

# 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



Calle del Ebano #16625  
Jardines de Chapultepec  
Tijuana B.C. Mexico  
Tel. (664) 681 1130  
Fax. (664) 681 1150  
Tel. 01800 027-4848  
www.finaltest.com.mx

**FINAL TEST**<sup>MR</sup>  
Venta de Instrumentos de Prueba y Medición

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 <350µVrms, 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
<b>DC OUTPUT</b>			
Low Range	0 ~ 8V/20A	0 ~ 15V/7A	0 ~ 30V/6A
High Range	0 ~ 20V/10A	0 ~ 30V/4A	0 ~ 60V/3.3A
<b>CONSTANT VOLTAGE OPERATION</b>			
Regulation (% of output + offset)	Load regulation ≤ 0.01% + 2mV Line regulation ≤ 0.01% + 2mV		
Ripple & Noise	< 350µVrms/3mVpp	< 350µVrms/2mVpp	≤50V:<500µVrms/3mVpp >50V:<1mVrms/3mVpp
<b>CONSTANT CURRENT OPERATION</b>			
Regulation (% of output + offset)	Load regulation ≤ 0.01% + 250µA Line regulation ≤ 0.01% + 250µA		
Ripple & Noise	< 2mArms		
<b>RESOLUTION</b>			
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(<10A),10mA(≥10A)		
OVP/OCP	Voltage 10mV Current 10mA		
<b>ACCURACY</b>			
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		
<b>TRANSIENT RESPONSE</b>			
	< 50µ sec ( for output to recover within 15mV following a change in output current from full load to half load)		
<b>COMMAND PROCESSING TIME</b>			
	100 ms		
<b>VOLTAGE PROGRAMMING RESPONSE TIME (for resistive load)</b>			
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
<b>STABILITY (% of output + offset)</b>			
Voltage	0.02% + 1mV		
Current	0.1% + 1mA		
<b>MEMORY</b>			
Store/Recall	100 sets		
<b>TEMPERATURE COEFFICIENT PER °C ± (% of Output + Offset)</b>			
Voltage	0.01% + 3mV		
Current	0.02% + 3mA		
<b>POWER SOURCE</b>			
	AC 100V/120V/220V±10%, 230V : - 6% ~ + 10%, 50/60Hz		
<b>INTERFACE</b>			
	Standard RS-232C , GPIB		
<b>DIMENSIONS &amp; WEIGHT</b>			
	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