

Programmable DC Power Supplies



DP800 and DP700 Series are high-performance programmable linear DC power supply. All models of DP800 series have excellent features including standard timing outputs, extremely low ripple and noise, comprehensive over-voltage, over current, over-temperature protection, a large and clear user interface, super performance and specifications. DP800A models provide standard high resolution mode (1mV/1mA), fully remote control interfaces, On-line Monitoring and analysis functions; those functions are the options for DP800 models.

DP700 series power supply is a type of affordable programmable linear DC power supply with high performance. DP700 series also supports timing output and trigger function, and provides a remote control interface, the clear and simple user interface make it easy to use for the customers.

DP800 Series and DP700 Series have broad range of applications such as:

- Power supply for the R&D labs
- System integration
- Provide clean power for RF products
- Verification and characterisation for the device or circuit
- Teaching labs

Model	Outputs	Output Range	Max. Power	Ripple & Noise	Std. Programming resolution	High resolution option	Monitor	Analyzer	Timing Output	Digital IO	Synchronized Output	RS232	LAN
DP711	1	30V/5A	150W	<500 μ Vrms	10mV	○			○		○	●	
DP712	1	50V/3A	150W	<500 μ Vrms	10mV	○			○		○	●	
DP811	1	20V/10A or 40V/5A	200W	<350 μ Vrms	10mV	○	○	○	●	○		○	○
DP821	2	8V/10A 60V/1A	140W	<350 μ Vrms	10mV/10mV	○	○	○	●	○		○	○
DP832	3	30V/3A 30V/3A, 5V/3A	195W	<350 μ Vrms	10mV/10mV/10mV	○	○	○	●	○		○	○
DP831	3	8V/5A 30V/2A, -30V/2A	160W	<350 μ Vrms	1mV/10mV/10mV	○	○	○	●	○		○	○
DP811A	1	20V/10A or 40V/5A	200W	<350 μ Vrms	1mV	●	●	●	●	●		●	●
DP821A	2	8V/10A 60V/1A	140W	<350 μ Vrms	1mV/1mV	●	●	●	●	●		●	●
DP832A	3	30V/3A 30V/3A, 5V/3A	195W	<350 μ Vrms	1mV/1mV/1mV	●	●	●	●	●		●	●
DP831A	3	8V/5A 30V/2A, -30V/2A	160W	<350 μ Vrms	1mV/1mV/1mV	●	●	●	●	●		●	●

● Standard ○ Optional

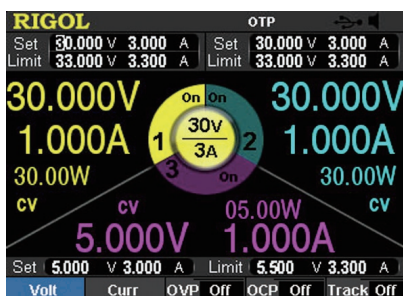
DP800 Series Programmable Linear DC Power Supplies



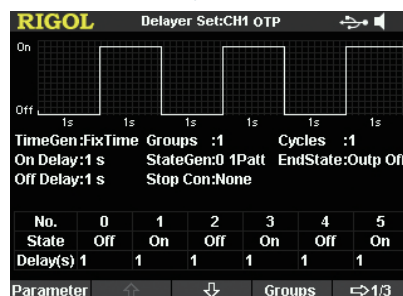
DP800 Series is the high-performance programmable linear DC power supply. All models have excellent features including standard timing outputs, extremely low ripple and noise, comprehensive over-voltage, over current, over-temperature protection, a large and clear user interface, super performance and specifications. DP800A models provide standard high resolution mode (1mV/1mA), fully remote control interfaces, online monitoring and analysis functions; those functions are the options for DP800 models.

