

7.5kW Programmable DC Power Supply PS 150-50



*Technical Specifications

	PS 150-50
Output Voltage	0 - 150 V
Output Current	0 - 50 A
Rated Power	7.5 kW
Efficiency at full load	87 %
Load regulation (CV Mode & CC Mode)	$\leq \pm 0.01\%$ for (50% to 100% change in Load)
Line Regulation (CV Mode & CC Mode)	$\leq \pm 0.01\%$ for (360 - 440V AC)
Ripple	$\leq 50\text{mVrms}$
Programming Speed	
Rise time	100 ms (10% to 90%) for resistive load, @100% load setting
Fall time	100 ms (90% to 10%) for resistive load, @100% load setting
Transient Response Time	< 1ms
Temperature Coefficients	CV: 100 ppm/°C CC: 100 ppm/°C after 30 min of warm up time and during 8 hrs
Output Stability	CV: 100 ppm CC: 100 ppm after 30 min of warm up time and during 8 hrs
Programming Interfaces	Analog, RS 232, RS 485, USB, LAN

	PS 150-50
Analog Programming	
Voltage & Current Programming	V: 0 ~ 10 V, Accuracy: $\pm 0.5\%$ of Vout rated, Input impedance: 1 M Ω I: 0 ~ 10 V Accuracy: $\pm 1\%$ of Iout rated Input impedance: 1 M Ω
Voltage & Current Monitoring	V: 0 ~ 10 V, Accuracy: $\pm 1\%$ of Vout rated output impedance: 150 Ω / 4 mA maxI: 0 ~ 10 V, Accuracy: $\pm 1\%$ of Iout rated Output impedance: 150 Ω / 4 mA max
Status outputs	Power Supply: OK = Logic 1 (High), AC Fail = Logic 0 (Low), DC Fail: Logic 0 (low) for DC fail by $\pm 5\%$ of set value, CV / CC Status: CV = Logic 0 / CC = Logic 1 Interlock: Dry contact, Short = Power Supply Enabled, Open = Power Supply Disabled DC ON Status: ON = Logic 1, OFF= Logic 0, OVP Status: Fault = Logic 0, OK = Logic 1, OTP Status: Fault = Logic 0, OK = Logic 1, Remote Status: Remote = Logic 1, Local = Logic 0
Isolated Analog Programming (Optional)	
Voltage & Current Programming	0 ~ 10 V, Accuracy: $\pm 1\%$ of Vout rated, Input impedance: 1 M Ω I: 0 ~ 10 V Accuracy: $\pm 1\%$ of Iout rated Input impedance: 1 M Ω
Voltage & Current Monitoring	V: 0 ~ 10 V, Accuracy: $\pm 1\%$ of Vout rated output impedance: 150 Ω / 4 mA maxI: 0 ~ 10 V, Accuracy: $\pm 1\%$ of Iout rated Output impedance: 150 Ω / 4 mA max
Remote Programming	
RS232 / USB / RS485	ADC: 16 Bits, DAC: 16 Bits
Voltage Programming	Resolution: Better than 15 bit Accuracy: 0.05% Vout + 0.05% Vrated

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Current Programming		Resolution: Better than 15 bit Accuracy: 0.1% Iout + 0.1% Irated	
Monitor Voltage		Resolution: Better than 15 bit Accuracy: 0.1% Vout + 0.1% Vrated	
Monitor Current		Resolution: Better than 15 bit Accuracy: 0.25% Iout + 0.2% Irated	
OVL & UVL Programming		Resolution: Better than 15 bit Accuracy: 0.05% Vout + 0.05% Vrated	
External Interlock		Potential free contact for remote shutdown	
Front Panel controls:		Mains ON/ OFF, Voltage and Current setting with encoders, Switch Settings: Set Over Voltage, Under Voltage, Foldback, Remote & Output ON/ OFF	
Indicators:		CV, CC, Over Voltage, Under Voltage, Foldback, Remote & Output ON	
Protections		Output Over voltage, Under Voltage,Over current, Short Circuit, Fold Back, Over temperature, Mains Over voltage, Mains Under Voltage,	
Output Terminals		Bus bar with M6 bolts	
Mains Input		400 V AC +/- 10%, Three Ph, 50 Hz	
Power Factor		0.99 @ full load / 0.98 @ 50% load	
Display			
Resolution	Voltage	4 Digit	0 ~ 150.0 V
	Current	4 Digit	0 ~ 50.00 A
Accuracy		± (0.5% + 2 D)	
Environment Conditions			
Operating Temperature		-0 ~ +40 °C; with 100% load; derate 75% at 60 °C	
Storage		-40 ~ + 85 °C	
Humidity		max. 95% non condensing at 40 °C max. 75% non condensing at 50 °C	
Insulation		Input to Output: 1500 V for 1 min Input to case: 2500 Vrms Output to case: 600 V Insulation resistance: 100 MΩ at 25 °C, 70% RH, 500 Vdc	
Safety and EMC Standard		IEC 61010-1, IEC 61000-4-2, IEC 61000-4-5, IEC 61000-4-8, IEC 61000-4-4	
Dimension		19" Rack size, 5U Height excluding connectors, terminals, switches, front and back panel controls, handles etc	

	PS 150-50
Cooling	Forced Air, variable Fan speed
Programming Interfaces	Analog Programming, RS 232, RS 485, USB, LAN
Accessories	Interface Cables

*Subject to change without notice

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Scientific Mes-Technik Pvt. Ltd.

B-14, Industrial Estate, Pologround, Indore 452 015, India

 0731-2422330/31/32/33

 sales@scientificindia.com

 www.scientificindia.com

Bengaluru 080-23452635
Chennai 044-42054180
Gujarat +917567463752
Hyderabad +917095228811
Kanpur +919981329105

✉ bangalore@scientificindia.com
✉ chennai@scientificindia.com
✉ gujarat@scientificindia.com
✉ hyderabad@scientificindia.com
✉ up@scientificindia.com

Kolkata +919673162333
Mumbai +919850901735
New Delhi +918770013379
Pune +919603828884



✉ kolkata@scientificindia.com
✉ mumbai@scientificindia.com
✉ ndelhi@scientificindia.com
✉ pune@scientificindia.com