



Programmable DC Power Supply Model 6201F Series 1200W / Low Cost - High Power

KEY FEATURES

- Soft start operation limiting in-rush current on power up
- Lower losses in power and higher efficiency
- Quiet operation
- Multiple fans to maintain cooling and speed controlled for long life
- Analog programming as a standard feature
- Multiple level shut down for safe operation

The 6201F series is our newest line of power supplies. It incorporates our most advanced technology and design philosophy.

The 6201F series uses zero voltage switching which results in increased efficiency and lower noise. This latest development in power conversion technology has only recently been implemented by manufacturers of fixed output power supplies.

The 6201F series caters to the applications needs of computer controlled component burn-in, electroplating, process control, magnet control, and other high powered requirements.

The 6201F is a 19" rack mountable power supply which allows for a 1.75"(1U) vertical rack space.

ORDERING INFORMATION

- 6201F-6** : DC Power Supply 6V/200A/1200W
- 6201F-7.5** : DC Power Supply 7.5V/140A/1050W
- 6201F-12** : DC Power Supply 12V/100A/1200W
- 6201F-20** : DC Power Supply 20V/60A/1200W
- 6201F-35** : DC Power Supply 35V/35A/1225W
- 6201F-40** : DC Power Supply 40V/30A/1200W
- 6201F-60** : DC Power Supply 60V/20A/1200W
- 6201F-100** : DC Power Supply 100V/12A/1200W
- 6201F-150** : DC Power Supply 150V/8A/1200W
- 6201F-300** : DC Power Supply 300V/4A/1200W
- 6201F-600** : DC Power Supply 600V/2A/1200W
- A620100** : Isolated Programming Interface for Model 6201F/6202F Series
- A620101** : GPIB Interface for Model 6201F/6202F Series
- A620102** : RS-232 Interface for Model 6201F/6202F Series

SPECIFICATIONS ¹

Model	6201F-6	6201F-7.5	6201F-12	6201F-20	6201F-35	6201F-40	6201F-60	6201F-100	6201F-150	6201F-300	6201F-600
Output Ratings											
Output Voltage	0-6V	0-7.5V	0-12V	0-20V	0-35V	0-40V	0-60V	0-100V	0-150V	0-300V	0-600V
Output Current	0-200A	0-140A	0-100A	0-60A	0-35A	0-30A	0-20A	0-12A	0-8A	0-4A	0-2A
Output Power	1200W	1050W	1200W	1200W	1225W	1200W	1200W	1200W	1200W	1200W	1200W
Line Regulation ²											
Voltage	2.5mV	2.5mV	2.5mV	2.5mV	2.5mV	2.5mV	2.5mV	2.5mV	2.5mV	5mV	10mV
Current	20mA	10mA	10mA	4mA	4mA	4mA	4mA	2mA	2mA	1mA	1mA
Load Regulation ³											
Voltage	3mV	3mV	3mV	3mV	3mV	3mV	3mV	3mV	5mV	10mV	60mV
Current	20mA	10mA	8mA	8mA	5mA	5mA	9mA	4mA	4mA	4mA	4mA
Meter Accuracy											
Voltage (1% of Vmax+1 count)	0.07V	0.09V	0.13V	0.3V	0.4V	0.5V	0.7V	1.1V	1.6V	4V	7V
Current (1% of Imax+1 count)	2.5A	1.5A	1.1A	0.7A	0.45A	0.4A	0.3A	0.13A	0.09A	0.05A	0.03A
Output Noise & Ripple (V)											
rms	5mV	5mV	5mV	8mV	8mV	8mV	6mV	8mV	13mV	22mV	50mV
p-p (0-20MHz)	50mV	50mV	55mV	50mV	50mV	50mV	55mV	55mV	60mV	115mV	190mV
Stability⁴											
Voltage (0.05% of Vmax)	3mV	3.75mV	6mV	10mV	17.5mV	20mV	30mV	50mV	75mV	150mV	300mV
Current (0.05% of Imax)	200mA	70mA	50mA	30mA	17.5mA	15mA	10mA	6mA	4mA	2mA	1mA
Temperature Coefficient ⁵											
Voltage (0.02% of V max/°C)	1.2mV	1.5mV	2.4mV	4mV	7mV	8mV	12mV	20mV	30mV	60mV	120mV
Current (0.03% of I max/°C)	60mA	42mA	30mA	18mA	10.5mA	9mA	6mA	3.6mA	2.4mA	1.2mA	0.6mA
OVP Adjustment Range (5% to 110% of Vmax)											
	0.3-6.6V	0.375-8.25V	0.6-13.2V	1-22V	1.75-38.5V	2-44V	3-66V	5-110V	7.5-165V	15-330V	30-660V

1 These Specifications indicate typical performance at 25°C±5°C ,nominal line input of 120 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 Maximum drift over 8 hours with constant line, load, and temperature, after 30 minute warm-up.

5 Change in output per °C change in ambient temperature, with constant line and load.

6 Derate output current on 6V model by 1.5A per °C for operating temperature 30-50°C

AC Input Voltage Range: 85-130Vdc or 190-264Vac, 1Ø (17A max @120Vdc; 8.8A max @230Vdc typical)

Frequency: 47-63Hz

Maximum Voltage Differential from Output to Safety

Ground: 600Vdc

Time Delay from Power on Until Output Stable: 7 seconds maximum

Voltage Mode Transient Response Time: <3ms for the output voltage to recover within 0.5% of its previous level after a step change in load current of 10%-90% of rated output.

Switching Frequency: Nominal 78KHz (156KHz output ripple)

Typical Efficiency: 85%

Maximum Remote Sense Line Drop Compensation: 5V/line (line drop is subtracted from total voltage available at supply output)

Remote Monitoring:

Output voltage and current: 0-5V, 0-10V 0 to full scale output, 1% accuracy

Remote Start/Stop and Interlock: TTL Compatible Input,

selectable logic

Agency Approvals: CE, CSA, UL and FCC, Part 15.

PROGRAMMING

Remote analog programming (Full Scale Input) - voltage and current programming: 0-5k, 0-10k resistance: 0-5V (factory default), 0-10V voltage sources Optional isolated program and readback (V&I)-0-5V.

Optional digital control, RS232C, GPIB interfaces

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature Range: 0°C - 50°C From 50°C - 70°C, derate output current 2% per°C

Storage Temperature Range: -20 to +70°C

Humidity Range: 30-90% RH Non-condensing

Cooling: Fan cooled. Air exhaust to rear.

Overtemperature Shutdown: automatic restart or latch off

Weight: 8.2 Kgs (18lbs)

Dimension Size (WxHxD): 429.4x43.2x508.1 mm