



# 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





### **FEATURES**

- Voltage Rating : 6V/12.5V/20V/40V/60V
- 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-485and Analog Control interfaces as standard.

Series	Operation	
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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	

### **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





SPECIFICATIONS					•
Model	RSPS-6-200	RSPS-12.5-120	RSPS-20-76	RSPS-40-38	RSPS-60-25
OUTPUT RATINGS	1				1
Voltage	0 ~ 6V	0~12.5V	0 ~ 20V	0 ~ 40V	0 ~ 60V
Current	0 ~ 200A	0~120A	0 ~ 76A	0 ~ 38A	0 ~ 25A
Power	1200W	1500W	1520W	1520W	1500W
OUTPUT RIPPLE AND NOISE	1	1			1
CV p-p (10~20MHz)	60mV	60mV	60mV	60mV	60mV
CV rms (5Hz~1MHz)	8mV	8mV	8mV	8mV	8mV
CC rms (5Hz~1MHz)	400mA	240mA	152mA	95mA	75mA
LOAD REGULATION	T	1		Γ	1
Voltage	2.6mV	3.25mV	4mV	6mV	8mV
Current	45mA	29mA	20.2mA	12.6mA	10mA
LINE REGULATION (change from 85 to 13					1
Voltage	2.6mV	3.25mV	4mV	6mV	8mV
Current	22mA	14mA	9.6mA	5.8mA	4.5mA
PROGRAMMING ACCURACY					
Voltage 0.05% + (mV) Current 0.2% + (mA)	3mV	6.25mV	10mV	20mV	30mV
	200mA	120mA	76mA	38mA	25mA
MEASUREMENT ACCURACY	(m)/	12.5mV	20)/	40.001/	(Om)/
Voltage 0.1% + (mV) Current 0.2% + (mA)	6mV 400mA	12.5mV 240mA	20mV 152mA	40mV 76mA	60mV 50mA
LOAD TRANSIENT RECOVERY TIM		2101101	1521117	701171	501171
Time	1.5ms	lms	lms	lms	lms
OUTPUT RESPONSE TIME	1.51113	11113	11113	11113	11113
Rise Time (No Load & Full Load)	80ms	80	90-m e	80mm	80
Fall Time (No Load)	500ms	80ms 700ms	80ms 800ms	80ms 1000ms	80ms 1100ms
Fall Time (Full Load)	10ms	50ms	50ms	80ms	80ms
PROGRAMMING/MEASUREMENT RI	SOLUTION				1
Voltage	0.2mV	0.4mV	0.7mV	1.3mV	2mV
Current	6mA	4mA	2.5mA	1.2mA	0.8mA
TEMPERATURE COEFFICIENT (after a 3	0 minute warm-up)				
Voltage	100PPM/°C after 30 mi				
Current	100PPM/°C after 30 mi	nutes warm up			
SERIES AND PARALLEL OPERATION					
Parallel Operation	Up to 4 units including				
Series Operation	Up to 2 units including	master unit			
ENVIRONMENTAL CONDITIONS	Lada and the test of the test		llution down 2		
Environment Operating Temperature Range	0°C~50°C	cateorgy II (AC Input), po	ollution degree 2		
Storage Temperature Range					
Operating Humidity Range	-25°C~0°C 20% to 85% RH Up to 90% or less relative humidity (no condensation)				
Storage Humidity Range					
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)					
Inrush Current	≦50A	1			1
Efficiency(100Vac/200Vac)	76.5%/78.5	82%/85%	83%/86%	84%/87%	84%/87%
DIMENSIONS & WEIGHT	%				
Analog Control (Non-Isolated)	YES				
PC Remote Interface (Standard)	USB (Device/Host)/RS-232 with RS-485/LAN GPIB/Analog Control Interface (Isolated Voltage Control)/Analog Control Interface (Isolated Current Control);				
PC Remote Interface (Optional)	GPIB/Analog Control Ir Note : Selection one of		oritroi)/Analog Control Int	eriace (isolated Current (	control);
Cooling Fan	Forced air cooling by in				
Dimensions & Weight	423 (W) x 43.6(H) x 447				
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#### 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
ACCESSORIES	<b>3 1 1 1 1 1 1 1 1 1 1</b>

CD-ROM x 1 (User Manual, Programming Manual), Outp cover x 1, Analog connector plug kit x 1,Output terminal Input terminal cover x 1,1U Handle (RoHS),1U Bracket (LI 1U Bracket(RIGHT,RoHS), Power Cord(10A) provided for regions only

	OPTIONAL ACCESSORIES
C Power Supply C Power Supply C Power Supply C Power Supply C Power Supply	PSU-01B Bus bar for 2 units in parallel connection GTL-246 USB Cable, USB 2.0A-B Type Cable, 4P   PSU-01C Cable for 2 units in parallel connection GRM-001 Slide bracket 2pcs/set ,PSU option   PSU-02C Cable for 3 units in parallel connection PSU-02C Cable for 3 units in parallel connection PSU-02C Cable for 4 units in parallel connection   PSU-03C Cable for 4 units in parallel connection PSU-03C Cable for 4 units in parallel connection GPW-001 UL/CSA power cord 3m ,PSU option   GPW-002 VDE power cord 3m ,PSU option GPW-003 PSE power cord 3m ,PSU option
put terminal I M8 bolt set, LEFT, RoHS), or certain	PSU-322 RS232 Cable with DB9 connector kit   PSU-485 RS485 Cable with DB9 connector kit   PSU-01A Joins a vertical stack of 2 PSU units together. 2U-sized handles x2, joining plates x2   PSU-03A Joins a vertical stack of 3 PSU units together. 3U-sized handles x2, joining plates x2   PSU-03A Joins a vertical stack of 4 PSU units together. 4U-sized handles x2, joining plates x2   PSU-ISO-I Isolate current remote control card(factory option)   PSU-ISO-V Isolate voltage remote control card(factory option)   FREE DOWNLOAD Driver   LabView Driver LabView Driver



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