Programmable DC Power Source

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-7.5: DC Power Source 7.5V/140A/ 1050W
6201F-12: DC Power Source 12V/100A/1200W
6201F-20: DC Power Source 20V/60A/1200W
6201F-40: DC Power Source 40V/30A/1200W
6201F-60: DC Power Source 60V/20A/ 1200W
6201F-100: DC Power Source 100V/12A/ 1200W
6201F-150: DC Power Source 150V/8A/ 1200W
6201F-300: DC Power Source 300V/4A/ 1200W
6201F-600: DC Power Source 600V/2A/ 1200W
A621001: Isolated Programming Interface
A621002: GPIB Interface
A621003: RS-232 Interface for Model 6206/6210/6201F/ 6202F Series
Special model upon request

SPECIFICATIONS [1]

Model	6201F-7.5	6201F-12	6201F-20	6201F-40	6201F-60	6201F-100	6201F-150	6201F-300	6201F-600
Output Ratings									
Output Voltage	0-7.5V	0-12V	0-20V	0-40V	0-60V	0-100V	0-150V	0-300V	0-600V
Output Current	0-140A	0-100A	0-60A	0-30A	0-20A	0-12A	0-8A	0-4A	0-2A
Output Power	1050W	1200W	1200W	1200W	1200W	1200W	1200W	1200W	1200W
Line Regulation [2]									
Voltage (0.01% of Vmax+2mV)	5.75mV	8mV	12mV	22mV	32mV	52mV	77mV	152mV	302mV
Current (0.01% of Imax+1mA)	72mA	52mA	32mA	17mA	12mA	8mA	6mA	4mA	3mA
Load Regulation [3]									
Voltage (0.01% of Vmax+2mV)	11mV	14mV	20mV	35mV	50mV	80mV	117.5mV	230mV	455mV
Current (0.05% of Imax+1mV)	110mA	80mA	50mA	27.5mA	20mA	14mA	11mA	3mA	6.5mA
Meter Accuracy									
Voltage (1% of Vmax+1 count)	0.09V	0.13V	0.3V	0.5V	0.7V	1.1V	1.6V	4V	7V
Current (1% of Imax+1 count)	1.5A	1.1A	0.7A	0.4A	0.3A	0.13A	0.09A	0.05A	0.03A
Output Noise & Ripple (V)									
rms	10mV	10mV	10mV	10mV	10mV	10mV	20mV	30mV	40mV
p-p (0-20MHz)	75mV	75mV	75mV	150mV	150mV	150mV	150mV	300mV	400mV
Stability[4]									
Voltage (0.05% of Vmax)	3.75mV	6mV	10mV	20mV	30mV	50mV	75mV	150mV	300mV
Current (0.05% of Imax)	70mA	50mA	30mA	15mA	10mA	6mA	4mA	2mA	1mA
Temperature Coefficient [5]									
Voltage (0.02% of V max/°C)	1.5mV	2.4mV	4mV	8mV	12mV	20mV	30mV	60mV	120mV
Current (0.03% of I max/°C)	42mA	30mA	18mA	9mA	6mA	3.6mA	2.4mA	1.2mA	0.6mA
OVP Adjustment Range (5% to 110% of Vmax)	0.375-8.25V	0.6-13.2V	1-22V	2-44V	3-66V	5-110V	7.5-165V	15-330V	30-660V

1 These specifications are warranted over a temperature range of 0-50°C. From 50 to 70°C, derate output current 2% per°C. Specifications are subject to change without notice. Numbers posted are maximum values for model-dependent specifications.
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.

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: 5 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: CSA pending, CE pending

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, SAMI interfaces

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature Range: 0°C - 50°C From 50°C - 70°C, derate output current 2% per°C
Storage Temperature Range: -40 to +85°C
Humidity Range: 0-80% 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): 483x43.4x508 mm