- 1, 2 or 3 outputs, the maximum power is up to 195W
- Low Ripple and Noise: <350uVrms/2mVpp
- Fast Transient Response Time: < 50us
- 0.01% Linear Regulation Rate and Load Regulation Rate
- Standard Timing output; Built-in V,A,W measurements and
- waveform display
- 3.5 inch TFT display, easy for operation

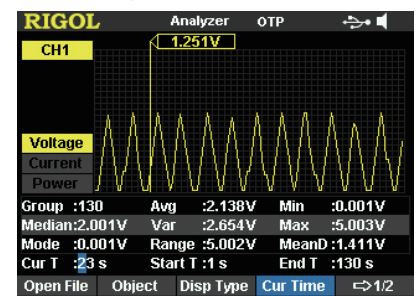
Intuitive User Interface



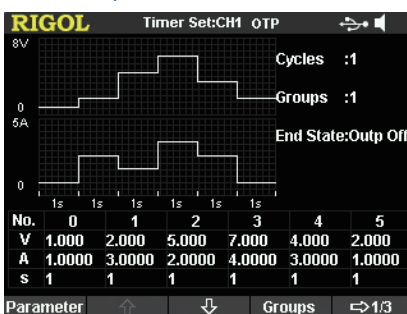
Output On/Off Delay



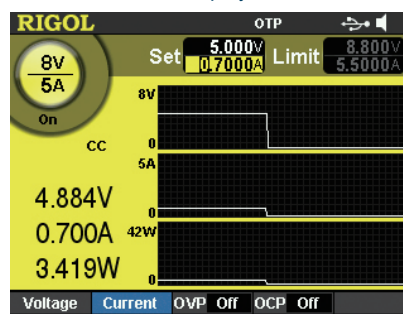
Output Analysis



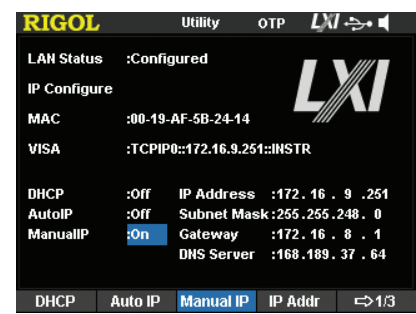
Timing Output Setting



V/A/W Waveform Display



LAN Setting



Key Specifications

Model	DP832A	DP832	DP831A	DP831	DP821A	DP821	DP811A	DP811
Channels	3				2		1	
DC Output	30V/3A 30V/3A, 5V/3A		8V/5A 30V/2A, -30V/2A		8V/10A 60V/1A		20V/10A or 40V/5A	
Load Regulation Rate	Voltage: < 0.01% + 2mV; Current: < 0.01% + 250uA							
Linear Regulation Rate	Voltage: < 0.01% + 2mV; Current: < 0.01% + 250uA							
Ripples and Noise(20Hz-20MHz)	Normal Mode Voltage: <350uVrms/3mVpp; Normal Mode Current: <2mArmss							

Programming Annual Accuracy	Voltage	CH1	0.05% + 20mV		0.1%+5mV		0.1%+25mV		0.05%+10mV	
		CH2	0.05% + 20mV		0.05%+20mV		0.05%+10mV		–	
		CH3	0.1% + 5mV		0.05%+20mV		–		–	
	Current	CH1	0.2% + 5mA		0.2%+10mA		0.2%+10mA		0.1%+10mA	
		CH2	0.2% + 5mA		0.2%+5mA		0.2%+10mA		–	
		CH3	0.2% + 5mA		0.2%+5mA		–		–	
Readback Annual Accuracy	Voltage	CH1	0.05% + 20mV		0.1%+5mV		0.1%+25mV		0.05%+10mV	
		CH2	0.05% + 20mV		0.05%+20mV		0.05%+10mV		–	
		CH3	0.1% + 5mV		0.05%+20mV		–		–	
	Current	CH1	0.15% + 5mA		0.2%+10mA		0.15%+10mA		0.1%+10mA	
		CH2	0.15% + 5mA		0.1%+5mA		0.15%+10mA		–	
		CH3	0.15% + 5mA		0.1%+5mA		–		–	
Programming Resolution		Voltage	1mV	10mV	1mV 1mV 1mV	1mV 10mV 10mV	10mV 1mV	10mV 10mV	1mV	10mV
		Current	1mA	1mA	0.3mA 0,1mA 0,1mA	1mA 1mA 1mA	0.1mA 1mA	1mA 10mA	0.5mA	10mA
Readback Resolution		Voltage	0.1mV	10mV	0.1mV	1mV	1mV 1mV	10mV 10mV	0.1mV	1mV
		Current	0.1mA	1mA	0.1mA	1mA	0.1mA 1mA	1mA 10mA	0.1mA	1mA
Display Resolution		Voltage	1mV	10mV	1mV	10mV	1mV 1mV	10mV 10mV	1mV	10mV
		Current	1mA	10mA	1mA	10mA	0.1mA 1mA	1mA 10mA	1mA	10mA
Interface		USB Device	●	●	●	●	●	●	●	●
		USB Host	●	●	●	●	●	●	●	●
		LAN	●	○	●	○	●	○	●	○
		RS232	●	○	●	○	●	○	●	○
		Digital IO	●	○	●	○	●	○	●	○
		USB-GPIB	○	○	○	○	○	○	○	○

