



PSU-Series

Programmable Switching D.C. Power Supply

FEATURES

- Voltage Output : 6V/8V/12.5V/15V/20V/30V/40V/50V/60V/80V/100V/150V/300V/400V/600V
- Power Output : 1200W ~ 1560W
- C.V./C.C Priority Mode
- Adjustable Voltage/Current Rise and Fall Time
- Series/Parallel Connection : Max. 2 units(Models Under 300V)/4 units of The Same Model
- High Efficiency and High Power Density
- 1U Height and 19"Rack Mount Size
- Three sets of Preset Function
- Bleeder Control Function
- Internal Resistance Function
- Panel Lock Function
- Protection : OVP, OCP, OHP,UVL, AC Fail, FAN Fail
- Standard : USB, LAN, RS-232, RS-485, Analog Control
- Option : CPiB, Isolated Analog Interface(Voltage Control/Current Control)

GW INSTEK
Simply Reliable

Notes:

- *1. Minimum voltage is guaranteed to maximum 0.2% of the rated output voltage.
- *2. Current is guaranteed to maximum 0.1% of the rated output current.
- *3. A 100- μ S, 12V, 100ms pulse, common to all inputs.
- *4. From 10 to 1000 Hz, constant input voltage. Measured at the sensing point in Remote Sense.
- *5. Measure with JEITA KC-0313 (1-1) probe
- *6. Measurement frequency bandwidth is 10Hz to 20MHz.
- *7. Measurement frequency bandwidth is 5Hz to 1MHz.
- *8. From 10% to 90% of rated output voltage, with rated resistive load.
- *9. From 90% to 10% of rated output voltage, with rated resistive load.

ORDERING INFORMATION

PSU 8-1200	1200W	Programmable Switching DC Power Supply
PSU 8-1400	1400W	Programmable Switching DC Power Supply
PSU 8-1500	1500W	Programmable Switching DC Power Supply
PSU 12.5-1200	1500W	Programmable Switching DC Power Supply
PSU 12.5-1200	1500W	Programmable Switching DC Power Supply
PSU 20-76	1520W	Programmable Switching DC Power Supply
PSU 30-50	1500W	Programmable Switching DC Power Supply
PSU 40-38	1520W	Programmable Switching DC Power Supply
PSU 50-30	1500W	Programmable Switching DC Power Supply
PSU 60-25	1520W	Programmable Switching DC Power Supply
PSU 80-15	1500W	Programmable Switching DC Power Supply
PSU 100-10	1500W	Programmable Switching DC Power Supply
PSU 130-5	1500W	Programmable Switching DC Power Supply
PSU 150-3	1500W	Programmable Switching DC Power Supply
PSU 400-2.8	1520W	Programmable Switching DC Power Supply
PSU 600-2.6	1560W	Programmable Switching DC Power Supply

ACCESSORIES

CD-ROM x 1 (User Manual, Programming Manual), Output terminal cover x 1, Analog connector plug kit x 1, Output terminal M8 bolt set (6V~60V model), Input terminal cover x 1, 1U Handle (RoHS), 1U Bracket (LEFT, RoHS), 1U Bracket (RIGHT, RoHS), Power Cord (10A) provided for certain regions only

OPTIONAL ACCESSORIES

[illegible]

Specifications subject to change without notice. PSU-SeriesCD18H

10. Time for output voltage to recover within 0.5% of its rated output after a load change from 10% to 50% of its rated output current.
11. Voltage drop from 10% to 100% of rated output current. For load voltage change, equal to the unit voltage rating, constant input voltage.
12. For 20–20W model the ripple is measured at 2V – rated output voltage and full output current. For other models, the ripple is measured at 10–100% output voltage and full output current.
13. At rated output power.
14. If installed front panel filter kit, the temperature is guaranteed to 40 °C.

Global Headquarters
GOOD WILL INSTRUMENT CO., LTD.
No. 7-1, Jhongxing Road, Tucheng Dist., New Taipei City 236, Taiwan
T +886-2-2268-0389 F +886-2-2268-0639
E-mail: marketing@goodwill.com.tw

China Subsidiary
GOOD WILL INSTRUMENT (SUZHOU) CO., LTD.
No. 521, Zhujiang Road, Snd, Suzhou Jiangsu 215011 China
F +86-512-6661-7177 F +86-512-6661-7277

Malaysia Subsidiary
GOOD WILL INSTRUMENT (SEA) SDN. BHD.
No. 1-3-18, Elit Avenue, Jalan Mayang Pasir 3,
11950 Bayan Baru, Penang, Malaysia
T +604-6111122 F +604-6115225

Europe Subsidiary
GOOD WILL INSTRUMENT EURO B.V.
De Run 5427A, 5504DC Veldhoven, THE NETHERLANDS
T +31 (0)40-2557790 F +31 (0)40-2543194

J.S.A. Subsidiary
INSTEK AMERICA CORP.
 5198 Brooks Street Montclair, CA 91763, U.S.A.
 T +1-909-399-3535 F +1-909-399-0819
 Inman Subsidiary

TEXIO TECHNOLOGY CORPORATION.
7F Towa Fudosan Shin Yokohama Bldg., 2-18-13 Shin
Yokohama, Kohoku-ku, Yokohama, Kanagawa,
222-0033 Japan
+81-45-620-2305 F +81-45-534-7181

Korea Subsidiary
GOOD WILL INSTRUMENT KOREA CO., LTD.
Room No.503, Gyeonginro 775 (Mulleae-Dong 3Ca,
Ace Hightech-City B/D 1Dong), Yeongduengpo-Gu,
Seoul 150093, Korea.
F +82-2-3439-2205 F +82-2-3439-2207

India Subsidiary
GW INSTEK INDIA LLP.
No.2707/B&C, 1st Floor UNNATHI Building,
E-Block, Sahakara Nagar, Bengaluru-560 092, India
P: +91 80 6911 0500 E: +91 80 6911 0526

GW INSTEK
Simply Reliable



원문: GW Instek PSU Series PSU Brochure · 제조사 원문 자료입니다. 사양은 제조사 사정에 따라 변경될 수 있습니다.

