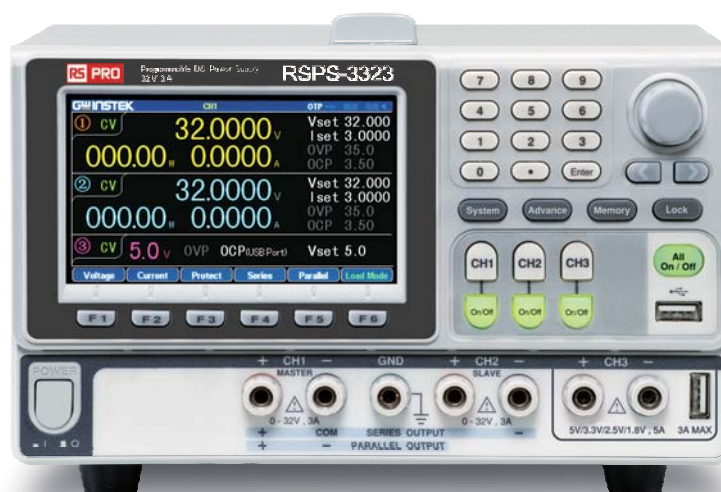


Datasheet

Multi-output Programmable D.C. Power Supply

Stock No. : Model :
2521598 **RSPS-3323**



FEATURES

- 4.3" TFT LCD Display
- Supports Setting Value, Measurement Value and Output Waveform Display
- Load Function (CC, CV, CR Mode)
- Setting Resolution: 1mV/0.1mA ; Read Back Resolution: 0.1mV/0.1mA
- Low Ripple Noise: $\leq 350\mu\text{Vrms}/\leq 2\text{mArms}$
- Transient Response Time: $\leq 50\mu\text{s}$
- 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
- Intelligent Temperature Control Fan Effectively Reduces Noise
- 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
- CH3 Supports A USB(Type A) Output Terminal
- Standard: RS-232, USB, Ext I/O ; Optional(Manufacturer Installed Only): LAN, GPIB+LAN
- Compatible with Commands of IPS-X303S Series

With the maximum output power of 217W, the RSPS-3323, a multi-channel programmable DC power supply, provides three-channel output (CH1: 0~32V/0~3A, CH2:0~32V/0~3A, CH3: 1.8V, 2.5V, 3.3V, 5.0V/5A) and provides high program resolution (1mV/0.1mA) and read back resolution (0.1mV/0.1mA), but also features optimal low-ripple noise characteristics $\leq 350\mu\text{Vrms}/\leq 2\text{mAms}$ and output transient recovery capability $\leq 50\mu\text{s}$. Independent output on-off switch is provided for each channel.

For series and parallel applications of CH1 and CH2, the tracking function of the RSPS-3323 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.

The RSPS-3323 offers a variety of display modes, including single or multi-channel setting values, measurement values, and waveform displays. The Monitor function of the RSPS-3323 allows users to set monitoring conditions according to requirements, sound alarms or stop output during the measurement process, and stop measurement and protect the customer's DUT. The RSPS-3323 provides output recorder function, which records the voltage/current of the output process to the internal memory, and the result can be stored as a (*.REC) or (*.CSV) file, which can then be transferred to the USB flash drive. The stored *.CSV can be exported to the Excel to conduct the future analysis.

The CH1/CH2 of the RSPS-3323 are designed with the load function. A single power supply can set one channel as the power output, and one channel for the load function to consume the power of the DUT so as to meet the basic charging and discharging test requirements for battery. Channel 1 and channel 2 not only provide 32V/3A power output, but also feature built in maximum 32V constant voltage load (CV), maximum 3.2A constant current load (CC) and maximum 1k Ω constant resistance load (CR) function.

The RSPS-3323 provides the 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. In order to simplify the setting of waveform editing, the RSPS-3323 has 8 built-in Templet waveforms in the sequence output function for users to directly apply for output, including Sine, Pulse, Ramp, Stair Up, Stair Dn, Stair UpDn, Exp Rise, Exp Fall waveforms.

The sound protection functions include OVP/OCP/OPP/OTP, in which the protection mechanism for OVP/OCP/OTP is implemented by hardware circuit that has the advantage of faster response time compared with competitors who adopt software to achieve protections. The OVP/OCP functions allow users to set the protection action point (except CH3) according to the conditions of the DUT. The OPP is only activated during the operation of the load function. The Delay Function sets the length of time during channel 1 or channel 2 power output on or during power output off.

In addition, the Trigger In/ Trigger Out functions synchronize external devices. The channel 3 adds a 3A USB (Type A) output terminal for USB charging test. The intelligent temperature-controlled fan can adjust the speed according to the temperature of the power transistor so as to reduce unnecessary noise. The output value setting and the Sequence/Delay/Recorder functions provide 10 sets of internal memory for use, and can be loaded/stored using a USB flash drive. In addition to the standard RS-232 and USB remote interfaces, the RSPS-3323 also has an optional LAN or LAN+GPIB interface to facilitate different requirements. The commands of the RSPS-3323 conform to SCPI requirements and are compatible with the commands of the IPS-X303S Series.

