

Programmable DC Power Supply 6200 Series

Power Supply Test Equipment



Programmable DC Power Supply Model 6200 Series 60W

KEY FEATURES

- Low output noise and ripple, excellent line and load regulation, and fast transient response
- Hundreds of single, dual, triple and quad output configurations
- Overvoltage protection (Option)
- Wide range of voltage/current combinations
- Analog, RS-232, or GPIB programming



The Chroma 6200 series low power (60W) programmable DC power source, deliver low output noise and ripple (Voltage < 1mVrms, Current < 1mArms), excellent line and load regulation, and fast transient response. With wide range of voltage (7V-250V), Current (0.25A-6A) combinations, it is used in every part of your manufacturing process from design to production test.

For higher power requirements, the 6200 series can be easily combined with 6203 series supplies in dual, triple, and quad configurations. With six standard models, three remote programming options, including Internal Analog Programming interface (APG)-master/slave tracking, Internal RS-232 interface-serial instrument programming using the RS-232 protocol, GPIB Interface with 14 bits resolution and software calibration. The instrument offers quality and reliability for even most demanding applications in production testing, R&D design characterization, and QA verification.

ORDERING INFORMATION

- 6200-7** : DC Power Supply 7V/6A/42W
- 6200-15** : DC Power Supply 15V/4A/60W
- 6200-20** : DC Power Supply 20V/3A/60W
- 6200-30** : DC Power Supply 30V/2A/60W
- 6200-60** : DC Power Supply 60V/1A/60W
- 6200-120** : DC Power Supply 120V/0.5A/60W
- 6200-250** : DC Power Supply 250V/0.25A/60W
- A620001** : Analog Programming Interface for Model 6200/6203 Series
- A620002** : RS-232 Interface for Model 6200/6203 Series
- A620003** : GPIB Interface for Model 6200/6203 Series

SPECIFICATIONS¹

Model	6200-7	6200-15	6200-20	6200-30	6200-60	6200-120	6200-250
Output Ratings							
Output Voltage	0-7V	0-15V	0-20V	0-30V	0-60V	0-120V	0-250V
Output Current	0-6A	0-4A	0-3A	0-2A	0-1A	0-0.5A	0-0.25A
Output Power	42W	60W	60W	60W	60W	60W	60W
Line Regulation²							
Voltage	2mV	2mV	2mV	2mV	2mV	2mV	3mV
Current	0.4A	0.4mA	0.4mA	0.3mA	0.3mA	0.3mA	0.25mA
Load Regulation³							
Voltage	2mV	2mV	2mV	2mV	2mV	2mV	3mV
Current	0.4mA	0.4mA	0.4mA	0.3mA	0.3mA	0.3mA	0.25mA
Meter Accuracy							
Voltage (1% of Vmax+1 count)	0.08V	0.25V	0.3V	0.4V	0.7V	2.2V	3.5V
Current (1% of Imax+1 count)	0.07A	0.05A	0.04A	0.03A	0.02A	0.006A	0.003A
Output Noise and Ripple (20Hz-20MHz)							
Voltage	<1mVrms						
Current	<1mArms						
Stability⁴							
Voltage (0.02% of V max)	1.4mV	3mV	4mV	6mV	12mV	24mV	50mV
Current (0.03% of I max)	1.8mA	1.2mA	0.9mA	0.6mA	0.3mA	0.15mA	0.075mA
Temperature Coefficient⁵							
Voltage (0.015% of V max/°C)	1.05mV	2.25mV	3mV	4.5mV	9mV	18mV	37.5mV
Current (0.02% of I max/°C)	1.2mA	0.8mA	0.6mA	0.4mA	0.2mA	0.1mA	0.05mA
Front Panel Voltage Control Resolution(0.02% of Vmax)	1.4mV	3mV	4mV	6mV	12mV	24mV	50mV

1 Specifications indicate typical performance at 25°C±5°C,nominal line input of 115 Vac.

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

3 For 0-100% load variation, with constant nominal line voltage.

4 Drift over 8 hours after 30-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 ±0.1%, 0-10kΩ for 0-100% of rated voltage or current ±0.1%

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

Remote On/Off: 2 to 25Vdc high. <0.8Vdc low. User-selectable.

Tracking Accuracy: ±1% for series operation

Operating Ambient Temperature: 0-30°C for full rated output. Above 30°C, derate output linearly to zero at 70°C

Storage Temperature Range: -55 to +85°C

Humidity Range: Up to 80% RH, Non-condensing

Voltage Mode Transient Response Time: <100µs recovery to 0.05% band, for ±50% load change in the range of 25% to 100% of the rated load

Front Panel Control: 10-turn voltage and 1-turn current potentiometers (10-turn current control optional)

Front Panel Voltage Control Resolution: 0.02% of Vrms

Weight: 3.5 Kgs (7.7 lbs)

Agency Approvals: CSA

Dimension Size (WxHxD): 109x132x297 mm