— we measure, we calibrate, we validate.

KOLAS 국제공인교정기관 · ISO/IEC 17025

(주)테솔 · www.tessol.com

TS-TL-GWI-221

1 / 5

원문: GW Instek PSU Series PSU Brochure · 제조사 원문 자료입니다. 사항은 제조사 사정에 따라 변경될 수 있습니다.

GW Instek PSU-Series, a DC power supply with high power density design, is 1U in height and compatible with 19" Rack Mount Size. The series is suitable for test system installation or system integration by flexibly selecting models for the integration into the existing test system. The PSU-Series, featuring superior voltage and current control functions, comprises fifteen models with output voltage/current ranging from 6V/200A to 600V/2.6A. The Series is suitable for different test conditions and DUTs, including electronic components testing, micro resistors, relays, shunt resistors, 12V/24V/48V battery simulation, and automotive electronic device testing.

The PSU-HV series is ideal for the primary input of DC/DC converter and servomotor production application. PSU is often integrated into component test systems such as aging test equipment for capacitors; 600V DC bias applications; aging test equipment for diode; semiconductor production equipment; automotive electronics; and ECU for V8 engine or V12 engine, etc.

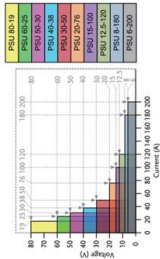
Utilizing same model units of the PSU-Series to conduct series and parallel connections can increase total output power, total current or total voltage. The wide voltage and current output ranges of the PSU-Series can fully satisfy various voltage and current measurement requirements. The PSU-Series is a single power output DC programmable power supply, which outputs 1200W to 1560W. The PSU-Series provides maximum 2 units in series connection (models under 300V) to achieve maximum 600V or 4 units in parallel connection to obtain maximum 800A and the maximum output power of 6.24 kilowatts.

The PSU-Series allows settings for CC priority or CV priority. Under CC or CV mode, users can adjust slew rate for output voltage or current based upon test requirements. There are two kinds of slew rate settings: high speed priority and slow rate priority. High speed priority sets slow rate at the maximum speed to reach CC or CV mode. Slow rate priority allows users to set slow rate for CC or CV mode in order to control rise or fall slow rate. Slow rate priority mode is ideal for motor tests by adjusting the rise time of output voltage to protect DUT from being damaged by inrush current occurred at turn-on.

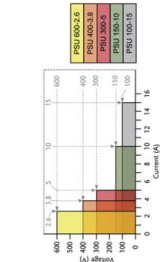
Comparing with other 1U power supplies available in the market, PSU supports a most complete array of interfaces, including USB, LAN, RS-232, RS-485, analog control interface, GPIB (option), isolated analog interface (voltage control), and isolated analog interface (current control). Via the multi-drop mode, PSU will not need any switch/hub and GPIB cable for remote control and slave unit augmentation when using LAN, USB or GPIB. This feature can help users save costs on augmentation equipment for connecting slave while using LAN or USB.

The PSU-Series provides users with flexible settings of High/Low Level or Trigger input/Trigger output signals with pulse width of 1 ~ 60ms. Trigger input controls PSU to output or upload preset voltage, current and memory parameters. While outputting or uploading preset voltage, current and memory parameters PSU can produce corresponding Trigger output signals.

PSU Series Operating Area (6-80V models)



PSU-Series Operating Area (100-600V models)



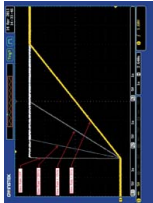
Model Name	Voltage	Current	Power
PSU 6-200	6V	200A	1200W
PSU 6-250	6V	250A	1500W
PSU 6-300	6V	300A	1800W
PSU 6-350	6V	350A	2100W
PSU 6-400	6V	400A	2400W
PSU 6-450	6V	450A	2700W
PSU 6-500	6V	500A	3000W
PSU 6-550	6V	550A	3300W
PSU 6-600	6V	600A	3600W
PSU 6-650	6V	650A	3900W
PSU 6-700	6V	700A	4200W
PSU 6-750	6V	750A	4500W
PSU 6-800	6V	800A	4800W

