



DP1116A/DP1308A Programmable DC Power Supply

- 4.3 inch large True Color LCD Display with 480x272 high resolution: Displays multiple parameters and state graph simultaneously.
- DP1308A: Separate Control and Independent Triple Outputs: +6V/5A, +25V/1A, -25V/1A, total 80W power.
- The +6V channel output is electrically isolated from ±25V channel output to minimize the interference between the circuits under test.
- DP1116A: Single output, dual ranges, 160W power with the remote sense capability
- Clean power with Low ripple noise: < 350 µVrms / 3 mVpp (DP1116A);
 < 350 µVrms / 2 mVpp(DP1308A)
- Excellent line regulation rate: < 0.01% + 2 mV (voltage), < 0.01% + 250 µA (current)
- Excellent load regulation rate: < 0.01% + 2 mV (voltage), < 0.005% + 250 µA (current) (DP1116A)
 < 0.01% + 2 mV (voltage), < 0.010% + 250 µA (current) (DP1308A)
- Fast Transient Response Time: <50µs
- DP1308A ±25V channels have output tracking functions
 The change of voltage value in one channel can be reflected in the other channel.
- Overvoltage and overcurrent protection function
- Two-level over-temperature protection
- Store and recall system setups
- DP1116A supports up to 100 groups of timing settings
- Real time V/A/W waveform display with V/A/W values
- DP1116A provides the classical display mode: dial plates with pointer and V/A/W values
- On-line help, Chinese & English interface and input
- Comprehensive Connectivity and Remote Control Interface
 USB Device, USB Host, LAN, GPIB interfaces, support USB flash drive storage
- Remote control via Web or SCPI commands
- Conform to LXI-C Class instrument standard (version 1.2)

DP1116A/DP1308A Programmable DC Power Supply

Observable Clean Stable Reliable Affordable

4.3 inch Large True Color TFT LCD Display
 Clean power with Low ripple noise
 Excellent Load and Line Regulation



Product Dimension: Width×Height×Depth=235 mm×155 mm×384 mm Weight: 8.5 kg

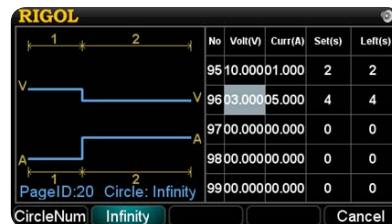
► Typical Applications

- R&D lab General purpose testing
- Quality Assessment inspection
- Bias power for RF/MW circuits
- Automotive electronic test
- Production testing
- Device or circuit characterization and troubleshooting
- Teaching lab experiments

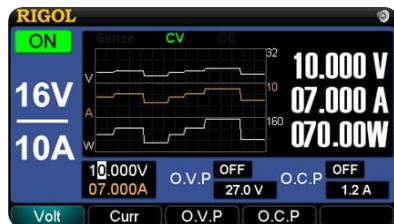
► Intuitive User Interface



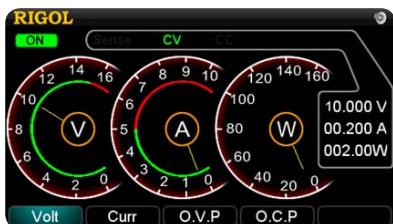
Displays multiple parameters and state graph simultaneously



DP1116A supports up to 100 groups of timing settings



Real time V/A/W waveform display with V/I/A/W values



DP1116A provides the classical display mode: dial plates with pointer and V/A/W values



Store and recall system setups



On-line help

► Specifications

Specifications are valid after 30 minute warm up time under specified temperature.

