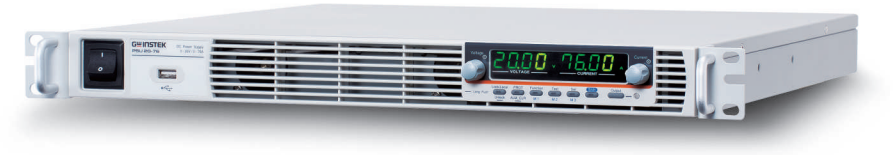
PROGRAMMABLE SWITCHING D.C. POWER SUPPLY

PSU-Series



NEW

CE | USB | GPIB | Analog Control | LAN | LabVIEW Driver | RS-232 | RS-485

The PSU-Series is a single output programmable switching DC Power Supply covering a power range up to 1520W. This series of products include five models with the combination from 6V to 60V rated voltages. As the PSU-Series can be connected in series for maximum 2 units or in parallel for maximum 4 units, the capability of connecting multiple PSU-Series units for higher voltage or higher current output provides a broad coverage of applications.

The C.V/C.C priority selection of the PSU-Series is a very useful feature for DUT protection. The conventional power supply normally operates under C.V mode when the power supply output is turned on. This could bring a high inrush current to the capacitive load or current-intensive load at the power output on stage. Though the current becomes stable after the C.C mode is activated, the current spike occurred at the C.V and C.C crossover point may possibly damage the DUT. At the power output on stage, the PSU-Series is able to run under C.C priority to limit the current spike occurred at the threshold voltage and therefore protects DUT from the inrush current damage.

The OVP and OCP protections can prevent the DUT damage. Both OVP and OCP levels can be selected the range of 10% to 110% , with the default level set at 110%, of the rated voltage/current of the power supply. The PSU-Series provides USB Host/Device, LAN, RS-232 with RS-485and Analog Control interfaces as standard. The LabView driver and the data Logging PC software are available at the rear panel for external control of the power On/Off and the external monitoring of power output voltage and current.

Series Operation

Model	Single Unit	Two Units
PSU 6-200	6V / 200A	12V / 200A
PSU 12.5-120	12.5V / 120A	25V / 120A
PSU 20-76	20V / 76A	40V / 76A
PSU 40-38	40V / 38 A	80V / 38A
PSU 60-25	60V / 25A	120V / 25A

Parallel Operation

Model	Single Unit	Two Units	Three Units	Four Units
PSU 6-200	6V / 200A	6V / 400A	6V / 600A	6V / 800A
PSU 12.5-120	12.5V / 120A	12.5V / 240A	12.5V / 360A	12.5V / 480A
PSU 20-76	20V / 76A	20V / 152A	20V / 228A	20V / 304A
PSU 40-38	40V / 38 A	40V / 76A	40V / 114A	40V / 152A
PSU 60-25	60V / 25A	60V / 50A	60V / 75A	60V / 100A

FEATURES

- Voltage Rating : 6V/12.5V/20V/40V/60V
- Output Power Rating : 1200W ~ 1520W
- C.V/C.C Priority; Particularly Suitable for the Battery and LED Industry
- Adjustable Slew Rate
- Series and Parallel Operation (2 Units in Series/4 Units in Parallel Maximum)
- High Efficiency and High Power Density
- 19" Rack Mount Size Design
- Standard Interface : LAN, RS-232 & RS485, USB (Device/Host), Analog Control Interface
- Optional Interface : GPIB/Analog Control Interface (Isolated Voltage Control)/Analog Control Interface (Isolated Current Control)

Front

Rear Panel

APPLICATIONS

- Laboratories and Educational Facilities
- Product Testing and Quality Assurance
- Service Operation and Post-Sales support
- Product Development and Debugging