A. SERIES / PARALLEL OPERATION AND HIGH POWER DENSITY

Series Connection	1 unit	2 units	3 units	4 units
Height of test	1U	2U	3U	4U
PSU 6-200	6V	12V	18V	24V
PSU 6-250	6V	12V	18V	24V
PSU 6-300	6V	12V	18V	24V
PSU 6-350	6V	12V	18V	24V
PSU 6-400	6V	12V	18V	24V
PSU 6-450	6V	12V	18V	24V
PSU 6-500	6V	12V	18V	24V
PSU 6-550	6V	12V	18V	24V
PSU 6-600	6V	12V	18V	24V
PSU 6-650	6V	12V	18V	24V
PSU 6-700	6V	12V	18V	24V
PSU 6-750	6V	12V	18V	24V
PSU 6-800	6V	12V	18V	24V
PSU 100-250	250V	500V	750V	1000V
PSU 100-300	300V	600V	900V	1200V
PSU 100-350	350V	700V	1050V	1400V
PSU 100-400	400V	800V	1200V	1600V
PSU 100-450	450V	900V	1350V	1800V
PSU 100-500	500V	1000V	1500V	2000V
PSU 100-550	550V	1100V	1650V	2200V
PSU 100-600	600V	1200V	1800V	2400V
PSU 100-650	650V	1300V	1950V	2600V
PSU 100-700	700V	1400V	2100V	2800V
PSU 100-750	750V	1500V	2250V	3000V
PSU 100-800	800V	1600V	2400V	3200V
PSU 100-850	850V	1700V	2550V	3400V
PSU 100-900	900V	1800V	2700V	3600V
PSU 100-950	950V	1900V	2850V	3800V
PSU 100-1000	1000V	2000V	3000V	4000V
PSU 100-1050	1050V	2100V	3150V	4200V
PSU 100-1100	1100V	2200V	3300V	4400V
PSU 100-1150	1150V	2300V	3450V	4600V
PSU 100-1200	1200V	2400V	3600V	4800V
PSU 100-1250	1250V	2500V	3750V	5000V
PSU 100-1300	1300V	2600V	3900V	5200V
PSU 100-1350	1350V	2700V	4050V	5400V
PSU 100-1400	1400V	2800V	4200V	5600V
PSU 100-1450	1450V	2900V	4350V	5800V
PSU 100-1500	1500V	3000V	4500V	6000V
PSU 100-1550	1550V	3100V	4650V	6200V
PSU 100-1600	1600V	3200V	4800V	6400V
PSU 100-1650	1650V	3300V	4950V	6600V
PSU 100-1700	1700V	3400V	5100V	6800V
PSU 100-1750	1750V	3500V	5250V	7000V
PSU 100-1800	1800V	3600V	5400V	7200V
PSU 100-1850	1850V	3700V	5550V	7400V
PSU 100-1900	1900V	3800V	5700V	7600V
PSU 100-1950	1950V	3900V	5850V	7800V
PSU 100-2000	2000V	4000V	6000V	8000V
PSU 100-2050	2050V	4100V	6150V	8200V
PSU 100-2100	2100V	4200V	6300V	8400V
PSU 100-2150	2150V	4300V	6450V	8600V
PSU 100-2200	2200V	4400V	6600V	8800V
PSU 100-2250	2250V	4500V	6750V	9000V
PSU 100-2300	2300V	4600V	6900V	9200V
PSU 100-2350	2350V	4700V	7050V	9400V
PSU 100-2400	2400V	4800V	7200V	9600V
PSU 100-2450	2450V	4900V	7350V	9800V
PSU 100-2500	2500V	5000V	7500V	10000V
PSU 100-2550	2550V	5100V	7650V	10200V
PSU 100-2600	2600V	5200V	7800V	10400V
PSU 100-2650	2650V	5300V	7950V	10600V
PSU 100-2700	2700V	5400V	8100V	10800V
PSU 100-2750	2750V	5500V	8250V	11000V
PSU 100-2800	2800V	5600V	8400V	11200V
PSU 100-2850	2850V	5700V	8550V	11400V
PSU 100-2900	2900V	5800V	8700V	11600V
PSU 100-2950	2950V	5900V	8850V	11800V
PSU 100-3000	3000V	6000V	9000V	12000V
PSU 100-3050	3050V	6100V	9150V	12200V
PSU 100-3100	3100V	6200V	9300V	12400V
PSU 100-3150	3150V	6300V	9450V	12600V
PSU 100-3200	3200V	6400V	9600V	12800V
PSU 100-3250	3250V	6500V	9750V	13000V
PSU 100-3300	3300V	6600V	9900V	13200V
PSU 100-3350	3350V	6700V	10050V	13400V
PSU 100-3400	3400V	6800V	10200V	13600V
PSU 100-3450	3450V	6900V	10350V	13800V
PSU 100-3500	3500V	7000V	10500V	14000V
PSU 100-3550	3550V	7100V	10650V	14200V
PSU 100-3600	3600V	7200V	10800V	14400V
PSU 100-3650	3650V	7300V	10950V	14600V
PSU 100-3700	3700V	7400V	11100V	14800V
PSU 100-3750	3750V	7500V	11250V	15000V
PSU 100-3800	3800V	7600V	11400V	15200V
PSU 100-3850	3850V	7700V	11550V	15400V
PSU 100-3900	3900V	7800V	11700V	15600V
PSU 100-3950	3950V	7900V	11850V	15800V
PSU 100-4000	4000V	8000V	12000V	16000V
PSU 100-4050	4050V	8100V	12150V	16200V
PSU 100-4100	4100V	8200V	12300V	16400V
PSU 100-4150	4150V	8300V	12450V	16600V
PSU 100-4200	4200V	8400V	12600V	16800V
PSU 100-4250	4250V	8500V	12750V	17000V
PSU 100-4300	4300V	8600V	12900V	17200V
PSU 100-4350	4350V	8700V	13050V	17400V
PSU 100-4400	4400V	8800V	13200V	17600V
PSU 100-4450	4450V	8900V	13350V	17800V
PSU 100-4500	4500V	9000V	13500V	18000V
PSU 100-4550	4550V	9100V	13650V	18200V
PSU 100-4600	4600V	9200V	13800V	18400V
PSU 100-4650	4650V	9300V	13950V	18600V
PSU 100-4700	4700V	9400V	14100V	18800V
PSU 100-4750	4750V	9500V	14250V	19000V
PSU 100-4800	4800V	9600V	14400V	19200V
PSU 100-4850	4850V	9700V	14550V	19400V
PSU 100-4900	4900V	9800V	14700V	19600V
PSU 100-4950	4950V	9900V	14850V	19800V
PSU 100-5000	5000V	10000V	15000V	20000V
PSU 100-5050	5050V	10100V	15150V	20200V
PSU 100-5100	5100V	10200V	15300V	20400V
PSU 100-5150	5150V	10300V	15450V	20600V
PSU 100-5200	5200V	10400V	15600V	20800V
PSU 100-5250	5250V	10500V	15750V	21000V
PSU 100-5300	5300V	10600V	15900V	21200V
PSU 100-5350	5350V	10700V	16050V	21400V
PSU 100-5400	5400V	10800V	16200V	21600V
PSU 100-5450	5450V	10900V	16350V	21800V
PSU 100-5500	5500V	11000V	16500V	22000V
PSU 100-5550	5550V	11100V	16650V	22200V
PSU 100-5600	5600V	11200V	16800V	22400V
PSU 100-5650	5650V	11300V	16950V	22600V
PSU 100-5700	5700V	11400V	17100V	22800V
PSU 100-5750	5750V	11500V	17250V	23000V
PSU 100-5800	5800V	11600V	17400V	23200V
PSU 100-5850	5850V	11700V	17550V	23400V
PSU 100-5900	5900V	11800V	17700V	23600V
PSU 100-5950	5950V	11900V	17850V	23800V
PSU 100-6000	6000V	12000V	18000V	24000V
PSU 100-6050	6050V	12100V	18150V	24200V
PSU 100-6100	6100V	12200V	18300V	24400V
PSU 100-6150	6150V	12300V	18450V	24600V
PSU 100-6200	6200V	12400V	18600V	24800V
PSU 100-6250	6250V	12500V	18750V	25000V
PSU 100-6300	6300V	12600V	18900V	25200V
PSU 100-6350	6350V	12700V	19050V	25400V
PSU 100-6400	6400V	12800V	19200V	25600V
PSU 100-6450	6450V	12900V	19350V	25800V
PSU 100-6500	6500V	13000V	19500V	26000V
PSU 100-6550	6550V	13100V	19650V	26200V
PSU 100-6600	6600V	13200V	19800V	26400V
PSU 100-6650	6650V	13300V	19950V	26600V
PSU 100-6700	6700V	13400V	20100V	26800V
PSU 100-6750	6750V	13500V	20250V	27000V
PSU 100-6800	6800V	13600V	20400V	27200V
PSU 100-6850	6850V	13700V	20550V	27400V
PSU 100-6900	6900V	13800V	20700V	27600V
PSU 100-6950	6950V	13900V	20850V	27800V
PSU 100-7000	7000V	14000V	21000V	28000V
PSU 100-7050	7050V	14100V	21150V	28200V
PSU 100-7100	7100V	14200V	21300V	28400V
PSU 100-7150	7150V	14300V	21450V	28600V
PSU 100-7200	7200V	14400V	21600V	28800V
PSU 100-7250	7250V	14500V	21750V	29000V
PSU 100-7300	7300V	14600V	21900V	29200V
PSU 100-7350	7350V	14700V	22050V	29400V
PSU 100-7400	7400V	14800V	22200V	29600V
PSU 100-7450	7450V	14900V	22350V	29800V
PSU 100-7500	7500V	15000V	22500V	30000V
PSU 100-7550	7550V	15100V	22650V	30200V
PSU 100-7600	7600V	15200V	22800V	30400V
PSU 100-7650	7650V	15300V	22950V	30600V
PSU 100-7700	7700V	15400V	23100V	30800V
PSU 100-7750	7750V	15500V	23250V	31000V
PSU 100-7800	7800V	15600V	23400V	31200V

