DP1116A Power Supply Specifications

The specification and operating characteristics are based on the instrument having been operated continuously for 30 minutes under the specified operating temperature.

Note: All the specifications below apply to both the two scales unless where noted.

Model		DP1116A	
Scale		16 V/10 A	32 V/5 A
Output Ratings (0℃ - 40℃)			
Voltage		0 - 16 V	0 - 32 V
Current		0 - 10 A	0 - 5 A
Overvoltage Protection		0.1 V - 35.2 V	
Overcurrent Protection		0 .1 A - 11 A	
Load Regulation± (output percentage + offset)			
Voltage		< 0.01% + 2 mV	
Current		< 0.005% + 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	
Normal Mode Current		< 2 mA rms	
Accuracy 12 Months[1] (25℃±5℃)±(output percentage + offset)			
Programming	Voltage	0.05% + 10 mV	
	Current	0.2% + 10 mA	
Read Back	Voltage	0.05% + 5 mV	
	Current	0.15% + 5 mA	
Resolution			
Programming		1 mV/1 mA	
Read Back		1 mV/1 mA	
Meter		1 mV/1 mA	
Transient Response Time			
Less than 50 μs is spent on recovering the voltage within 15 mV when the output current changes from full load to half load or half to full.			

Remote Sensing (Sense)		
Each Sense lead can compensate up to 1V voltage drop for each load lead.		
Command Processing Time [2]		
< 50 ms		
Temperature Coefficient,± (output percentage + offset) (The maximum varieties of Output/Read Back for each 1℃ change of temperature after 30 minutes warm-up.)		
Voltage		0.01% + 3 mV
Current		0.02% + 3 mA
Stability [3], ± (output percentage + offset)		
Voltage		0.02% + 1 mV
Current		0.1% + 1 mA
Voltage Programming Speed (1% of total variation range)		
Rising	Full Load	50 ms
	No Load	20 ms
Falling	Full Load	45 ms
	No Load	400 ms
OVP/OCP		
Accuracy ± (output percentage + offset)		0.5% + 0.5 V/0.5% + 0.5 A
Activation Time		1.5 ms (OVP ≥ 3 V); < 10 ms (OVP < 3 V) < 10 ms (OCP)
Mechanical		
Dimension		235 mm (W) x 155 mm (H) x 384 mm (D)
Weight		11 kg
Power Supply		
AC input (50 Hz – 60 Hz)		100 Vac ± 10%, 115 Vac ± 10%, 220 Vac ± 10%, 230 Vac ± 10% (up to 250 Vac)
Environment		
Working Temperature		Full rating output: 0℃～40℃ At high temperature: the output current drops to 50% at 55℃of maximum.
Cooling		Fan cooling
Product Regulation		CE, cTUVus

Remarks:

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

[2] The maximum time required for regulating the corresponding output when received APPLy

and SOURce commands.

[3] The varieties of outputs within 8 hours when the instrument has been warmed up for 30 minutes and both the load circuit and environment temperatures are in constant conditions.