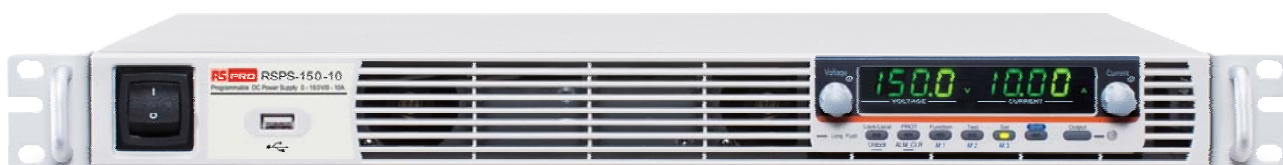


Datasheet

Programmable Switching D.C. Power Supply

Stock No. : Model :

2010441	RSPS-6-200
2010442	RSPS-12.5-120
2010443	RSPS-20-76
2010444	RSPS-40-38
2010445	RSPS-60-25
2521599	RSPS-150-10



FEATURES

- Voltage Rating : 6V/12.5V/20V/40V/60V/150V
- Output Power Rating : 1200W ~ 1520W
- C.V/C.C Priority Mode; Particularly Suitable for the Battery and LED Industry
- Adjustable Slew Rate
- Series and Parallel Operation (2 Units in Series/4 Units in Parallel Maximum)
- High Efficiency and High Power Density
- 19" Rack Mount Size Design
- Standard Interface : LAN, RS-232 & RS485, USB (Device/Host), Analog Control Interface
- Optional Interface : GPIB/Isolated Analog Control Interface (Voltage Control /Current Control)

The RSPS-Series is a single output programmable switching DC Power Supply covering a power range up to 1520W. This series of products include five models with the combination from 6V to 60V rated voltages. As the RSPS-Series can be connected in series for maximum 2 units or in parallel for maximum 4 units, the capability of connecting multiple RSPS-Series units for higher voltage or higher current output provides a broad coverage of applications.

The C.V/C.C priority selection of the RSPS-Series is a very useful feature for DUT protection. The conventional power supply normally operates under C.V mode when the power supply output is turned on. This could bring a high inrush current to the capacitive load or current-intensive load at the power output on stage. Though the current becomes stable after the C.C mode is activated, the current spike occurred

at the C.V and C.C crossover point may possibly damage the DUT. At the power output on stage, the RSPS-Series is able to run under C.C priority to limit the current spike occurred at the threshold voltage and therefore protects DUT from the inrush current damage.

The OVP and OCP protections can prevent the DUT damage. Both OVP and OCP levels can be selected the range of 10% to 110% , with the default level set at 110%, of the rated voltage/current of the power supply. The RSPS-Series provides USB Host/Device, LAN, RS-232 with RS-485 and Analog Control interfaces as standard.

Series Operation

Model	Single Unit	Two Units
RSPS-6-200	6V / 200A	12V / 200A
RSPS-12.5-120	12.5V / 120A	25V / 120A
RSPS-20-76	20V / 76A	40V / 76A
RSPS-40-38	40V / 38 A	80V / 38A
RSPS-60-25	60V / 25A	120V / 25A
RSPS-150-10	150V / 10A	300V / 25A

Parallel Operation

Model	Single Unit	Two Units	Three Units	Four Units
RSPS-6-200	6V / 200A	6V / 400A	6V / 600A	6V / 800A
RSPS-12.5-120	12.5V / 120A	12.5V / 240A	12.5V / 360A	12.5V / 480A
RSPS-20-76	20V / 76A	20V / 152A	20V / 228A	20V / 304A
RSPS-40-38	40V / 38 A	40V / 76A	40V / 114A	40V / 152A
RSPS-60-25	60V / 25A	60V / 50A	60V / 75A	60V / 100A
RSPS-150-10	150V / 10A	150V / 20A	150V / 30A	150V / 40A