Model	DP1116A		DP1308A		
Output Ranges/Channels	16 V/10 A	32 V/5 A	+6 V	+25 V	-25 V
DC Output (0°C - 40°C)					
Voltage	0 to 16 V	0 to 32 V	0 to +6V	0 to +25 V	0 to -25 V
Current	0 to 10 A	0 to 5 A	0 to 5 A	0 to 1 A	0 to 1 A
Overshoot Protection	0.1 V to 35.2 V		0.1 V to 6.5 V	0.1 V to 27 V	-0.1 V to -27 V
Overshoot Protection	0.1 A to 11 A		0.1 A to 5.5 A	0.1 A to 1.2 A	0.1 A to 1.2 A
Load Regulation [±] (output percentage + offset)					
Voltage	< 0.01% + 2 mV				
Current	< 0.005% + 250 μA		< 0.01% + 250 μA		
Line Regulation [±] (output percentage + offset)					
Voltage	< 0.01% + 2 mV				
Current	< 0.01% + 250 μA				
Ripple and Noise (20 Hz - 20 MHz)					
Normal Mode Voltage	< 350 μV rms/3 mVpp		< 350 μV rms/2 mVpp		
Normal Mode Current	< 2 mA rms		< 2 mA rms	< 500 μA rms	
Common Mode Current	-		< 1.5 μA rms		
Accuracy 12 Months ^[1] (25°C±5°C)±(output percentage + offset)					
Programming	Voltage	0.05% + 10 mV	0.1% + 5 mV	0.05% + 20 mV	
	Current	0.2% + 10 mA	0.2% + 10 mA	0.15% + 4 mA	
Read Back	Voltage	0.05% + 5 mV	0.1% + 5 mV	0.05% + 10 mV	
	Current	0.15% + 5 mA	0.2% + 10 mA	0.15% + 4 mA	
Resolution					
Programming		1 mV/1 mA	0.5 mV/0.5 mA	1.5 mV/0.1 mA	
Read Back		1 mV/1 mA	0.5 mV/0.5 mA	1.5 mV/0.1 mA	
Meter		1 mV/1 mA	1 mV/1 mA	10 mV/1 mA	
Transient Response Time					
Less than 50 μs is spent on recovering the voltage within 15 mV during the output current changes from full load to half load or half to full.					
Sense (only for DP1116A)					
Voltage drop: Up to 1V per each lead					
Command Processing Time ^[2]					
< 50 ms					
Temperature Coefficient per °C (output percentage + offset)					
Voltage	0.01% + 3 mV	0.01% + 2 mV	0.01% + 3 mV		
Current	0.02% + 3 mA	0.02% + 3 mA	0.01% + 0.5 mA		
Stability ^[3] , ±(output percentage + offset)					
Voltage	0.02% + 1 mV	0.03% + 1 mV	0.02% + 2 mV		
Current	0.1% + 1 mA	0.1% + 3 mA	0.05% + 1 mA		
Voltage Programming Speed(to within 1% of total variation range)					
Rising	Full Load	50 ms	11 ms	50 ms	
	No Load	20 ms	10 ms	45 ms	
Falling	Full Load	45 ms	13 ms	20 ms	
	No Load	400 ms	200 ms	400 ms	
OVP/OCP					
Accuracy	0.5% + 0.5V/0.5% + 0.5 A				
± (output percentage + offset)					
Activation Time	1.5 ms(OVP ≥ 3 V); < 10 ms(OVP < 3 V) < 10 ms(OCP)				
Machine					
Dimension	235 mm (W) x 155 mm (H) x 384 mm (D)				
Weight	11 kg		8.5 kg		
Power Supply					
AC Input	100 Vac ± 10%, 115 Vac ± 10%, (50 Hz - 60 Hz) 220 Vac ± 10%, 230 Vac ± 10% (250 Vac Max)				
Environment					
Working Temperature	Full rated value output: 0°C - 40°C				
Cooling Method	At higher temperature: the output current falls into 50% at the maximum temperature 55°C Fan cooling				
Product Regulation	CE, cTUVus				

Remarks:

[1] Specifications are for one hour warm-up and at 25°C.

[2] The maximum time required for regulating corresponding output when received APPLy and SOURce commands.

[3] The variation of output within 8 hours after warm-up 30 minutes and both the load circuit and environment temperature are in constant conditions.

► Ordering Information

	Description	Order Number
Model	Programmable DC Power (Single Channel) Programmable DC Power (Triple-Channel)	DP1116A DP1308A
Standard Accessories	A Power cord A USB data cable Two shorted devices (only for DP1116A) A CD (including User's Guide and Programming Guide)	
	Four fuses (two of 250 V/T2.5 A and two of 250 V/T4 A): DP1116A Four fuses (two of 250 V/T3 A and two of 250 V/T2 A): DP1308A	
	An INSTRUCTION	



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