Ordering Information

	Description	Order Number
Models	Three channel, high resolution, Programmable Linear DC Power Supply	DP832A
	Three channel, Programmable Linear DC Power Supply	DP832
	Three channel, two polarity ,high resolution, Programmable Linear DC Power Supply	DP831A
	Three channel, two polarity ,Programmable Linear DC Power Supply	DP831
	Two channel, high resolution, Programmable Linear DC Power Supply	DP821A
	Two channel, Programmable Linear DC Power Supply	DP821
	One channel, dual ranges, high resolution, Programmable Linear DC Power Supply	DP811A
	One channel, dual ranges, Programmable Linear DC Power Supply	DP811
Standard Accessories	USB cable	CB-USBA-USBB-FF-150
	One fuse (50T-025H 250V 2.5A)	-
	One shorted device	-
	Power cord, Quick Guide	-
Optional Accessories	1mV & 1mA High resolution option(DP8xx models)	HIRES-DP800
	4 Lines Trigger In&Out (DP8xx models)	DIGITALIO-DP800
	On-line Monitoring and analysis (DP8xx models)	AFK-DP800
	RS232 and LAN interface (DP8xx models)	INTERFACE-DP800
	USB-GPIB Converter	USB-GPIB
	Rack Mount Kit (one instrument)	RM-1-DP800
	Rack Mount Kit (two instruments)	RM-2-DP800

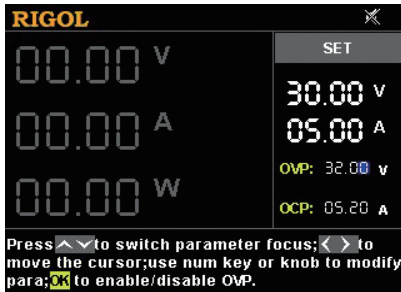
DP700 Series Programmable Linear DC Power Supplies



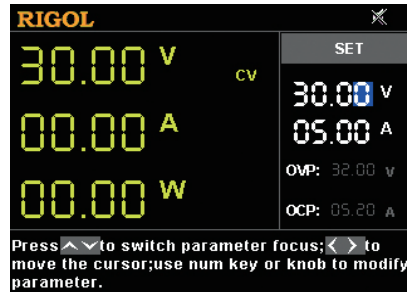
DP700 series power supply is a type of affordable programmable linear DC power supply with high performance. DP700 series supports timing output and trigger function, and provides a remote control interface, the clear and simple user interface makes it easy to use for the customers.

- Two Models, Single Output, Max. Output Power up to 150 W
- Low ripple and noise: <500uVrms/3mVpp or 4mVpp
- 0.01% Excellent load and line regulation rate
- Support 1 mV/1 mA high resolution mode
- Complete OV,OT,OC protection function
- Synchronous output for multiple units
- Timing output
- 3.5-inch TFT-LCD; compact size, easy to use

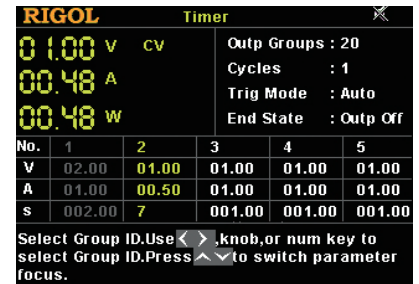
Complete overvoltage/overcurrent protection (OVP/OCP)



