0.1mV/0.1mA
- \* Low Ripple Noise: ≦1mVrms/≦2mArms
- \* Transient Response Time:  $\leq 100 \mu S$
- \* Load Function (CC, CV, CR mode)
- \* Tracking Series and Parallel Function without Additional External Wiring
- \* Utilizing Hardware to Realize Over Voltage Protection/Over Current Protection/ Over Temperature Protection
- \* Delay Function/Output Monitoring Function/ Output Recorder Function
- \* Supports Setting Value, Measurement Value and Output Waveform Display
- \* Sequential Output Function and Built-in 8 Template Waveforms
- \* The Output Recorder Function Records the Output Voltage & Current Parameters with a Minimum Recording Interval of 1 Second
- \* Provides 10 Sets of Memory for Each Sequence/
- Delay/Recorder/Panel Setting Condition \* GPP-3060/6030 Supports a USB (Type A) Output Terminal
- \* Intelligent Temperature Control Fan Effectively Reduces Noise
- \* Standard: RS-232, USB, LAN, Ext I/O Optional (manufacturer installed only): GPIB



Front Panel



Rear Panel

#### APPLICATIONS

- IoT Device
- Portable Device
- Wearable Device
- Sensor Component



# GPP-3060/6030

			GPP-3	060	GPP-6030					
OUTPUT MODE	Number of Channel	CH1	CH2	CH3	CH1	CH2	CH3			
	Voltage	0~30V	0~30V	1.8/2.5/3.3/5V, ±5%	0~60V	0~60V	1.8/2.5/3.3/5V, ±5%			
	Current	0~6A	0~6A	5A(MAX), 3A(MAX,USB port)	0~3A	0~3A	5A(MAX), 3A(MAX,USB port)			
	Tracking Series Voltage Tracking Parallel Current	0~60V 0~12A			0~120V 0~6A		_			
CONSTANT	Line Regulation	≦0.01%+3mV		≦3mV	≦0.01%+3mV		≦3mV			
VOLTAGE OPERATION	Load Regulation	$\leq$ 0.01%+5mV (rating current $\leq$ 10A)		≦5mV	$\leq$ 0.01%+5mV (rating current $\leq$ 10A)		≦5mV			
	Ripple & Noise(5Hz~1MHz)	≦1mVrms		≦2mVrms	≦1mVrms		≤2mVrms			
	Recovery Time	≦100μs		≦100μs	≦100μs		≦100μs			
CONSTANT CURRENT OPERATION	Line Regulation	≦0.01%+3mA		-	≦0.01%+3mA					
	Load Regulation	≦0.01%+3mA		_	≦0.01%+3mA		_			
	Ripple & Noise	≦2mA		_	≦2mA		_			
TRACKING OPERATION (CH1,CH2)	Tracking Error Parallel Regulation Series Regulation Ripple & Noise(5Hz~1MHz)	(No Load, $1 \le 0.0$ ) Line: $\le 0.0$ Load: $\le 0.0$ Line: $\le 0.0$	with load ad 1%+3mV )1%+5mV(ra	er (GPP-3060), $\leq 0.2\%+$ d load regulation $\leq 200$ ting current $\leq 10A$ ); $\leq 0$ oad : $\leq 200$ mV z)	mV)					
METER	Voltage Programming Resolution Current Programming Resolution Voltage Readback Resolution Current Readback Resolution Voltage Setting Accuracy Current Setting Accuracy Voltage Readback Accuracy Current Readback Accuracy	0.2mA 0.1mV 0.1mA $\leq \pm (0.03\% \text{ of}$ reading+10mV) $\leq \pm (0.30\% \text{ of}$ reading+10mA) $\leq \pm (0.03\% \text{ of}$ reading+10mV)		-	$2mV$ $0.1mA$ $0.1mV$ $0.1mA$ $\leq \pm (0.03\% \text{ of}$ $reading+10mV)$ $\leq \pm (0.30\% \text{ of}$ $reading+10mA)$ $\leq \pm (0.03\% \text{ of}$ $reading+10mV)$ $\leq \pm (0.30\% \text{ of}$ $reading+10mV)$		_			
DC LOAD CHARACTERISTIC	Channel Display Power Display Voltage Display Current CV Mode Setting Range Resolution Set Accuracy CC Mode Setting Range Resolution Set Accuracy CR Mode Setting Range Resolution Set Accuracy Read Accuracy Read Accuracy	$\begin{array}{l} CH1/CH2 \\ 0-50.00W \\ 1-32.00V \\ 0-6.200A \\ 1.500V-32.00V \\ 10mV \\ \leq 0.1\%+30mV \\ \leq 0.1\%+30mV \\ 0-6.200A \\ 1mA \\ \leq 0.3\%+10mA \\ \leq 0.3\%+10mA \\ 1-1k\Omega \\ 1\Omega \\ \leq 3\%+1\Omega (Voltage \geq \\ 0.1V, Current \geq 0.1A) \\ \leq 3\%+1\Omega (Voltage \geq \\ 0.1V, Current \geq 0.1A) \end{array}$		_	$\begin{array}{c} CH1/CH2 \\ 0-50.00W \\ 1-62.00V \\ 0-3.200A \\ 1.500V-62.00V \\ 10mV \\ \leq 0.1\%+30mV \\ \leq 0.1\%+30mV \\ \leq 0.1\%+30mV \\ 0-3.200A \\ 1mA \\ \leq 0.3\%+10mA \\ \leq 0.3\%+10mA \\ 10A \\$		_			
INSULATION	Chassis and Terminal Chassis and AC Power Cord		bove (DC 50 bove (DC 50							
ENVIRONMENT CONDITION	Operation Temp $0 \sim 40^{\circ} C$ Storage Temp $-10 \sim 70^{\circ} C$ Operating Humidity $\leq 80\%$ RHStorage Humidity $\leq 70\%$ RH									
INTERFACE	Standard: RS-232, USB, LAN, Ext I/O ; Optional(manufacturer installed only): GPIB									
POWER SOURCE	AC100V/120V/220V/230V±10%, 50/60Hz									
POWER CONSUMPTION	900VA, 680W									
DIMENSION & WEIGHT	213 (W) x 145 (H) x 362 (	D) mm · Apr	prox 10kg							
A WEIGHT		- , ,			to change withou		GPP-30606030GD1DS 202			

GPP-3060 385W Triple-channel Programmable DC Power Supply GPP-6030 385W Triple-channel Programmable DC Power Supply ACCESSORIES

CD (User manual), Quick start manual, Power cord , Test lead : European test leads: GTL-204A x 3, GTL-201A x 1

 Specifications subject to change without notice.
 GPP-3060

 OPTIONAL ACCESSORIES
 GTL-246
 USB Cable

 GRA-437-E
 Rack Mount Kit (EIA)
 GRA-437-J

 GRA-437-J
 Rack Mount Kit (JIS)
 INTERFACE

 Standard: RS-232, USB, LAN, Ext I/O
 Optional (manufacturer installed only): GPIB

NOTE : \* Contact local sales if you have issues with Interface purchase.





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