

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, 350µVrms 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 <math><350\mu\text{Vrms}</math>, 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 $\leq 0.01\% + 2\text{mV}$ Line regulation $\leq 0.01\% + 2\text{mV}$		
Ripple & Noise	$< 350\mu\text{Vrms}/3\text{mVpp}$	$< 350\mu\text{Vrms}/2\text{mVpp}$	$\leq 50\text{V}: < 500\mu\text{Vrms}/3\text{mVpp}$ $> 50\text{V}: < 1\text{mVrms}/3\text{mVpp}$
CONSTANT CURRENT OPERATION			
Regulation (% of output + offset)	Load regulation $\leq 0.01\% + 250\mu\text{A}$ Line regulation $\leq 0.01\% + 250\mu\text{A}$		
Ripple & Noise	$< 2\text{mArms}$		
RESOLUTION			
Programming	Voltage 1mV Current 1mA	1mV 0.5mA	2mV 0.5mA
Readback	Voltage 0.5mV Current 1mA	0.5mV 0.1mA	1mV 0.5mA
Front Panel	Voltage 1mV Current 1mA (<math><10\text{A}</math>), 10mA ($\geq 10\text{A}</math>)$		
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			
	$< 50\mu\text{sec}$ (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 No Load	95 ms 45 ms	50 ms 20 ms
Voltage Down	Full Load No Load	30 ms 450 ms	45 ms 400 ms
STABILITY (% of output + offset)			
Voltage	0.02% + 1mV		
Current	0.1% + 1mA		
MEMORY			
Store/Recall	100 sets		
TEMPERATURE COEFFICIENT PER °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 Driver PC Software including Data Log ; Remote Control Software
Labview Driver ; PSM VB Example ; PSM VC++ Example