SPECIFICATIONS						
Model	RSPS-6-200	RSPS-12.5-120	RSPS-20-76	RSPS-40-38	RSPS-60-25	RSPS-150-10
OUTPUT RATINGS						
Voltage	0 ~ 6V	0 ~ 12.5V	0 ~ 20V	0 ~ 40V	0 ~ 60V	0 ~ 150V
Current	0 ~ 200A	0 ~ 120A	0 ~ 76A	0 ~ 38A	0 ~ 25A	0 ~ 10A
Power	1200W	1500W	1520W	1520W	1500W	1500W
OUTPUT RIPPLE AND NOISE						
CV p-p (10~20MHz)	60mV	60mV	60mV	60mV	60mV	100mV
CV rms (5Hz~1MHz)	8mV	8mV	8mV	8mV	8mV	10mV
CC rms (5Hz~1MHz)	400mA	240mA	152mA	95mA	75mA	35mA
LOAD REGULATION						
Voltage	2.6mV	3.25mV	4mV	6mV	8mV	17mV
Current	45mA	29mA	20.2mA	12.6mA	10mA	7mA
LINE REGULATION (change from 85 to 132 VAC input or 170-265 VAC)						
Voltage	2.6mV	3.25mV	4mV	6mV	8mV	17mV
Current	22mA	14mA	9.6mA	5.8mA	4.5mA	3mA
PROGRAMMING ACCURACY						
Voltage 0.05% + (mV)	3mV	6.25mV	10mV	20mV	30mV	75mV
Current 0.2% + (mA)	200mA	120mA	76mA	38mA	25mA	10mA
MEASUREMENT ACCURACY						
Voltage 0.1% + (mV)	6mV	12.5mV	20mV	40mV	60mV	150mV
Current 0.2% + (mA)	400mA	240mA	152mA	76mA	50mA	20mA
LOAD TRANSIENT RECOVERY TIME						
Time	1.5ms	1ms	1ms	1ms	1ms	2ms
OUTPUT RESPONSE TIME						
Rise Time (No Load & Full Load)	80ms	80ms	80ms	80ms	80ms	150ms
Fall Time (No Load)	500ms	700ms	800ms	1000ms	1100ms	2000ms
Fall Time (Full Load)	10ms	50ms	50ms	80ms	80ms	150ms
PROGRAMMING/MEASUREMENT RESOLUTION						
Voltage	0.2mV	0.4mV	0.7mV	1.3mV	2mV	5.2mV
Current	6mA	4mA	2.5mA	1.2mA	0.8mA	0.35mA
TEMPERATURE COEFFICIENT(after a 30 minute warm-up)						
Voltage	100PPM/°C after 30 minutes warm up					
Current	100PPM/°C after 30 minutes warm up					
SERIES AND PARALLEL OPERATION						
Parallel Operation	Up to 4 units including master unit					
Series Operation	Up to 2 units including master unit					
ENVIRONMENTAL CONDITIONS						
Environment	Indoor use, installation category II (AC Input), pollution degree 2					
Operating Temperature Range	0°C~50°C					
Storage Temperature Range	-25°C~0°C					
Operating Humidity Range	20% to 85% RH					
Storage Humidity Range	Up to 90% or less relative humidity (no condensation)					
AC INPUT						
Norminal Input	100Vac ~ 240Vac, 50Hz ~ 60Hz, single phase					
Input Range	85Vac ~ 265Vac					
Power Factor (100Vac/200Vac)	0.99/0.98					
Maximum Input Current (100Vac/200Vac)	21A/11A					
Innrush Current	≤50A					
Efficiency(100Vac/200Vac)	76.5%/78.5%	82%/85%	83%/86%	84%/87%	84%/87%	84%/87%
DIMENSIONS & WEIGHT						
Analog Control (Non-Isolated)	YES					
PC Remote Interface (Standard)	USB (Device/Host)/RS-232 with RS-485/LAN					
PC Remote Interface (Optional)	GPIB/Analog Control Interface (Isolated Voltage Control)/Analog Control Interface (Isolated Current Control);					
Cooling Fan	Note : Selection one of three					
Dimensions & Weight	Forced air cooling by internal fan 423(W) x 43.6(H) x 447.2(D) ; Approach 8.7kg					

ORDERING INFORMATION	
RSPS-6-200	1200W Programmable Switching DC Power Supply
RSPS-12.5-120	1500W Programmable Switching DC Power Supply
RSPS-20-76	1520W Programmable Switching DC Power Supply
RSPS-40-38	1520W Programmable Switching DC Power Supply
RSPS-60-25	1500W Programmable Switching DC Power Supply
RSPS-150-10	1500W Programmable Switching DC Power Supply
ACCESSORIES	
Output terminal cover x 1, Analog connector plug kit x 1, Output terminal M8 bolt set, Input terminal cover x 1, 1U Handle(RoHS), 1U Bracket(LEFT, RoHS), 1U Bracket(RIGHT, RoHS), Power Cord(10A) provided for certain regions only	
FREE DOWNLOAD	
Driver LabView Driver	