

PSM3 Series

Multi-Channels Regulated Linear DC Power Supply with 4 Digits Display

PSM3 series is a multi-channel Linear DC power supply with 3- output channels. Its high stability and enhanced linearity make this regulated DC power supply significantly useful where high performance and stable power sources are required. It is widely adopted for R&D, educational and industrial usage.

It provides full load stable performance, intelligent ventilation fan control to minimise operation noise, and fully adjusts voltage and current readings. When output overloads, the system will automatically cut off the output to protect the connected circuit or loading. At the same time, the overload indicator will illuminate to warn the operator for further action.

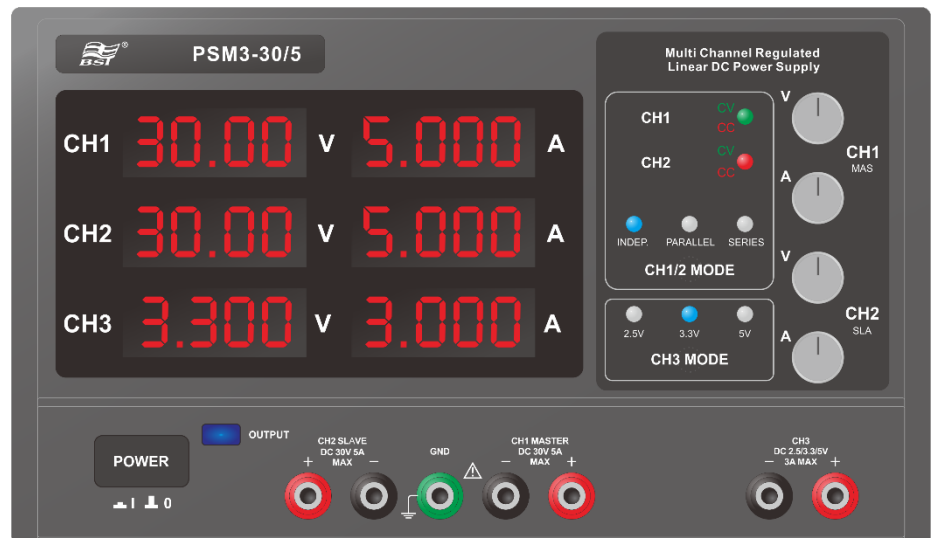
In auto-tracking mode, the PSM3 series can auto-connect CH1 and CH2 output either in parallel or in series internally to provide double current or voltage output.

On-screen 3 sets of the output display. Operator not required to switch display, direct monitor all channel's voltage and current usage status simultaneously.

These excellent performances with extract stability and enhanced linearity make the unit very outstanding. These power supplies are suitable for laboratory, university, high school, and workplace uses or where high performance and precision regulated DC power supply is required.

Features:

- 3 Adjustable Channels Output
- DC 0 ~ 30V Linear Voltage Adjustment (Channel1 and 2)
- Channel 1 and 2 max DC 5A (PSM3-30/5) / DC 3A (PSM3-30/3) Linear Current Adjustment
- Channel 3 Output Voltage Selectable DC 5.0V/3.3V/2.5V for TTL/CMOS Circuit (Channel3)
- 6 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
- Overload Indication
- Intelligent Ventilation Fan Control
- Auto Tracking Output
- Auto Parallel or Series connection
- Doubling Current with Series Connection (10A PSM3-30/5). Doubling voltage (60V) with Parallel Connection
- Continuous Operation with Full Loading
- 110V/220V AC Power Input Switchable
- Rugged Metal Cabinet



1. SPECIFICATIONS

GERNERAL SPECIFICATION

Model	Number of Channels	CHANNEL OUTPUT					
		CH 1		CH 2		CH 3	
		Voltage	Current	Voltage	Current	Voltage	Current
PSM3-30/3	3	0 ~ 30V	2A	0 ~ 30V	2A	5/3.3/2.5V Switchable	3A
PSM3-30/5	3		5A		5A		

OPERATION CONDITION

Environmental Condition	Operating altitude <2000m, pollution degree II
Input Voltage	110V / 220V AC $\pm 10\%$ at 50/60Hz
Operating Condition	Temperature -10 ~ 40°C Relative Humidity $\leq 80\%RH$ (non condensing)
Storage Condition	Temperature -20°C ~ 80°C Relative Humidity $\leq 80\%RH$ (non-condensing)

TECHNICAL SPECIFICATION

Channel 1 and Channel 2 (CH1 & CH2)

Constant Voltage Mode (CV)	
Voltage Range	0.6 to 30V
Line Effect	$CV \leq 0.01\% + 3mV$ ($\pm 10\%$ of Rated Voltage)
Loading Effect	$CV \leq 0.01\% + 3mV$ (Output current $\leq 3A$) $CV \leq 0.02\% + 5mV$ (Output current $> 3A$) (5A Model)
Noise and Ripple	$CV \leq 1mV_{rms}$ (Output current $\leq 3A$, 5Hz~1MHz) $CV \leq 2mV_{rms}$ (Output current $> 3A$, 5Hz~1MHz) (5A Model)
Recovery Time	$\leq 100\mu sec$ (50% of loading effect with min. loading of 0.5A, Setting Band 15mV)
Constant Current Mode (CC)	
Current Range	30mA to 3A (3A Model) / 30mA to 5A (5A model)
Line Effect	$CC \leq 0.2\% + 3mA$
Loading Effect	$CC \leq 0.2\% + 3mA$ (Output current $\leq 3A$) $CC \leq 0.2\% + 5mA$ (Output current $> 3A$) (5A Model)
Noise and Ripple	$CC \leq 3mA_{rms}$ (Output current $\leq 3A$) $CC \leq 10mA_{rms}$ (Output current $> 3A$) (5A Model)
Tracking Characteristics (in Series)	
Line Effect	$CV \leq 0.01\% + 3mV$
Loading Effect	$CV \leq 0.01\% + 3mV$ (Output current $\leq 3A$) $CV \leq 0.02\% + 3mV$ (Output current $\geq 3A$)
Tracking Transient	$\leq \text{Master} * 2\% + 50mA$ (Loading change $\leq 300mA$)
Tracking Characteristic (in Parallel)	
Line Effect	$CV \leq 0.01\% + 5mV$

TECHNICAL SPECIFICATION

Loading Effect	$CV \leq 300mV$
Tracking Transient	$\leq \text{Master} * 0.5\% + 10mV$ (Loading change $\leq 300mV$)
Channel 3 (CH3)	
Voltage Range	2.5V/3.3V/5V
Current Range	3A
Line Effect	$\leq 25mV$
Loading Effect	$\leq 25mV$
Noise and Ripple	$\leq 2mV_{rms}(5Hz \sim 1MHz)$
Display	
Resolution (CH1 & CH2)	10mV/1mA
Resolution (CH3)	1mV/1mA
Accuracy	$\pm(1\% \text{ of reading} + 2\text{digits})$

Standard Environment: 23°C $\pm$ 5°C ; RH $\leq$ 75% (non-condensing)

MECHANICAL SPECIFICATION

Dimension	330(D) $\times$ 250(W) $\times$ 155(H) mm
Weight	Approx. 9kg

2. PACKING

Carton Box

Power Supply
Power Cord
Manual

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