

GPE-X323 Series Linear D.C. Power Supply (High Resolution)

New Product Announcement

GW Instek introduces the GPE-X323 series high resolution power supply to the global market. As a front-runner in the power supply manufacturing industry, GW Instek adheres to the policy of highest production quality so as to ensure the qualitative edge over the competitors. The GPE-X323 series features output power from 192 to 217 watts, three independent isolated output channels (GPE-X323), high resolution, low noise, high reliability, key lock function, and compact size. The GPE-X323 series has firmly established another new paradigm for GW Instek in manufacturing economy linear D.C. power supplies.



Digital Panel Control

The GPE-X323 series has a built-in digital panel control design to replace conventional control method. This unique design allows the GPE-X323 series linear DC power supply to provide users with more efficient functionalities, including set view and key lock so as to expedite the operation process. The key lock function protects DUTs by preventing others from changing voltage / current parameters. Additionally, output key light facilitates users in clearly reading the operational status of power supply.



Tracking Series / Parallel Operational

In addition to independent output channels, the GPE-X323 series provides automatic tracking series and parallel connection function. The series and parallel connections allow power supplies to output 32V/6A (Parallel connection) and 64V/3A (Series connection). The CH1 and CH2 of GPE-2323 / GPE-3323 / GPE-4323 models operate the series and parallel connection function.



High Resolution (For Setting and Read back)

The GPE-X323 series features 10mV/1mA high resolution (for setting and read back). The series outputs a pure and stable power supply. Users can easily simulate small voltage or small current measurements for DUTs that is the area the conventional low resolution linear power supplies can't achieve.



Remote Control (Remote I/O) for Output On / Off Function

The GPE-X323 series provides the Output On/Off function to prevent DUTs from unnecessary damages caused by the pre-output when connecting a DUT with a power supply. Users must preset voltage and current parameters and ensure that all connections are correct. Then, via manual control on the front panel, users can activate the Output On/Off .



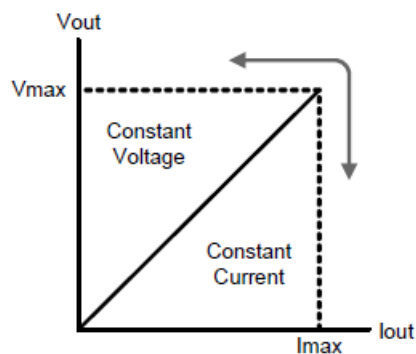
Features

- 1 / 2 / 3 / 4 Independent Isolated Output
- 4.3 Inch LCD Display
- Setting & Read back Resolution 10mA / 1mA
- Output ON/OFF Switch
- Analog Control (Remote I/O) for Output ON / OFF
- Set View function for checking an original V / I setting during output on
- Key Lock Function
- Tracking series and parallel operation
- Smart cooling fan achieving low noise
- Optional European Jack Type Terminal

Operating Mode

■ C.V. and C.C Operation Mode

Under the constant voltage (CV) mode, current limit is required to identify its crossover point and voltage limit for the constant current (CC) mode is also required to identify its crossover point. When current exceeds the crossover point, power supply will switch to the CC mode.



■ Key Lock Function

For users conducting a long period of time and fixed voltage/current output conditions on a power supply, the key lock function protects DUTs by preventing others from changing voltage/current parameters. Users can activate the key lock function to protect DUTs.

■ Series and Parallel Mode

The GPE-X323 series linear D.C. power supply will elevate its total output current level when CH1/CH2 parallel arrangement is adopted. When series arrangement is utilized, the total output voltage will be two fold (maximum) to that of the rated voltage output of a single unit. Users operate series or parallel operation by selecting required connection method from the front panel.



■ **Remote Control Settings**

The GPE-X323 series provides the simple Remote Control function. Via the remote control connector, users conduct remote Output On/Off control to define each pin.

