

## Programmable Power Supplies PSD9000 Series

The new **PSD 9000** series Programmable DC Power Supplies is unbeatable in design, performance and reliability. The advanced design provides fully programmability and remote control operation.

The **PSD 9001 & PSD 9002** delivers 0 to 30V at 2 A and an auxiliary 5V 2 A. The auxiliary 5V output is adjustable from 1.5V to 5.5V ideally suited to modern digital circuits from LTTL to TTL levels. In addition to these **PSD9002** is allows you to enter direct numeric values for setting voltage, current limits , fuse current with ease and quick response.

Both outputs 0-30V, 2A can be independently programmed in the **PSD9003 & PSD 9004** with tracking. **PSD9004** has a graphic LCD display.

A programmable electronic fuse setting enables the user better control over the circuit under test. PC interface with software is useful to generate a time varying DC output. This is widely used in component and critical circuit testing and validation.

All these features of the **PSD9000** series make it an ideal choice for innumerable applications in laboratory, servicing, industries and educational use where accurate and reliable result is a necessity.



### Programmable DC 0 to 30V, 2A

The DC output is fully programmable from front panel and remotely thru PC.

### Electronic Fuse for output

The Fuse current can be programmed, so that when the current crosses the limit, the output is switched off.

### Last setup save

All settings, viz. Voltage, Fuse current, etc. are stored automatically when the Power Supply is switched off. No need to remember the settings when next you switch ON the power supply.

### Constant Voltage & Constant Current modes

The power supplies may be used in precise constant voltage (CV) or in current (CC) mode. Switchover from CV to CC depends on the load connected. The CC mode is indicated by LED OL on front panel.

### Adjustable Current Limiter

The value of current max. can be set to protect the circuit under test.

### Output ON/ OFF control

User has full control over the DC output; it can be switched ON or OFF.

### Serial Interface RS232 standard, USB Interface (optional)

Built-in interfacing with PC for remote control and Arbitrary mode RS232C along with software gives flexibility to user for wide applications, from circuit testing to component testing.

### Auxiliary 5V, 2A (PSD9001 & PSD9002)

Apart from programmable DC output an auxiliary 5V is also provided for connecting digital circuits from wide range 1.5V LTTL to TTL circuits. This way it avoids looking for any additional power supply requirement on test bench.

### Numeric Key pad (PSD9002, PSD9003 & PSD9004)

Allows you to enter settings for voltage, current, Fuse current directly in numeric, makes ideal choice for quick response

## Programmable Power Supplies PSD9001 & PSD9002



The remote control software provided with programmable power supplies is used for connecting to PC , with parameters , Vset , Iset , electronic Fuse , output ON/OFF controls . Used in prolonged testing, which runs hours together, can be performed with ease and accuracy. Applications with user's own software is also possible, by embedding the controls of Programmable Power Supply in their application software.

When power supply is operated in remote inaccessible test, the displayed data can be monitored on remote PC screen. Application , such as process control , or in R&D Labs. It can also be mounted with standard 19" Rack (with optional 19" Rack Mount Kit) , and the displayed data can be monitored on remote console.



With Arbitrary operating mode, power supply can be programmed to perform set of predefined output voltage with respect to time. These time varying data can be fed to software manually or it can also be written in worksheet and loaded to software. The test can be conducted and monitored , the current data can be logged and saved for further analysis and documentation.

### TECHNICAL SPECIFICATIONS

Specifications	PSD9001	PSD9002	PSD9003	PSD9004
<b>DC Output</b>	A: DC-30 V/ 2A B: 5 V/ 2A (Auxiliary) (adj. 1.5 V -5.5 V)	A: DC-30 V/ 2A B: 5 V/ 2A (Auxiliary) (adj. 1.5 V -5.5 V)	2 x Dc - 30 V / 2A Both Programmable	2 x Dc - 30 V / 2A Both Programmable
<b>Setting Resolution</b>	V : 10 mV, I : 1 mA			
<b>Operating Modes</b>	Constant Voltage (CV), Constant Current (CC)			
<b>load &amp; Line regulation</b>				
Voltage	$\leq \pm (0.05\% + 10\text{mV})$			
Current	$\leq \pm (0.05\% + 250\mu\text{A})$			
<b>Ripple &amp; Noise</b>	$\leq 1 \text{ m Vrms}$			
<b>Internal Resistance</b>	$\leq 10 \text{ m}\Omega$			
<b>Stability</b>	$\leq 2.5 \text{ mV at full load}$			
<b>Recovery Time</b>	$\leq 100 \mu\text{s}$			
<b>Temp. Coefficient</b>	$\leq \pm (0.05\% + 10\text{m V / }^\circ\text{C})$			
<b>Current limit adjustments</b>	100 mA to 2 A			
<b>Display</b>	Display for power supply A 7 segment LED, 4 digit each for Voltage & Current		7 segment LED, 4 digit each for Voltage & Current for A & B Power Supply	Graphic LCD Display
<b>Display Accuracy</b>	$\pm (0.05\% + 2D)$			
<b>Protections</b>	Built-in overheat and over voltage protection			
<b>Insulation</b>	between chasis & Output terminal > 10 M $\Omega$ at 100 Vdc, chasis & AC plug > 50 M $\Omega$ at 500 Vdc			
<b>Input Supply</b>	230 V AC $\pm 10\%$ 50 60 Hz (100/120/220/240 V available on request)			
<b>Operating Condition</b>	0 - 40°C RH 95%			
<b>Dimensions (W x H x D)</b>	185 x 215 x 360 mm			
<b>Weight</b>	5.9 kg approx.	5.9 kg approx.	6.0 kg approx.	6.2 kg approx.

#### Accessories Supplied

PSD9001, PSD9002, & PSD9003 : User Manual , connecting prods, Interface cable, Software ; PSD9004 : User Manual , connecting prods .