D. ADJUSTABLE SLEW RATE

VOLTAGE SLEW RATE	CURRENT SLEW RATE
0.001V~0.060V/msec (PSU 6-200)	0.001A~2.000A / msec (PSU 6-200)
0.001V~0.080V/msec (PSU 8-180)	0.001A~1.800A / msec (PSU 8-180)
0.001V~0.125V/msec (PSU 12.5-120)	0.001A~1.200A / msec (PSU 12.5-120)
0.001V~0.150V/msec (PSU 15-100)	0.001A~1.000A / msec (PSU 15-100)
0.001V~0.200V/msec (PSU 20-76)	0.001A~0.760A / msec (PSU 20-76)
0.001V~0.300V/msec (PSU 30-50)	0.001A~0.500A / msec (PSU 30-50)
0.001V~0.400V/msec (PSU 40-38)	0.001A~0.380A / msec (PSU 40-38)
0.001V~0.500V/msec (PSU 50-30)	0.001A~0.300A / msec (PSU 50-30)
0.001V~0.600V/msec (PSU 60-25)	0.001A~0.250A / msec (PSU 60-25)
0.001V~0.800V/msec (PSU 80-19)	0.001A~0.190A / msec (PSU 80-19)
0.001V~1.000V/msec (PSU 100-15)	0.001A~0.150A / msec (PSU 100-15)
0.001V~1.500V/msec (PSU 150-10)	0.001A~0.100A / msec (PSU 150-10)
0.001V~1.500V/msec (PSU 300-5)	0.001A~0.025A / msec (PSU 300-5)
0.001V~2.000V/msec (PSU 400-3.8)	0.001A~0.008A / msec (PSU 400-3.8)
0.001V~2.400V/msec (PSU 600-2.6)	0.001A~0.006A / msec (PSU 600-2.6)



Adjustable Voltage Slew Rate

The PSU series can adjust slew rate for current and voltage. Via setting the rise and fall time of voltage and current, users can verify DUT's characteristics during voltage and current variation.

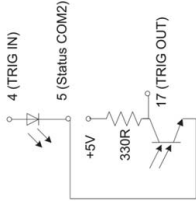
Additionally, slew rate adjustment can mitigate voltage shift to effectively prevent DUT from being damaged by inrush current. This function is ideal for tests such as capacitive load and motor.