7&8 short circuit setting for remote control setting, On/Off light will blink on the front panel

9&10 open circuit setting for remote control Output On

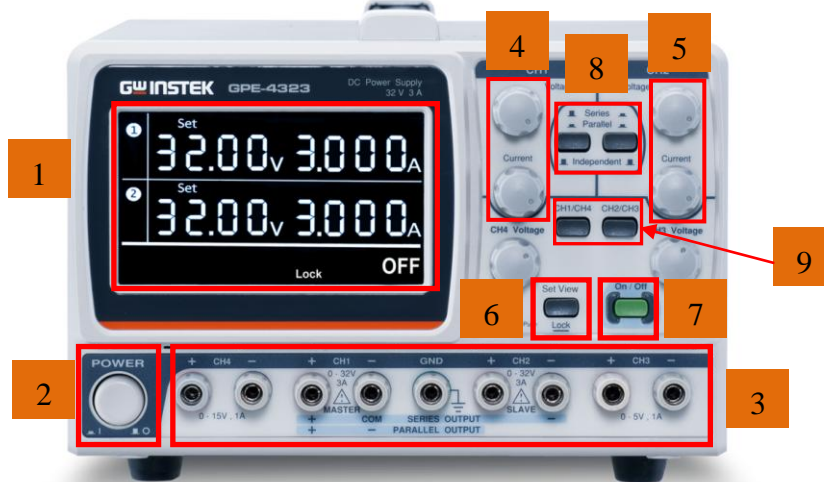
9&10 short circuit setting for remote control Output Off

Key Features , Advantages and Customers' Benefits

Features	Advantages	Benefits
Built-in automatic series/parallel connection function	Increase total output voltage by series connection and elevate total output current by parallel connection	For different DUTs, built-in series /parallel connection exempts users from the inconvenient connection
High measurement resolution (for setting/read back)	For testing LED or low current consumption products , users will not encounter inaccurate measurements	To increase measurement precision for users requiring measurements on low current DUTs
Set Check/Confirm function	Check the original parameters without turning off the output function	Check the original parameters while outputting

Front Panel & Rear Panel

Front Panel



- 1. 4.3 Inch LCD Display
- 2. Power Switch
- 3. Output Terminal (CH1/CH2/CH3/CH4)
- 4. CH1 Voltage / Current Knob
- 5. CH2 Voltage / Current Knob
- 6. Key Lock / Set View
- 7. Output On / Off
- 8. Series / Parallel Operation Key
- 9. CH1/CH4 & CH2/CH3 Channel Selection key

Rear Panel



- 10. Remote Control Connector
- 11. AC Inlet
- 12. AC Input Voltage Selection Switch

Features Comparison

Features	Model Number	GW INSTEK	GW INSTEK	B & K Precision
		GPE-X323 Series	GPS-X303 Series	1672
1/2/3/4 Isolated Channel Output		V	V	Triple Output Model Only
Tracking Series and Parallel Operation		V	V	V
Setting & Readback Resolution		10mV/1mA	100mV/10mA	100mV/10mA
Output On / Off Function		V	V	N/A
Analog Control Interface (Remote I/O)		V	N/A	N/A
OVP and Overload Protection		V	V	Overload Protection Only
V / I Check key		V	N/A	N/A
Optional European Type Jack Terminal		V	V	V

Key Dates for Product Announcement

1. Distributor Announcement and Demo Units Shipped to Distributors (Nov 16 , 15')
2. Global Market Announcement and Mass quantity orders fulfillment (Dec 16, 15')

Marketing Resource

Marcom Material and Service Manual download through Website. Good Will Instrument continues to provide after sales support through its website. The most updated version of service manual and Marcom material of GPE-X323 Series will be posted on the distributor zone of GWINSTEK'S website at <http://www.gwinstek.com.tw>.