SPECIFICATIONS			
OUTPUT MODE			
Number of Channel	CH1	CH2	CH3
Voltage	0 ~ 32.000V	0 ~ 32.000V	1.8V/2.5V/3.3V/5.0V, ±5%
Current	0 ~ 3.0000A	0 ~ 3.0000A	5A (USB Port 3A)
Tracking Series Voltage/Current	0 ~ 64.000V / 0 ~ 3.0000A		-
Tracking Parallel Voltage/Current	0 ~ 32.000V / 0 ~ 6.0000A		-
Warning : The CH3 of GPP-3323 output current from the 2 terminals should Not exceed 5A.			
CONSTANT VOLTAGE OPERATION			
Line Regulation	≤ 0.01% + 3mV		≤ 3mV
Load Regulation	≤ 0.01%+3mV(rating current≤3A)		≤ 5mV
	≤ 0.02%+5mV(rating current>3A)		
Ripple & Noise (5Hz-1MHz)	≤0.35mVrms		≤2mVrms
Transient Recovery Time	≤50µs		≤100µs
	(50% load change , minimum load 0.5A)		
Temperature Coefficient	≤ 300ppm/°C		
CONSTANT CURRENT OPERATION			
Line Regulation	≤ 0.2% + 3mA		
Load Regulation	≤ 0.2% + 3mA		
Ripple & Noise	≤ 2mArms		
Resolution			
Programming	Voltage/Current	1mV / 0.1mA	---
Reedback	Voltage/Current	0.1mV / 0.1mA	---
TRACKING OPERATION(CH1/CH2)			
Tracking Error	≤±(0.1%+10mV of Master(0~32V))		
	(No Load, with load add load regulation≤100mV)		
Parallel Regulation	Line	≤ 0.01% + 3mV	
	Load	≤ 0.01%+3mV(rating current≤3A)	
		≤ 0.02%+5mV(rating current>3A)	
Series Regulation	Line	≤ 0.01% + 5mV	
	Load	≤ 100mV	
Ripple & Noise	≤1mVrms(5Hz-1MHz)		
METER			
Full Scale	Voltage/Current	33.0000V / 3.2000A	1.8V/2.5V/3.3V/5.0V
Programming Resolution	Voltage/Current	5 digits / 5 digits	---
Reedback Resolution	Voltage/Current	5 digits / 6 digits	---
Setting Accuracy	Voltage	± (0.03% of reading + 10mV)	
	Current	± (0.3% of reading + 10mA)	
Reedback Accuracy	Voltage	± (0.03% of reading + 10mV)	
	Current	± (0.3% of reading + 10mA)	
DC LOAD MODE			
Display	Voltage	1 ~ 33.00V	
	Current	0 ~ 3.200A	
	Power	0 ~ 50.00W	
CV Mode	CH1/CH2	1.500V ~ 33.00V	
	Setting/Reedback Accuracy	≤±(0.1% + 30mV)	
	Resolution	10mV	
CC Mode	CH1/CH2	0 ~ 3.200A	
	Setting/Reedback Accuracy	≤±(0.3% + 10mA)	
	Resolution	1mA	
CR Mode	CH1/CH2	1Ω- 1kΩ	
	Setting/Reedback Accuracy	≤±(3% + 1Ω)	
	Resolution	(voltage≥0.1V, and current≥0.1A) 1Ω	
PROTECTION			
OVP	Power Mode	OFF,ON(0.5V ~ 35.0V)	
	Load Mode	OFF,ON(1.5V ~ 35.0V)	
	Setting Accuracy	±100mV	
	Resolution	100mV	
OCP	Power Mode	OFF,ON(0.05A ~ 3.50A)	
	Load Mode	OFF,ON(0.05A ~ 3.50A)	
	Setting Accuracy	±20mA	
	Resolution	10mA	
Insulation Resistance		Between chassis and terminal : 20MΩ or above (DC 500V)	
		Between chassis and DC power cord : 30MΩ or above (DC 500V)	
GENERAL			
Operation Environment	Indoor use, Altitude: ≤ 2000m ; Ambient temperature: 0 ~ 40°C / Relative humidity: ≤ 80% ; Installation category: II / Pollution degree: 2		
Storage Environment	TEMPERATURE: -10°C ~ 70°C / HUMIDITY: ≤70%		
Power Input	AC 100V/120V/220V/230V±10%, 50/60Hz		
Power Consumption	420W		
Dimensions & Weight	213 (W) x 145 (H) x 312 (D) mm ; Approx. 7.5kg		

Specifications subject to change without notice.

ORDERING INFORMATION

RSPS-3323 (32V/3A*2; 1.8V or 2.5V or 3.3V or 5V/5A*1)
Three-Output Programmable DC Power Supply

ACCESSORIES

User Manual x 1 , Power cord x 1 , Test Lead GTL-104A x 3
European Test Leads: GTL-204A x 3, GTL-201A x 1

OPTIONAL ACCESSORIES

GTL-246 USB Cable **GRA-437-J** Rack Mount Kit (JIS) **GRA-437-E** Rack Mount Kit (EIA)

OPTIONS (Manufacturer Installed Only)

LAN Interface; GPIB+LAN Interface