

Programmable DC Power Supply 6202F Series

Power Supply Test Equipment



Programmable DC Power Supply Model 6202F Series 2800W / 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

SPECIFICATIONS 1

Model	6202F-7.5	6202F-12	6202F-20	6202F-33	6202F-40	6202F-60	6202F-100	6202F-150	6202F-300	6202F-600
Output Ratings										
Output Voltage	0-7.5V	0-12V	0-20V	0-33V	0-40V	0-60V	0-100V	0-150V	0-300V	0-600V
Output Current	0-300A	0-220A	0-130A	0-85A	0-70A	0-46A	0-28A	0-18A	0-9A	0-4A
Output Power	2250W	2640W	2600W	2085W	2800W	2760W	2800W	2700W	2700W	2400W
Line Regulation 2										
Voltage	3mV	3mV	3mV	3mV	3mV	3mV	3mV	3mV	15mV	15mV
Current	20mA	20mA	5mA	4mA	3mA	3mA	3mA	3mA	3mA	3mA
Load Regulation 3										
Voltage	3mV	3mV	3mV	3mV	3mV	3mV	3mV	3mV	15mV	15mV
Current	20mA	20mA	10mA	5mA	5mA	4mA	4mA	4mA	4mA	3mA
Meter Accuracy										
Voltage (1% of Vmax+1 count)	0.09V	0.13V	0.3V	0.43V	0.5V	0.7V	1.1V	1.6V	4V	7V
Current (1% of Imax+1 count)	4A	2.3A	1.4A	0.95A	0.8A	0.56A	0.38A	0.19A	0.1A	0.05A
Output Noise & Ripple (V)										
rms	5mV	5mV	7mV	7mV	7mV	7mV	14mV	15mV	20mV	35mV
p-p (0-20MHz)	50mV	50mV	60mV	60mV	60mV	60mV	100mV	100mV	100mV	175mV
Stability 4										
Voltage (0.05% of Vmax)	3.75mV	6mV	10mV	16.5mV	20mV	30mV	50mV	75mV	150mV	300mV
Current (0.05% of Imax)	150mA	110mA	65mA	42.5mA	35mA	23mA	14mA	9mA	4.5mA	2mA
Temperature Coefficient 5										
Voltage (0.02% of V max/°C)	1.5mV	2.4mV	4mV	6.6mV	8mV	12mV	20mV	30mV	60mV	120mV
Current (0.03% of I max/°C)	90mA	66mA	39mA	25.5mA	21mA	13.8mA	8.4mA	5.4mA	2.7mA	1.2mA
OVP Adjustment Range (5% to 110% of Vmax)										
	0.375-8.25V	0.6-13.2V	1-22V	1.65-36.6V	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 208 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.

AC Input Voltage Range: 190-264Vac, 1Ø (22.6A @208Vdc; 20.5A max @230Vdc typical)
Frequency: 47-63Hz



The 6202F series is our newest line of power supplies. It incorporates our most advanced technology and design philosophy.

The 6202F 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 6202F series caters to the applications needs of computer controlled component burn-in, electroplating, process control, magnet control, and other high powered requirements.

The 6202F is a 19" rack mountable power supply which is available in a 3.5" (2U) size.

ORDERING INFORMATION

6202F-7.5 : DC Power Supply 7.5V/300A/2250W

6202F-12 : DC Power Supply 12V/22A/2640W

6202F-20 : DC Power Supply 20V/130A/2600W

6202F-33 : DC Power Supply 33V/85A/2085W

6202F-40 : DC Power Supply 40V/70A/2800W

6202F-60 : DC Power Supply 60V/46A/2760W

6202F-100 : DC Power Supply 100V/28A/2800W

6202F-150 : DC Power Supply 150V/18A/2700W

6202F-300 : DC Power Supply 300V/9A/2700W

6202F-600 : DC Power Supply 600V/4A/2400W

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

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% to 90% of rated output

Switching Frequency: Nominal 31KHz (62KHz 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, CE, 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: 15 Kgs (33lbs)

Dimension Size (WxHxD): 429.4x88.9x533.5 mm