GW INSTEK
Simply Reliable

SPECIFICATIONS

Model	PSU 6-200	PSU 12.5-120	PSU 20-76	PSU 40-38	PSU 60-25
OUTPUT RATINGS					
Voltage	0 ~ 6V	0 ~ 12.5V	0 ~ 20V	0 ~ 40V	0 ~ 60V
Current	0 ~ 200A	0 ~ 120A	0 ~ 76A	0 ~ 38A	0 ~ 25A
Power	1200W	1500W	1520W	1520W	1500W
OUTPUT RIPPLE AND NOISE					
CV p-p (10~20MHz)	60mV	60mV	60mV	60mV	60mV
CV rms (5Hz~1MHz)	8mV	8mV	8mV	8mV	8mV
CC rms (5Hz~1MHz)	400mA	240mA	152mA	95mA	75mA
LOAD REGULATION					
Voltage	2.6mV	3.25mV	4mV	6mV	8mV
Current	45mA	29mA	20.2mA	12.6mA	10mA
LINE REGULATION (change from 85 to132 VAC input or 170-265 VAC)					
Voltage	2.6mV	3.25mV	4mV	6mV	8mV
Current	22mA	14mA	9.6mA	5.8mA	4.5mA
PROGRAMMING ACCURACY					
Voltage 0.05% + (mV)	3mV	6.25mV	10mV	20mV	30mV
Current 0.2% + (mA)	200mA	120mA	76mA	38mA	25mA
MEASUREMENT ACCURACY					
Voltage 0.1% + (mV)	6mV	12.5mV	20mV	40mV	60mV
Current 0.2% + (mA)	400mA	240mA	152mA	76mA	50mA
LOAD TRANSIENT RECOVERY TIME					
Time	1.5ms	1ms	1ms	1ms	1ms
OUTPUT RESPONSE TIME					
Rise Time (No Load & Full Load)	80ms	80ms	80ms	80ms	80ms
Fall Time (No Load)	500ms	700ms	800ms	1000ms	1100ms
Fall Time (Full Load)	10ms	50ms	50ms	80ms	80ms
PROGRAMMING/MEASUREMENT RESOLUTION					
Voltage	0.2mV	0.4mV	0.7mV	1.3mV	2mV
Current	6mA	4mA	2.5mA	1.2mA	0.8mA
TEMPERATURE COEFFICIENT (after a 30 minute warm-up)					
Voltage	100PPM/°C after 30 minutes warm up				
Current	100PPM/°C after 30 minutes warm up				
SERIES AND PARALLEL OPERATION					
Parallel Operation	Up to 4 units including master unit				
Series Operation	Up to 2 units including master unit				
ENVIRONMENTAL CONDITIONS					
Environment	Indoor use, installation cateorgy Ⅱ (AC Input), pollution degree 2				
Operating Temperature Range	0℃～50℃				
Storage Temperature Range	-25℃～70℃				
Operating Humidity Range	20% to 85% RH				
Storage Humidity Range	Up to 90% or less relative humidity (no condensation)				
AC INPUT					
Norminal Input	100Vac ~ 240Vac, 50Hz ~ 60Hz, single phase				
Input Range	85VAc ~ 265Vac				
Power Factor (100Vac/200Vac)	0.99/0.98				
Maximum Input Current (100Vac/200Vac)	21A/11A				
Inrush Current	≦50A				
Efficiency(100Vac/200Vac)	77%/79%	82%/85%	83%/86%	84%/87%	84%/87%
DIMENSIONS & WEIGHT					
Analog Control (Non-Isolated)	YES				
PC Remote Interface (Standard)	USB (Device/Host)/RS-232 with RS-485/LAN				
PC Remote Interface (Optional)	GPIB/Analog Control Interface (Isolated Voltage Control)/Analog Control Interface (Isolated Current Control); Note : Selection one of three				
Cooling Fan	Forced air cooling by internal fan				
Dimensions & Weight	423(W) x 43.6(H) x 447.2(D) ; Approach 8.7kg				

Specifications subject to change without notice. SU-SeriesGD2DH

ORDERING INFORMATION

PSU 6-200	1200W Programmable Switching DC Power Supply
PSU 12.5-120	1500W Programmable Switching DC Power Supply
PSU 20-76	1520W Programmable Switching DC Power Supply
PSU 40-38	1520W Programmable Switching DC Power Supply
PSU 60-25	1500W Programmable Switching DC Power Supply

ACCESSORIES

User Manual x 1, Basic Accessories Kit x 1

FREE DOWNLOAD

Driver LabView Driver

OPTIONAL ASSESSORIES

GTL-248	GPIB Cable (2m)
GTL-246	USB Cable, USB 2.0A-B TYPE CABLE, 4P
GTL-251	GPIB-USB-HS (high speed)
PSU-01B	Bus bar for 2 units in parallel connection
PSU-01C	Cable for 2 units in parallel connection
PSU-02B	Bus bar for 3 units in parallel connection
PSU-02C	Cable for 3 units in parallel connection
PSU-03B	Bus bar for 4 units in parallel connection
PSU-03C	Cable for 4 units in parallel connection
PSU-232	RS 232 Cable with DB9 connector kit
PSU-485	RS 485 Cable with DB9 connector kit
GRM-001	Slide bracket 2pcs/set ,PSU option
PSU-GPIB	GPIB Interface card (factory option)
PSU-ISO-I	Isolate current remote control card (factory option)
PSU-ISO-V	Isolate voltage remote control card (factory option)
GPW-001	UL/CSA power cord 3m ,PSU option
GPW-002	VDE power cord 3m ,PSU option
GPW-003	PSE power cord 3m ,PSU option

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