

# PROGRAMMABLE DUAL-RANGE D.C. POWER SUPPLY



## PSM-2010/3004/6003



Patent No: ZL 03 3 01174.5

## FEATURES

- \* Single Output Dual Range Max. 200W
- \* High Resolution: 1mV/1mA
- \* Stable & Clear Power: 0.01% Load/Line Regulation, 350  $\mu$ Vrms Ripple
- \* 100 Sets Memory
- \* Auto Step Running With Timer Setting
- \* Safety Design: OVP, OCP & OTP ; Output ON/OFF Control(OCP Provides Delay Setting to Prevent Trip of High Start-Up Current)
- \* Self-Test and Software Calibration
- \* Highly Visible Vacuum-Fluorescent Display
- \* Front and Rear Output Terminal
- \* Standard Interface : RS-232C, GPIB
- \* Option : European Jack Type Terminal

## Rear Panel



The PSM-Series are single output / dual range, 120 or 200W, programmable linear DC power supplies. OVP, OCP, OTP, and output On/Off control protect the PSM-Series and their load from unexpected conditions. High resolution, high regulation, and low ripple are maintained at 1mV/1mA, 0.01%, and <350  $\mu$ Vrms, respectively. Operation and configuration is simplified with a digital interface and a clear LCD display. Standard features include; store/recall output memories, automatic stepping with timers for continuous testing and self-testing and software calibration features to reduce maintenance overhead. SCPI programming, LabVIEW drivers, RS-232C and GPIB interfaces enable easy automated test system integration and remote control. The PSM-Series are an ideal choice for high precision applications such as QA verification and product development.

SPECIFICATIONS				
		PSM-2010	PSM-3004	PSM-6003
DC OUTPUT				
Low Range		0 ~ 8V/20A	0 ~ 15V/7A	0 ~ 30V/6A
High Range		0 ~ 20V/10A	0 ~ 30V/4A	0 ~ 60V/3.3A
CONSTANT VOLTAGE OPERATION				
Regulation (% of output + offset)		Load regulation $\leq 0.01\% + 2mV$ Line regulation $\leq 0.01\% + 2mV$		
Ripple & Noise		$< 350 \mu V_{rms}/3mV_{pp}$	$< 350 \mu V_{rms}/2mV_{pp}$	$\leq 50V$ : $< 500 \mu V_{rms}/3mV_{pp}$ $> 50V$ : $< 1mV_{rms}/3mV_{pp}$
CONSTANT CURRENT OPERATION				
Regulation (% of output + offset)		Load regulation $\leq 0.01\% + 250 \mu A$ Line regulation $\leq 0.01\% + 250 \mu A$		
Ripple & Noise		$< 2mArms$		
RESOLUTION				
Programming	Voltage	1mV	1mV	2mV
	Current	1mA	0.5mA	0.5mA
Readback	Voltage	0.5mV	0.5mV	1mV
	Current	1mA	0.1mA	0.5mA
Front Panel	Voltage	1mV		
	Current	1mA(<10A), 10mA( $\geq 10A$ )		
OVP/OCP	Voltage	10mV		
	Current	10mA		
ACCURACY				
Programming	Voltage	0.05% + 10mV		
	Current	0.2% + 10mA		
Readback	Voltage	0.05% + 5mV		
	Current	0.15% + 5mA		
OVP/OCP	Voltage	0.1% + 10mV		
	Current	0.4% + 10mA		
TRANSIENT RESPONSE				
		$< 50 \mu sec$ ( for output to recover within 15mV following a change in output current from full load to half load)		
COMMAND PROCESSING TIME				
		100 ms		
VOLTAGE PROGRAMMING RESPONSE TIME (for resistive load)				
Voltage Up	Full Load	95 ms	50 ms	80 ms
	No Load	45 ms	20 ms	100 ms
Voltage Down	Full Load	30 ms	45 ms	30 ms
	No Load	450 ms	400 ms	450 ms
STABILITY (% of output + offset)				
Voltage		0.02% + 1mV		
Current		0.1% + 1mA		
MEMORY				
Store/Recall		100 sets		
TEMPERATURE COEFFICIENT PER $^{\circ}C \pm$ (% of Output + Offset)				
Voltage		0.01% + 3mV		
Current		0.02% + 3mA		
POWER SOURCE				
AC 100V/120V/220V $\pm 10\%$ , 230V : - 6% ~ + 10%, 50/60Hz				
INTERFACE				
Standard RS-232C, GPIB				
DIMENSIONS & WEIGHT				
230(W) x 140(H) x 380(D) ; Approx. 10kg				

## ORDERING INFORMATION

PSM-2010 200W Single Output, Programmable Power Supply  
 PSM-6003 200W Single Output, Programmable Power Supply  
 PSM-3004 120W Single Output, Programmable Power Supply

### ACCESSORIES :

User manual x 1, Power cord x 1, Test lead GTL-104 x 1, European test lead GTL-204 x 1, Ground lead GTL-201A x 1 (European terminal), Sense lead GTL-202 x 1 (European terminal)

### OPTION

Opt. 01: GRA-407 Rack Mounting ( 19" , 4U )

### OPTIONAL ACCESSORIES

GTL-232 RS-232C Cable, 9-pin Female to 9-pin , Null Modem for PC Computer

### FREE DOWNLOAD

PC Software PC Software including Data Log ; Remote Control Software  
 Driver Labview Driver ; PSM VB Example ; PSM VC++ Example

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