

PSM Series

Multi-Channels Regulated DC Power



PSM series is a multi-channels DC power supply with 2-, 3-, and 4- output channels. Its high stability and enhanced linearity make this regulated Dc power supply significantly useful in where high performance and stable power sources are required. It is widely adopted for R&D, educational and industrial usage.

FEATURES:

- 2 Adjustable Channels Output (PSM 2 Series)
- 2 Adjustable Channels and 1 fixed Output (PSM 3 Series)
- 4 Adjustable Channels Output (PSM 4 Series)
- 0 ~ 30V Linear Voltage Adjustment
- 4 Sets of LED for Voltage and Current Output Display
- Low Noise and Ripple; Less than 1mV (5Hz ~ 1MHz)
- Voltage and Current Pre-set Feature
- CV/CC Mode Automatic Change
- Auto Tracking Output
- Auto Parallel or Series connection
- Doubling Current with Series Connection
- Doubling Voltage with Parallel Connection
- 16 Hours Continuous Operation with Full Loading
- Rugged Metal Cabinet

GERNERAL SPECIFICATION:

Model	Number of Channels	CHANNEL OUTPUT							
		CH 1		CH 2		CH 3		CH 4	
		Voltage	Current	Voltage	Current	Voltage	Current	Voltage	Current
PSM 2/2A	2		2A		2A	N/A			
PSM 2/3A	2	0 ~ 30V	3A	0 ~ 30V	3A				
PSM 2/5A	2		5A		5A				
PSM 3/2A	3		2A		2A	5V	1 A	N/A	
PSM 3/3A	3	0 ~ 30V	3A	0 ~ 30V	3A				
PSM 3/5A	3		5A		5A				
PSM 4/2A	4		2A		2A	2.2 ~ 5.2V	1 A	8 ~ 15V	1 A
PSM 4/3A	4	0 ~ 30V	3A	0 ~ 30V	3A				
PSM 4/5A	4		5A		5A				

OPERATION CONDITION:

Environmental Condition	Operating altitude <2000m, pollution degree II
Input Voltage	110V _{AC} /220V _{AC} ±10% at 50Hz
Operating Condition	Temperature 0~40℃
	Relative Humidity ≅80%RH
Storage Condition	Temperature -10℃~70℃
	Relative Humidity ≅80%RH

TECHNICAL SPECIFICATION:

Channel 1 and 2 Characteristic	
Constant Voltage Mode (CV)	
Voltage Range	0 to maximum rated current
Line Effect	$\leq 1 \times 10^{-4} + 3\text{mV}$ ($\pm 10\%$ of Rated Voltage)
Loading Effect	$\leq 1 \times 10^{-4} + 3\text{mV}$ (Output current $\leq 3\text{A}$) $\leq 2 \times 10^{-4} + 3\text{mV}$ (Output current $\geq 3\text{A}$)
Noise and Ripple	$\leq 1\text{m V}_{\text{rms}}$ (5Hz – 1 MHz)
Recovery Time	$\leq 100\mu\text{sec}$ (50% of loading effect with min. loading of 0.5A)
Temperature Coefficient	$\leq 300\text{ppm}/^\circ\text{C}$
Constant Current Mode (CC)	
Current Range	0 to maximum rated current
Line Effect	$\leq 2 \times 10^{-3} + 3\text{mA}$
Loading Effect	$\leq 2 \times 10^{-3} + 3\text{mA}$
Noise and Ripple	$\leq 3\text{mA}_{\text{rms}}$
Tracking Characteristic (in Series)	
Line Effect	$\leq 1 \times 10^{-4} + 3\text{mV}$
Loading Effect	$\leq 1 \times 10^{-4} + 3\text{mV}$ (Output current $\leq 3\text{A}$) $\leq 2 \times 10^{-4} + 3\text{mV}$ (Output current $\geq 3\text{A}$)
Tracking Characteristic (in Parallel)	
Line Effect	$\leq 1 \times 10^{-4} + 5\text{mV}$
Loading Effect	$\leq 300\text{mV}$
PSM4 Channel 3 Characteristic	
Voltage Range	2.2-5.2V ($\pm 8\%$)
Current Range	0-1A
Line Effect	$\leq 5\text{mV}$
Loading Effect	$\leq 15\text{mV}$
Noise and Ripple	$\leq 2\text{m V}_{\text{rms}}$ (5Hz – 1 MHz)
PSM4 Channel 4 Characteristic	
Voltage Range	8-15V ($\pm 8\%$)
Current Range	0-1A
Line Effect	$\leq 5\text{mV}$
Loading Effect	$\leq 15\text{mV}$



<i>Noise and Ripple</i>	$\leq 2m V_{rms}$ (5Hz – 1 MHz)
PSM3 Channel 3 Characteristic	
Voltage Range	5.0V ($\pm 8\%$)
Current Range	Fixed 1A
Line Effect	$\leq 5mV$
Loading Effect	$\leq 15mV$
<i>Noise and Ripple</i>	$\leq 2m V_{rms}$ (5Hz – 1 MHz)
Display Accuracy	
Digital Display	3 Digits Display ($\pm 0.5\% + 2d$)
Insulation	
Chassis and Terminal	$\leq 20M \Omega$, at DC500V
Chassis and Power Cord	$\leq 30M \Omega$, at DC500V
Mechanical Specification	
Weight(kg):	7.5 approximately
Dimension(mm):	255*150*305

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