Ordering Information

GPE-1326 , Single Channel, 192W Linear DC Power Supply

GPE-2323 , 2 Channels, 192W Linear DC Power Supply

GPE-3323 , 3 Channels, 217W Linear DC Power Supply

GPE-4323 , 4 Channels, 212W Linear DC Power Supply

Accessories

User Manual (CD) x 1 ; Power Cord x 1

GPE-1326 Test Lead GTL-104 x 1 ; GTL-105 x 1 ; or European GTL-204A x 1, GTL-203A x1

GPE-2323 Test Lead GTL-104 x 2 ; or European GTL-204A x 2,

GPE-3323 Test Lead GTL-104 x 3 ; or European GTL-204A x 3

GPE-4323 Test Lead GTL-104 x 2 ; GTL-105 x 2 or European GTL-204A x 2 , GTL-203A x 2

Service Policy

1. **1 year warranty.** **GPE-x323 Series** Linear DC Power Supply carries a standard warranty for 1 year.
2. **Service Support.** The service instructions in the Service Manual will help distributors repair damage units promptly. The parts-swapping service support is provided by Good Will Instrument to facilitate the repair jobs done at the distributor's site.

Specifications

	GPE-4323				GPE-3323			GPE-2323		GPE-1326
Output Mode										
Number of Channel	CH1	CH2	CH3	CH4	CH1	CH2	CH3	CH1	CH2	CH1
Voltage	0~32V	0~32V	0~5V	0~15V	0~32V	0~32V	5.0V	0~32V	0~32V	0~32V
Current	0~3A	0~3A	0~1A	0~1A	0~3A	0~3A	5A	0~3A	0~3A	0~6A
Tracking Series Voltage	0~64V		----		0~64V		----	0~64V		----
Tracking Parallel Current	0~6A		----		0~6A		----	0~6A		----
Constant Voltage Operation										
Line Regulation	$\leq 0.01\%+3mV$									
Load Regulation	$\leq 0.01\%+3mV(\text{rating current} \leq 3A)$									
	$\leq 0.02\%+5mV(\text{rating current} > 3A)$									
Ripple & Noise	$\leq 1mV_{rms}(5Hz\sim 1MHz)$									
Recovery Time	$\leq 100\mu s(50\% \text{ Load Change, minimum load } 0.5A)$									
Constant Current Operation										
Line Regulation	$\leq 0.2\%+3mA$									
Load Regulation	$\leq 0.2\%+3mA$									
Ripple & Noise	$\leq 3mArms$									
Tracking Operation(CH1,CH2)										
Tracking Error	$\leq 0.1\%+10mV$ of Master(0~32V) No Load , with Load add load regulation $\leq 100mV$									
Parallel Regulation	Line: $\leq 0.01\%+3mV$									
	Load: $\leq 0.01\%+3mV(\text{rating current} \leq 3A)$									
	$\leq 0.02\%+5mV(\text{rating current} > 3A)$									
Series Regulation	Line: $\leq 0.01\%+5mV$									
Ripple & Noise	Load: $\leq 100mV$									
CH3 Operation for (GPE-3323)										
Output Voltage	5.0V, $\pm 5\%$									
Output Current	5A									
Line Regulation	$\leq 3mV$									
Load Regulation	$\leq 5mV$									
Ripple & Noise	1mVrms(5Hz~1MHz)									
Meter										
Voltage Resolution	10mV									
Current Resolution	1mA									
Setting Accuracy	Voltage $\pm(0.1\%$ of reading +30mV)									
	Current $\pm(0.3\%$ of reading +6mA)									
Readback Accuracy	Voltage $\pm(0.1\%$ of reading +30mV)									
	Current $\pm(0.3\%$ of reading +6mA)									
Insulation										
Chassis and Terminal	20M Ω or above (DC 500V)									
Chassis and AC Cord	30M Ω or above (DC 500V)									
Environment Condition										
Operation Temp	0~40 $^{\circ}C$									
Storage Temp	-10~70 $^{\circ}C$									
Operating Humidity	$\leq 80\%$ RH									
Storage Humidity	$\leq 70\%$ RH									
Other										
Power Source	AC100V/120V/220V $\pm 10\%$; 230V(+10%~-6%); 50/60Hz									
Dimensions & Weight	210(W)x 155(H) x 306(D) mm ; Approx. 7kg									

Sincerely yours,

Overseas Sales Department

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