E. OVP,OCP AND UVL

SETTING RANGE				
MODEL	OCP	OVP	UVL	
PSU 6-200	5 ~ 220A	0.6 ~ 6.6V	0 ~ 6.3V	
PSU 8-180	5 ~ 198A	0.8 ~ 8.8V	0 ~ 8.4V	
PSU 12.5-120	5 ~ 132A	1.25 ~ 13.75V	0 ~ 13.12V	
PSU 15-100	5 ~ 110A	1.5 ~ 16.5V	0 ~ 15.75V	
PSU 20-76	5 ~ 83.6A	2 ~ 22V	0 ~ 21V	
PSU 30-50	5 ~ 55A	3 ~ 33V	0 ~ 31.5V	
PSU 40-38	3.8 ~ 41.8A	4 ~ 44V	0 ~ 42V	
PSU 50-30	3 ~ 33A	5 ~ 55V	0 ~ 52.5V	
PSU 60-25	2.5 ~ 27.5A	5 ~ 66V	0 ~ 63V	
PSU 80-19	1.9 ~ 20.9A	5 ~ 88V	0 ~ 84V	
PSU 100-15	1.5 ~ 16.5A	5 ~ 110V	0 ~ 105V	
PSU 150-10	1 ~ 11A	5 ~ 165V	0 ~ 157.5V	
PSU 300-5	0.5 ~ 5.5A	5 ~ 330V	0 ~ 315V	
PSU 400-3.8	0.38 ~ 4.18A	5 ~ 440V	0 ~ 420V	
PSU 600-2.6	0.26 ~ 2.86A	5 ~ 660V	0 ~ 630V	

Once the voltage or current output exceeds the preset level of OVP or OCP, PSU will shut down output to protect DUT. UVL is for users to set the minimum output voltage from the output terminal.

F. TRIGGER CONTROL (TRIGGER INPUT/TRIGGER OUTPUT)



PSU-series provides users with complete trigger input and trigger output functions so as to flexibly control PSU-series. Each function is elaborated as follows.

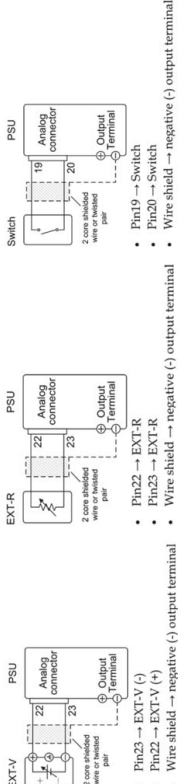
Trigger Input function :

1. Allow users to set the effective pulse width from 0-60ms for trigger input (0: the LOW or HIGH signal of DC level for trigger input)
2. Receive trigger input to control PSU-series output or to output preset voltage and current.
3. Receive trigger input to upload preset memory parameters.

Trigger Output function :

1. Allow users to set the effective pulse width from 0-60ms for trigger output (0: the LOW or HIGH signal of DC level for trigger output)
2. Set LOW or HIGH for output DC level
3. PSU produces trigger output signal when setting output or changing preset value or uploading preset memory parameters.

G. EXTERNAL ANALOG CONTROL FUNCTION

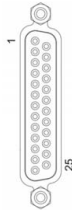


- Pin22 → EXT-V (+)
- Wire shield → negative (-) output terminal
- Pin23 → EXT-R
- Wire shield → negative (-) output terminal
- Pin19 → Switch
- Pin20 → Switch
- Wire shield → negative (-) output terminal

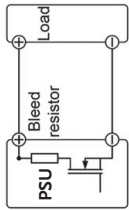
External Voltage Controls Voltage Range

The rear panel of the PSU-series has an analog control terminal. The external analog control interface allows external voltage or resistance to control voltage and current output; and allows power supply to output or to be turned on and off. The diagram on the upper shows typical connection methods for external control applications. For more detailed connection information please refers to user manual.

External On-off to Control Output, on or off



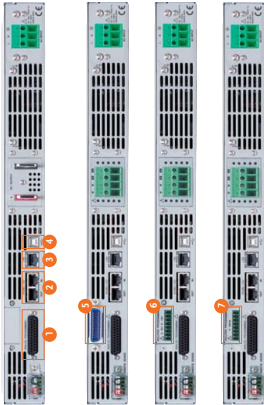
H. BLEEDER CONTROL



The PSU-Series employs a bleed resistor in parallel with the output terminal. Bleed resistor is designed to dispatch the power from the power supply filter capacitors when power is turned off or the load is disconnected. Without a bleed resistor, power terminal may remain charged on the filter capacitors for some time and be potentially hazardous. In addition, bleed resistor also allows for smoother voltage regulation of the power supply as the bleed resistor acts as a minimum voltage load. The bleed resistance can be turned on or off using the configuration setting.

PSU-Series Built-in Bleed Resistor

I. VARIOUS INTERFACES SUPPORT



1. Analog Control Interface
2. RS485/RS232 Interface for Remote Control
3. LAN Port for System Communication
4. USB Interface for Remote Control
5. GPIB Interface for Remote Control
6. Isolate Voltage Remote Control Card
7. Isolate Current Remote Control Card

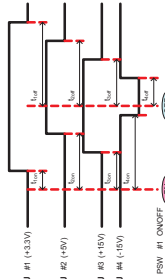
J. USING THE RACK MOUNT KIT



The rack mount kit of the PSU-Series supports both EIA and JIS standards. A standard rack can accommodate one unit of the PSU-Series.

