

Datasheet

Programmable Switching D.C. Power Supply

Stock No. : Model :

2521599 **RSPS-150-10**



FEATURES

- Voltage Rating : 150V
- Output Power Rating : 1500W
- 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-150-10 is a single output programmable switching DC Power Supply covering a power range up to 1500W. As the RSPS-150-10 can be connected in series for maximum 2 units or in parallel for maximum 4 units, the capability of connecting multiple RSPS-150-10 units for higher voltage or higher current output provides a broad coverage of applications.

The C.V/C.C priority selection of the RSPS-150-10 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-150-10 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-150-10 provides USB Host/Device, LAN, RS-232 with RS-485 and Analog Control interfaces as standard.

Series Operation

Model	Single Unit	Two Units
RSPS-150-10	150V / 10A	300V / 25A

Parallel Operation

Model	Single Unit	Two Units	Three Units	Four Units
RSPS-150-10	150V / 10A	150V / 20A	150V / 30A	150V / 40A

SPECIFICATIONS	
OUTPUT RATINGS	
Voltage	0 – 150V
Current	0 – 10A
Power	1500W
OUTPUT RIPPLE AND NOISE	
CV p-p (10~20MHz)	100mV
CV rms (5Hz~1MHz)	10mV
CC rms (5Hz~1MHz)	35mA
LOAD REGULATION	
Voltage	17mV
Current	7mA
LINE REGULATION (change from 85 to132 VAC input or 170-265 VAC)	
Voltage	17mV
Current	3mA
PROGRAMMING ACCURACY	
Voltage 0.05% + (mV)	75mV
Current 0.2% + (mA)	10mA
MEASUREMENT ACCURACY	
Voltage 0.1% + (mV)	150mV
Current 0.2% + (mA)	20mA
LOAD TRANSIENT RECOVERY TIME	
Time	2ms
OUTPUT RESPONSE TIME	
Rise Time (No Load & Full Load)	150ms
Fall Time (No Load)	2000ms
Fall Time (Full Load)	150ms
PROGRAMMING/MEASUREMENT RESOLUTION	
Voltage	5.2mV
Current	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
Inrush Current	≤50A
Efficiency(100Vac/200Vac)	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); Note : Selection one of three
Cooling Fan	Forced air cooling by internal fan
Dimensions & Weight	423(W) x 43.6(H) x 447.2(D) mm; Approach 8.7kg

Specifications subject to change without notice.

ORDERING INFORMATION

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

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