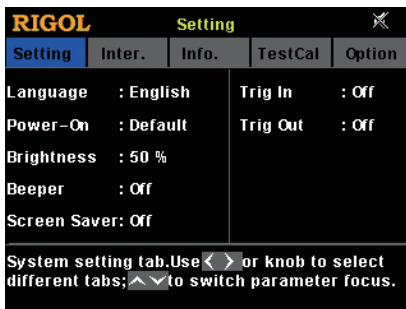
Clear and intuitive user interface, easy to use



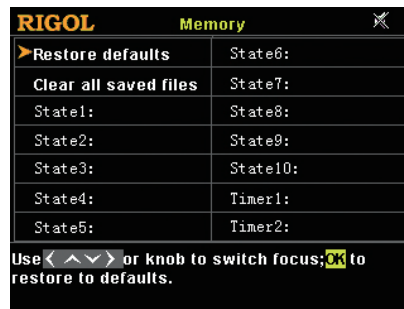
Powerful timing output function



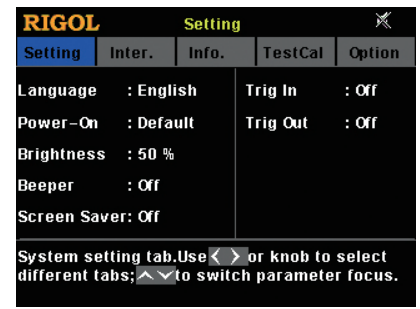
Convenient trigger function



Easy-to-use function of file storage and recall



Abundant system setting function



Key Specifications

Model	Voltage/Current Rating	OVP/OCP
DP711	0 V to 30 V/0 A to 5 A	0.01 V to 33 V/0.01 A to 5.5 A
DP712	0 V to 50 V/0 A to 3 A	0.01 V to 55 V/0.01 A to 3.3 A
Load Regulation, ±(% of Output + Offset)		
Voltage	<0.01% + 2 mV	
Current	<0.01% + 2 mA	
Line Regulation, ±(% of Output + Offset)		
Voltage	<0.01% + 2 mV	
Current	<0.01% + 2 mA	

Ripple and Noise (20 Hz to 20 MHz)		
Model	Normal Mode Voltage	Normal Mode Current
DP711	<500 μVrms/3 mVpp	<2 mArms
DP712	<500 μVrms/4 mVpp	
Annual Accuracy ^[1] (25°C ± 5°C), ±(% of Output + Offset)		
Programming	Voltage	0.05% + 20 mV
	Current	0.2% + 10 mA
Readback	Voltage	0.05% + 20 mV
	Current	0.2% + 20 mA
Resolution		
Programming	Voltage	Standard: 10 mV High resolution option installed: 1 mV
	Current	Standard: 10 mA High resolution option installed: 1 mA
Readback	Voltage	Standard: 10 mV High resolution option installed: 1 mV
	Current	Standard: 10 mA High resolution option installed: 1 mA
Display	Voltage	Standard: 10 mV High resolution option installed: 1 mV
	Current	Standard: 10 mA High resolution option installed: 1 mA
Transient Response Time		
Less than 50 μs for output voltage to recover to within 15 mV following a change in output current from full load to half load (or from half load to full load).		
Mechanical		
Dimensions	140 mm (W) x 202mm (H) x 332 mm (D)	
Weight	Net weight: 6.9 kg	
Interface		
RS232	1	

Ordering Information

	Description	Order No.
Models	Programmable Linear DC Power Supply (single channel, 30V/5A)	DP711
	Programmable Linear DC Power Supply (single channel, 50V/3A)	DP712
Standard Accessories	Power Cord Conforming to the Standard of the Destination Country	-
	Either one of the following specified fuses: Fuse 50T-050H 250V 5A (AC Selector: 100 Vac or 120 Vac) Fuse 50T-025H 250V 2.5A (AC Selector: 220 Vac or 240 Vac)	-
	Quick Guide (hard copy)	-
Optional Accessories	High Resolution	HIRES-DP700
	Trigger (external synchronous trigger input and output)	TRIGGER-DP700
	Timer	TIMER-DP700
	9-Pin RS232 Cable (female-to-female, straight)	CB-DB9-DB9-F-F-150
	DP700 Series Rack Mount Kit (for a single instrument)	RM-1-DP700
	DP700 Series Rack Mount Kit (for two instruments)	RM-2-DP700
	DP700 Series Rack Mount Kit (for three instruments)	RM-3-DP700