Rack Mount Kit for PSU-Series EIA & JIS

K. OUTPUT ON / OFF DELAY



The Example of Output On/Off Delay Control Among Multiple Outputs of the PSU Units

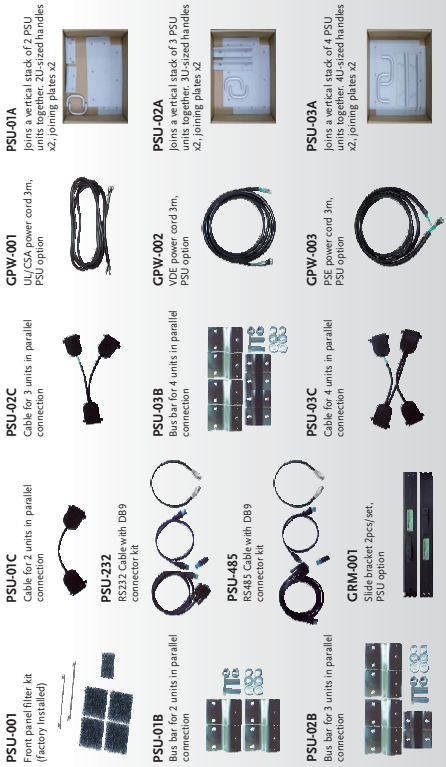
The Output On/Off delay feature enables the setting of a specific time delay for output on after the power supply output is turned on, and a specific time delay for output off after the power supply output is turned off. When multiple PSU units are used, the On/Off delay time of each unit can be set respectively referring to fix time points. This multiple-output control can be done through the analog control terminal at rear panel or through the PC programming with standard commands.

PANEL INTRODUCTION



1. AC Power Switch (AC Power On/Off)
2. USB A Port
3. Voltage Knob
4. Display Area
5. Current Knob
6. AC Input (H/V:Wire Clamp Connector)
7. DC Output Terminal
8. USB
9. LAN
10. RS 485 / RS 232
11. Analog Control Interface
12. Option Slot for (Selection One of Three) GPIB Interface Card/Isolate Voltage Remote Control Card/Isolate Current Remote Control Card
13. Remote Sense

OPTIONAL ACCESSORIES



원문: GW Instek PSU Series PSU Brochure · 제조사 원문 자료입니다. 사상은 제조사 사정에 따라 변경될 수 있습니다.

