



ENGLISH

Datasheet: 123-3565

RS Pro 180W Digital Bench Power Supply, Dual Output,
2 x 0 to 30 V dc, 2 x 0 to 3 A



The IPS series of bench power supplies from RS Pro are general purpose linear DC power supplies with flexible output voltage and current combinations. The IPS-2303 model has two independent isolated output channels and an output of 180 W. It offers protection from reverse polarity alongside overload protection. This bench power supply unit has an output ON/OFF switch that helps to protect users. It keeps the case and the load safe from unexpected conditions and ensures an excellent level of safety during operation. Tracking mode switches enable current and voltage to be output in either parallel or in series.

This bench power supply also features an automated cooling fan. Under low load or no load conditions, a fan control circuit reduces the noise from the unit ensuring quiet operation.

Applications:

This bench power supply is general-purpose, all in one solution, making it incredibly versatile and suitable for a range of applications and environments. It is lightweight and compact which allows you to take it on any job with you.

Suitable applications include:

- Education
- Laboratories (such as science student labs, R&D labs or engineering labs)
- Industry
- Electronic design
- Component testing
- System power modules
- Manufacturing



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Features:

- 4 x 3 digit LED displays provide a clear and easy to read display. You can easily monitor two outputs of voltage or current at the same time using the display.
- This power supply offers stable and clean power, providing 0.01% load and line regulation with low ripple and noise.
- The ON/OFF output switch protects load devices from damage during setting adjustment. The power output can easily be switched off while settings are changed, and power switched back on once the settings have been updated.
- The intelligent integrated fan helps to regulate noise during operation, reducing acoustic noise to create a quieter environment.
- The application range can be extended without the need for any additional power supplies. Tracking and automatic series/parallel features extend the series to 60 V/3 A in series and to 30 V/ 6 A in parallel.
- Polarity protection protects against the damage caused by misconnection.

Supplied with:

User manual, power cord and test leads

Benefits:

This benchtop power supply is incredibly accurate, flexible and safe. It provides clean, stable outputs with low ripple and noise. Utilising ring transformers and smaller surface mount components, this is a lightweight and more compact unit than many of its counterparts.



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SPECIFICATIONS										
		IPS-4303			IPS-3303			IPS-2303		
OUTPUT MODE										
		CH1	CH2	CH3	CH4	CH1	CH2	CH3	CH1	CH2
Voltage		0 – 30V		2.2 – 5.2V	8 – 15V	0 – 30V		5V Fixed	0 – 30V	
Current		0 – 3A		1A Max.	1A Max.	0 – 3A		3A Max.	0 – 3A	
Tracking Series Voltage		0 – 60V				0 – 60V		
Tracking Parallel Current		0 – 6A				0 – 6A		
CONSTANT VOLTAGE OPERATION (CH1, CH2)										
Line Regulation		$\leq 0.01\% + 3mV$								
Load Regulation		$\leq 0.01\% + 3mV$ (rating current $\leq 3A$) $\leq 0.02\% + 5mV$ (rating current $> 3A$)								
Ripple & Noise		$\leq 1mV_{rms}$, 5Hz – 1MHz								
Recovery Time		$\leq 100\mu S$ (50% Load change, Minimum load 0.5A)								
CONSTANT CURRENT OPERATION (CH1, CH2)										
Line Regulation		$\leq 0.2\% + 3mA$								
Load Regulation		$\leq 0.2\% + 3mA$								
Ripple & Noise		$\leq 3mArms$								
TRACKING OPERATION (CH1, CH2)										
Tracking Error		$\leq 0.5\% + 10mV$ of CH1								
Series Regulation		$\leq 0.01\% + 5mV$								
Load Regulation		$\leq 300mV$								
Ripple & Noise		$\leq 2mV_{rms}$, 5Hz – 1MHz								
Ch3 OPERATION (for IPS-3303/4303)										
CH3 Voltage		IPS-4303 : 2.2V – 5.2V IPS-3303 : 5V Fix								
Line Regulation		$\leq 5mV$								
Load Regulation		$\leq 15mV$								
Ripple & Noise		$\leq 2mV_{rms}$, 5Hz – 1MHz								
Current Output		IPS-4303 : 1A, IPS-3303 : 3A								
Ch4 OPERATION (for IPS-4303)										
CH4 VOLTAGE		8V – 15V								
Line Regulation		$\leq 5mV$								
Load Regulation		$\leq 10mV$								
Ripple & Noise		$\leq 2mV_{rms}$, 5Hz – 1MHz								
Current Output		1A								
METER										
Digital		3 digits 0.5" LED display IPS-4303/3303 Out ON Accuracy $\pm (0.5\%$ of rdg + 2 digits) IPS-4303/3303 Out OFF Accuracy $\pm (0.5\%$ of rdg + 8 digits) IPS-2303 Accuracy $\pm (0.5\%$ of rdg + 2 digits)								
INSULATION										
Chassis and Terminal		$\geq DC 500V / 20M\Omega$								
Chassis and AC Cord		$\geq DC 500V / 30M\Omega$								
POWER SOURCE										
AC 100V/120V/220V $\pm 10\%$, 230V(+10%–6%), 50/60Hz										
DIMENSIONS & WEIGHT										
255(W) x 145(H) x 265(D) mm, Approx. 7 kg										

Specifications subject to change without notice.

ORDERING INFORMATION

IPS-4303 4-channels, 200W Multiple Output Linear DC Power Supply
IPS-3303 3-channels, 195W Multiple Output Linear DC Power Supply
IPS-2303 2-channels, 180W Multiple Output Linear DC Power Supply

ACCESSORIES

User manual x 1, Power cord x 1,
 IPS-4303 : Test lead GTL-104A x 2, GTL-105A x 2 ; European test lead GTL-203A x 2, GTL-204A x 2, GTL-201 x 1
 IPS-3303 : Test lead GTL-104A x 2, GTL-105A x 1 ; European test lead GTL-203A x 1, GTL-204A x 2, GTL-201 x 1
 IPS-2303 : Test lead GTL-104A x 2

OPTIONAL ACCESSORIES

GPS-001 Voltage/Current Protection Knob