Programmable DC Power Supply 6203 Series

Power Supply Test Equipment



Programmable DC Power Supply Model 6203 Series

300W

KEY FEATURES

- Excellent regulation and transient response
- Single, dual, triple, and quad outputs
- Analog, GPIB, or RS-232 programming
- Overvoltage protection (Option)

The Chroma 6203 series programmable DC power source offers maximum rated DC power for output Voltage (15V/30V/60V), output current (5A/10A/20A), output power (300W), is an exceptional product providing the highest power density in its class to any bench or system application.



The higher precision requirement, 6203 series can be easily combined with 6200 series in dual, triple and quad configurations. Multiple units can be combined in auto parallel, auto series and auto tracing configurations to obtain more Voltage/Current output. For enhanced control, you can upgrade the 6203 series from front panel control to remote analog signal to computer programming. Excellent regulation and transient, the voltage mode transient response time less than 500us recovery to 50mV band for 50% load change in the range of 25% to 100% of the rated load, and the front panel control 10- turn voltage and1-turn current potentiometers, allow accurate adjustment of voltage and current output settings, the constantvoltage, constant current output allows operation as either a voltage source or current source.

The 6203 series is very easy to operate from the front panel keypad, or from the remote controller via IEEE 488, RS-232 or APG (Analog Programming Interface). The APG includes over voltage protection (OVP), remote ON/OFF, master slave tracking, output voltage and current can be controlled with external 0-10 voltage analog signals.

6203-15: DC Power Supply 15V/20A/300W 6203-30: DC Power Supply 30V/10A/300W 6203-60: DC Power Supply 60V/5A/300W

A620001: Analog Programming Interface for Model 6200/6203

A620002: RS-232 Interface for Model 6200/6203 Series A620003: GPIB Interface for Model 6200 / 6203 Series

SPECIFICATIONS 1			
Model	6203-15	6203-30	6203-60
Output Ratings			
Output Voltage	0-15V	0-30V	0-60V
Output Current	0-20A	0-10A	0-5A
Output Power	300W	300W	300W
Line Regulation ²		·	
Voltage	2mV	2mV	2mV
Current	3mA	2mA	1.5mA
Load Regulation ³		•	
Voltage	2mV	2mV	2mV
Current	3mA	2mA	1.5mA
Meter Accuracy		·	
Voltage (1% of Vmax+1 count)	0.25V	0.4V	0.7V
Current (1% of Imax+1 count)	0.3A	0.2A	0.06A
Output Noise and Ripple at rear output (OHz-20MHz) rms	5mV	5mV	5mV
р-р	75mV	75mV	100mV
Stability 4		•	
Voltage(0.02% of Vmax)	3mV	6mV	12mV
Current(0.03% of Imax)	6mA	3mA	1.5mA
Temperature Coefficient ⁵		•	
Voltage (0.015% of Vmax/°C)	2.25mV	4.5mV	9mV
Current (0.02% of Imax/ °C)	4mA	2mA	1mA
Front Panel Voltage Control Resolution (0.02% of Vmax)	3mV	6mV	12mV

^{1.} Specifications indicate typical performance at 25°C+5°C nominal line input of 120 Vac.

- 3 For 0-100% load variation, with constant nominal line voltage
- 4 Drift over 8 hours after 60 minute warmup
- 5 Change in output per °C change in ambient temperature, with constant line and load

Remote Analog Programming (option): 0-10Vdc for 0-100% of rated voltage or current $\pm 0.1\%$, 0-10k Ω for 0-100% of rated voltage or current ±0.1%

OVP Trip Range: 3V to full output +10%

AC Input(default): Single Unit: 104-127Vac at 6Arms; Dual Units: 104-127Vac at 12Arms, 47-63Hz

Operating Ambient Temperature: 0-30°C with default local sensing. Above 30°C, derate output linearly to zero

Storage Temperature Range: -55 to +85°C

Humidity Range: 0-80% RH, Non-condensing Front Panel Control: 10-turn voltage and 1-turn current potentiometers (10-turn current control optional) Voltage Mode Transient Response Time: <500µs recovery to 50mV band for ±50% load change in the range of 25% to 100% of the rated load Switching Frequency: 100kHz(nominal)

Weight: 3.5Kgs (7.7 lbs) **Agency Approvals: CE**

Dimension Size (WxHxD): 109.2x132x297 mm

² For input voltage variation over the AC input voltage range, with constant rated load