SPECIFICATIONS									
MODEL	PSU 6-200	PSU 8-180	PSU 12.5-120	PSU 15-100	PSU 20-76	PSU 30-50	PSU 40-38	PSU 50-30	
OUTPUT RATINGS									
Rated Output Voltage (°1)	6V	8V	12.5V	15V	20V	30V	40V	50V	
Rated Output Current (°2)	200A	180A	120A	100A	76A	50A	38A	30A	
Rated Output Power (°3)	1200W	1440W	1500W	1500W	1520W	1500W	1520W	1500W	
INPUT CHARACTERISTICS									
Input Voltage Range (°4)	60mV	60mV	60mV	60mV	60mV	60mV	60mV	60mV	
CVRatio (°5) - 10MHz r.m.s. (°6)	8mV	8mV	8mV	8mV	8mV	8mV	8mV	8mV	
CVRatio (°5) - 1MHz r.m.s. (°7)	400mV	360mV	240mV	200mV	152mV	125mV	95mV	85mV	
LOAD REGULATION									
Voltage(°4)	2.6mV	2.8mV	3.25mV	3.5mV	4mV	5mV	6mV	7mV	
Current(°11)	45mA	41mA	29mA	25mA	20.2mA	13mA	12.6mA	11mA	
VOLTAGE REGULATION									
Voltage(°3)	2.6mV	2.8mV	3.25mV	3.5mV	4mV	5mV	6mV	7mV	
Current(°3)	22mA	20mA	14mA	12mA	9.6mA	7mA	5.8mA	5mA	
ANALOG PROGRAMMING AND MONITORING									
External Voltage Control Output Voltage	Accuracy and linearity: ±0.5% of rated output voltage								
External Voltage Control Output Current	Accuracy and linearity: ±1% of rated output current								
External Resistor Control Output Current	Accuracy and linearity: ±1.5% of rated output current								
Output Voltage Monitor	Accuracy: ±1%								
Shutdown Control	Turns the output off with a LOW (0V to 0.5V) or short-circuit								
Output On/Off Control	Possible logic selections: Turn the output on using a LOW (0V to 0.5V) or short-circuit, turn the output off using a HIGH (4.5V to 5V) or open-circuit; Turn the output on using a LOW (0V to 0.5V) or short-circuit, turn the output off using a LOW (0V to 0.5V) or short-circuit; Clear alarms with a LOW (0V to 0.5V) or short-circuit								
Alarm Clear Control	Photocoupler open collector output; Maximum voltage 30V, maximum sink current 8mA								
CV/CC/ALM/PWR ON/OUT ON Indicator	Maximum low level output = 0.8V; maximum high level output = 2V; Maximum source current = 8mA								
Trigger Out	Maximum low level input voltage = 0.8V; maximum high level input voltage = 2V; Maximum sink current = 8mA								
USB Port	Maximum low level input voltage = 0.8V; maximum high level input voltage = 2V; Maximum sink current = 8mA								
FRONT PANEL									
Display, 4 digits, Voltage Accuracy 0.1%, Current Accuracy 0.2%	12mV	16mV	25mV	30mV	40mV	60mV	80mV	100mV	
Indications	600mA	540mA	360mA	300mA	228mA	150mA	114mA	90mA	
Knobs	GREEN LED's: CV, CC, V, A, VSR, ISR, DLY, RMT, LAN, M1, M2, M3, RUN, Output ON; RED LED's: ALM, ERR								
USB Port	Voltage, Current Type A USB connector								
TRANSIENT RESPONSE TIME (°10)									
Transient Response Time	1.5ms	1.5ms	1ms	1ms	1ms	1ms	1ms	1ms	
OUTPUT RESPONSE TIME									
Rise Time(°9)	80ms	80ms	80ms	80ms	80ms	80ms	80ms	80ms	
Fall Time(°9)	10ms	50ms	50ms	50ms	80ms	80ms	80ms	80ms	
Rated load	500mA	600mA	700ms	700ms	900ms	900ms	1000ms	1100ms	
PROGRAMMING AND MEASUREMENTS (RS-232/485, USB, LAN, GPIB)									
Output Voltage Programming Accuracy 0.05%	30mV	4mV	6.25mV	7.5mV	10mV	15mV	20mV	25mV	
Output Current Programming Accuracy 0.2%	180mA	180mA	120mA	100mA	76mA	50mA	38mA	30mA	
Output Voltage Measurement Resolution	0.1mV	0.1mV	0.4mV	0.4mV	0.4mV	0.4mV	0.4mV	0.4mV	
Output Current Measurement Resolution	0.1mA	0.1mA	0.1mA	0.1mA	0.1mA	0.1mA	0.1mA	0.1mA	
Output Voltage Measurement Resolution	0.2mV	0.2mV	0.4mV	0.4mV	0.4mV	0.4mV	0.4mV	0.4mV	
Output Current Measurement Resolution	0.1mA	0.1mA	0.1mA	0.1mA	0.1mA	0.1mA	0.1mA	0.1mA	
TEMPERATURE COEFFICIENT									
Voltage & Current	100ppm/°C after a 30 minute warm-up								
REMOTE SENSE COMPENSATION (VOLTAGE/TWO WIRE)									
PROTECTION FUNCTION	TV	TV	TV	TV	TV	TV	TV	TV	
Over Voltage Protection(OVP)	0.6-6.6V	0.8-8.8V	1.25-13.75V	1.5-16.5V	2-22V	3-33V	4-44V	5-55V	
Over Current Protection(OCP)	60mV	80mV	125mV	150mV	200mV	300mV	400mV	500mV	
Under Voltage Limit(UVL)	0-6.3V	0-8.4V	0-13.12V	0-15.75V	0-21V	0-31.5V	0-42V	0-52.5V	
Over Temperature Protection(OHP)	Turn the output off								
Low AC Input Protection (AC-FAIL)	Turn the output off								
Shutdown (SD)	Turn the output off								
Power Limit (POWER LIMIT)	Over power limit								
Value (Peak)	Approx. 105% of rated output power								
INTERFACE CAPABILITIES									
LAN	Type A, Type B, Speed 1, 10/20, USB Class CDC (Communications Device Class)								
RS-232 / RS-485	Complies with the EIA232D / EIA485 Specifications								
GPIB (Factory Option)	SCPI - 1993, IEEE 488.2 compliant interface								
ISOLATED ANALOG CONTROL INTERFACE (FACTORY OPTION)	Using 4-20mA current signals for programming and measurement								
Current Control	Using 4-20mA current signals for programming and measurement								
ENVIRONMENTAL CONDITIONS									
Operating Temperature	0 °C ~ 50 °C (°14)								
Operating Humidity	20% ~ 85% RH; No condensation								
Storage Humidity	90% RH or less; No condensation								
Altitude	Maximum 2000m								
MECHANICAL CHARACTERISTICS									
Nominal Input Rating	100Wac ~ 240Wac, 50Hz to 60Hz, single phase								
Input Voltage Range	85Vac ~ 265Vac								
Input Frequency Range	47Hz ~ 63Hz								
Maximum Input Current	100Wac/200Wac(4)								
Maximum Input Power	2000VA								
Power Factor	0.99/0.98								
Efficiency (°13)	76.7/79 ~ 78.8/81								
DIMENSIONS & WEIGHT									
423(W) × 43.6(H) × 44.7(D) mm, Approx. 8.7kg									

