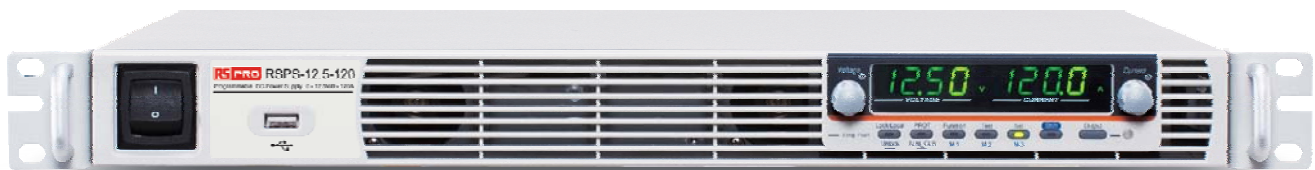


# Datasheet

## Programmable Switching D.C. Power Supply

Stock No. : Model :

2010441	<b>RSPS-6-200</b>
2010442	<b>RSPS-12.5-120</b>
2010443	<b>RSPS-20-76</b>
2010444	<b>RSPS-40-38</b>
2010445	<b>RSPS-60-25</b>



### 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-485 and Analog Control interfaces as standard.

### Series Operation

Model	Single Unit	Two Units
<b>RSPS-6-200</b>	6V / 200A	12V / 200A
<b>RSPS-12.5-120</b>	12.5V / 120A	25V / 120A
<b>RSPS-20-76</b>	20V / 76A	40V / 76A
<b>RSPS-40-38</b>	40V / 38 A	80V / 38A
<b>RSPS-60-25</b>	60V / 25A	120V / 25A

### Parallel Operation

Model	Single Unit	Two Units	Three Units	Four Units
<b>RSPS-6-200</b>	6V / 200A	6V / 400A	6V / 600A	6V / 800A
<b>RSPS-12.5-120</b>	12.5V / 120A	12.5V / 240A	12.5V / 360A	12.5V / 480A
<b>RSPS-20-76</b>	20V / 76A	20V / 152A	20V / 228A	20V / 304A
<b>RSPS-40-38</b>	40V / 38 A	40V / 76A	40V / 114A	40V / 152A
<b>RSPS-60-25</b>	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
<b>OUTPUT RATINGS</b>					
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
<b>OUTPUT RIPPLE AND NOISE</b>					
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
<b>LOAD REGULATION</b>					
Voltage	2.6mV	3.25mV	4mV	6mV	8mV
Current	45mA	29mA	20.2mA	12.6mA	10mA
<b>LINE REGULATION</b> (change from 85 to 132 VAC input or 170-265 VAC)					
Voltage	2.6mV	3.25mV	4mV	6mV	8mV
Current	22mA	14mA	9.6mA	5.8mA	4.5mA
<b>PROGRAMMING ACCURACY</b>					
Voltage 0.05% + (mV)	3mV	6.25mV	10mV	20mV	30mV
Current 0.2% + (mA)	200mA	120mA	76mA	38mA	25mA
<b>MEASUREMENT ACCURACY</b>					
Voltage 0.1% + (mV)	6mV	12.5mV	20mV	40mV	60mV
Current 0.2% + (mA)	400mA	240mA	152mA	76mA	50mA
<b>LOAD TRANSIENT RECOVERY TIME</b>					
Time	1.5ms	1ms	1ms	1ms	1ms
<b>OUTPUT RESPONSE TIME</b>					
Rise Time (No Load & Full Load)	80ms	80ms	80ms	80ms	80ms
Fall Time (No Load)	500ms	700ms	800ms	1000ms	1100ms
Fall Time (Full Load)	10ms	50ms	50ms	80ms	80ms
<b>PROGRAMMING/MEASUREMENT RESOLUTION</b>					
Voltage	0.2mV	0.4mV	0.7mV	1.3mV	2mV
Current	6mA	4mA	2.5mA	1.2mA	0.8mA
<b>TEMPERATURE COEFFICIENT</b> (after a 30 minute warm-up)					
Voltage	100PPM/°C after 30 minutes warm up				
Current	100PPM/°C after 30 minutes warm up				
<b>SERIES AND PARALLEL OPERATION</b>					
Parallel Operation	Up to 4 units including master unit				
Series Operation	Up to 2 units including master unit				
<b>ENVIRONMENTAL CONDITIONS</b>					
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)				
<b>AC INPUT</b>					
Normal 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				
Inrush Current	≤50A				
Efficiency(100Vac/200Vac)	76.5%/78.5	82%/85%	83%/86%	84%/87%	84%/87%
<b>DIMENSIONS &amp; WEIGHT</b>					
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	Forced air cooling by internal fan				
Dimensions & Weight	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

## ACCESSORIES

CD-ROM x 1 (User Manual, Programming Manual), 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

## OPTIONAL ACCESSORIES

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-02B	Bus bar for 3 units in parallel connection	PSU-GPIB	GPIB Interface card (factory option)
PSU-02C	Cable for 3 units in parallel connection	GPW-001	UL/CSA power cord 3m ,PSU option
PSU-03B	Bus bar for 4 units in parallel connection	GPW-002	VDE power cord 3m ,PSU option
PSU-03C	Cable for 4 units in parallel connection	GPW-003	PSE power cord 3m ,PSU option
PSU-232	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-02A	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



P. O. Box 99  
Corby  
Northants NN17 9RS  
England  
Tel: +44(0) 1536 201234