SPECIFICATIONS							
MODEL	PSU 60-25	PSU 80-19	PSU 100-15	PSU 150-10	PSU 300-5	PSU 400-3.8	PSU 600-2.6
OUTPUT RATINGS							
Rated Output Voltage (°1)	60V	80V	100V	150V	300V	400V	600V
Rated Output Current (°2)	25A	19A	15A	10A	5A	3.8A	2.6A
Rated Output Power (°2)	1500W	1520W	1500W	1500W	1500W	1520W	1500W
INPUT CHARACTERISTICS							
Input Voltage Range (°3)	60mV	80mV	80mV	100mV	150mV	200mV	300mV
CVRatio (V3 - 20Hz) r.m.s. (°7)	8mV	8mV	8mV	8mV	8mV	8mV	8mV
CVRatio (V3 - 1MHz) r.m.s. (°12)	75mV	57mV	45mV	35mV	25mV	17mV	12mV
LOAD REGULATION							
Voltage (°4)	8mV	10mV	12mV	17mV	32mV	42mV	62mV
Current (°11)	10mA	8mA	8mA	7mA	6mA	5mA	3.2mA
VOLTAGE REGULATION							
Voltage (°3)	4mV	10mV	12mV	17mV	25mV	42mV	62mV
Current (°3)	4mA	3mA	3.5mA	3mA	2.5mA	2.3mA	2.2mA
ANALOG PROGRAMMING AND MONITORING							
External Voltage Control Output Voltage	Accuracy and linearity: ±0.5% of rated output voltage						
External Voltage Control Output Current	Accuracy and linearity: ±1% of rated output current						
External Resistor Control Output Current	Accuracy and linearity: ±1.5% of rated output current						
Output Voltage Monitor	Accuracy: ±1%						
Shutdown Control	Turns the output off with a LOW (0V to 0.5V) or short-circuit						
Output On/Off Control	Possible logic selections: Turn the output on using a LOW (0V to 0.5V) or short-circuit, turn the output off using a HIGH (4.5V to 5V) or open-circuit; Turn the output on using a LOW (0V to 0.5V) or short-circuit, turn the output off using a LOW (0V to 0.5V) or short-circuit; Clear alarms with a LOW (0V to 0.5V) or short-circuit						
Alarm Clear Control	Photocoupler open collector output; Maximum voltage 30V, maximum sink current 8mA						
CV/CC/ALM/PWR ON/OUT ON Indicator	Maximum low level output = 0.8V; maximum high level output = 2V; Maximum source current = 8mA						
Trigger Out	Maximum low level input voltage = 0.8V; maximum high level input voltage = 2V; Maximum sink current = 8mA						
USB Port	Maximum low level input voltage = 0.8V; maximum high level input voltage = 2V; Maximum sink current = 8mA						
FRONT PANEL							
Display, 4 digits, Voltage Accuracy 0.1%, Current Accuracy 0.2%	12mV	16mV	25mV	30mV	40mV	60mV	80mV
Indications	600mA	540mA	360mA	300mA	228mA	150mA	114mA
Knobs	GREEN LED's: CV, CC, V, A, VSR, ISR, DLY, RMT, LAN, M1, M2, M3, RUN, Output ON; RED LED's: ALM, ERR						
USB Port	Voltage, Current Type A USB connector						
TRANSIENT RESPONSE TIME (°10)							
Transient Response Time	1ms	1ms	1ms	1ms	1ms	1ms	1ms
OUTPUT RESPONSE TIME							
Rise Time (°9)	80ms	150ms	150ms	150ms	150ms	200ms	250ms
Fall Time (°9)	80ms	150ms	150ms	150ms	150ms	200ms	250ms
Rated load	500mA	600mA	700mA	700mA	900mA	900mA	1000mA
Rated load	500mA	600mA	700mA	700mA	900mA	900mA	1000mA
PROGRAMMING AND MEASUREMENTS (RS-232/485, USB, LAN, GPIB)							
Output Voltage Programming Accuracy 0.05%	30mV	40mV	50mV	75mV	150mV	200mV	300mV
Output Current Programming Accuracy 0.2%	25mA	19mA	15mA	10mA	5mA	3.8mA	2.6mA
Output Power Programming Accuracy 0.2%	800mW	600mW	480mW	320mW	160mW	120mW	80mW
Output Current Programming Resolution	0.8mA	0.6mA	0.5mA	0.34mA	0.19mA	0.13mA	0.09mA
Output Voltage Measurement Accuracy 0.1%	60mV	80mV	100mV	150mV	300mV	400mV	600mV
Output Current Measurement Accuracy 0.2%	25mA	19mA	15mA	10mA	5mA	3.8mA	2.6mA
Output Voltage Measurement Resolution	2mV	2.7mV	3.4mV	5.2mV	10.2mV	13.6mV	20.4mV
Output Current Measurement Resolution	0.8mA	0.6mA	0.5mA	0.34mA	0.19mA	0.13mA	0.09mA
TEMPERATURE COMPENSATION							
Voltage & Current	100ppm/°C After a 30 minute warm-up						
VOLTAGE SENSE COMPENSATION VOLTAGE (TWO WIRE)							
Range	2V	4V	5V	5V	5V	5V	5V
PROTECTION FUNCTION							
Over Voltage Protection (OVP)	5-66V	5-88V	5-110V	5-155V	5-330V	5-440V	5-660V
Over Current Protection (OCP)	600mA	800mA	1000mA	1500mA	3000mA	4000mA	6000mA
Under Voltage Limit (UVL)	0-63V	0-84V	0-105V	0-157.5V	0-315V	0-420V	0-630V
Shutdown (SD)	Turn the output off						
Power Limit (POWER LIMIT)	Turn the output off						
Operation	Turn the output off						
Value (Fixed)	Approx. 105% of rated output power						
INTERFACE CAPABILITIES							
LAN	TCP/IP, HTTP, TFTP, FTP, SSH, 11/20 USB Class CDC (Communications Device Class)						
RS-232 / RS-485	MAC Address, DNS IP Address, User Password, Gateway IP Address, Subnet Mask						
GPB (factory option)	Complies with the EIA232D / EIA485 Specifications						
ISOLATED ANALOG CONTROL INTERFACE (FACTORY OPTION)							
Current Control	SCP1 - 1991, IEEE 488.2 compliant interface						
Current Control	Using 4-20mA current signals for programming and measurement						
ENVIRONMENTAL CONDITIONS							
Operating Temperature	0 °C ~ 50 °C (°14)						
Storage Temperature	-20° ~ +55° RH; No condensation						
Operating Humidity	20% ~ 85% RH; No condensation						
Storage Humidity	Maximum 2000m						
INPUT CHARACTERISTICS							
Nominal Input Rating	100W to 240W, 50Hz to 60Hz, single phase						
Input Voltage Range	85Vac ~ 265Vac						
Input Frequency Range	47Hz ~ 63Hz						
Input Power Factor	100w/240w(4)						
Inrush Current	Less than 50A						
Maximum Input Power	2000VA						
Hold-up Time	300/0.56						
Hold-up Time	100w/240w						
Hold-up Time	100w/240w						
Efficiency (°13)	84.8%	84.8%	84.8%	84.8%	84.8%	84.8%	84.8%
DIMENSIONS & WEIGHT							
423 (W) x 43 (H) x 47 (D) mm. Approx. 8.7g							