



# AC → DC SWITCHING POWER SUPPLY

# RPH120D SERIES

All the patents are held accountable counterfeiting.

## Features



## Green Power

- UL508, EN 62368 approved
- Output Voltage/Current/Temperature Digital Display.
- Intelligent Detection of Output Error: Relay and LCD Alarm Flickering
- Standard/Din Rail Mounting Dual Purpose
- Easy mounting (one-step installation)
- Full Range Input with PFC
- Comply with High Efficiency Power 80Plus Criterion
- 91% High Efficiency
- Build-in output stability monitor
- Split rail & Series connection possible
- Convection cooled high reliability
- 100% burn-in test
- 2 years warranty
- Output modify range: 5V~60VDC

DIMENSIONS:100(H)\*83(D)\*49(W)mm

WEIGHTS: 365g

## General specifications

### INPUT

Input range 90~264VAC  
120~380VDC

Input frequency 47~63Hz

Max. I/P current / Inrush current (25°C) 1.46A/20A@110VAC  
0.71A/40A@220VAC

Power factor 95% Min.

### OUTPUT

Hold-up time 13ms

Short protection Autorecovery

Over load protection Automatic power limited

1A power ready relay contacts are built in VAT module.

## Detail specifications

### 120 Watts

MODEL	O/P Volt Adj. ± %	Load(Current) <sup>1</sup>			Ripple & Noise <sup>4</sup>	Line REG. <sup>2</sup>	Load REG. <sup>3</sup>	Efficiency <sup>5</sup>	O.V.P
		Min.	Rated	Max.					
RPH1120D-12CED	V : +12V ±10%	0A	10.0A	10.0A	120mV	±1%	±1%	88% Ref.	17.1 ~ 18.9V
RPH1120D-24CED	V : +24V ±10%	0A	5.0A	5.0A	240mV	±1%	±1%	89% Ref.	31.4 ~ 34.7V
RPH1120D-48CED	V : +48V ±10%	0A	2.5A	2.5A	480mV	±1%	±1%	91% Ref.	64.6 ~ 71.4V

Please Choose Fit Function, And Fill In The Blank With Suitable Words.

Order Model: RPH1120D-24C  D

Optional Function:

Terminal Block: "B" : PCB Spring Terminal Block with Voltage, Current, Temperature Monitor

"E" : Mini Terminal Block with Voltage, Current, Temperature Monitor

Intelligent Monitor Alarm Instructions:

- Voltage alarms when output voltage value is not in the range of -10% to +10%.
- Voltage LCD flickering, open circuit for relay.
- Current alarms when output current value is over 100%.
- Current LCD flickering, open circuit for relay.

• Temperature alarms when monitor panel temperature is lower than -20 or higher than 75 degrees Celsius.

• Temperature LCD flickering, open circuit for relay.

• Relay alarm is normally closed contact. (For the two contacts, short circuit when power source is normal; open circuit when power source is abnormal.)

## CE Standards

EN 55032, EN 55035,  
EN 61000-3-2, EN 61000-3-3,  
(EN 61000-4-2, EN 61000-4-3,  
EN 61000-4-4, EN 61000-4-5,  
EN 61000-4-6, EN 61000-4-8,  
EN 61000-4-11)  
Heavy Industry level, criteria A  
LVD: EN 62368-1

## Safety Standards



UL 508 APPROVAL



CE Marking

## Environments

Operating Temperature

-15 ~ 60°C, Ambient

Operating Humidity

20 ~ 90% RH, No Condensing

Storage Temperature

-20 ~ 85°C, Ambient

Vibration

2G, 10~500Hz, 3 axes

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**REIGNPOWER**  
S.M.P.S



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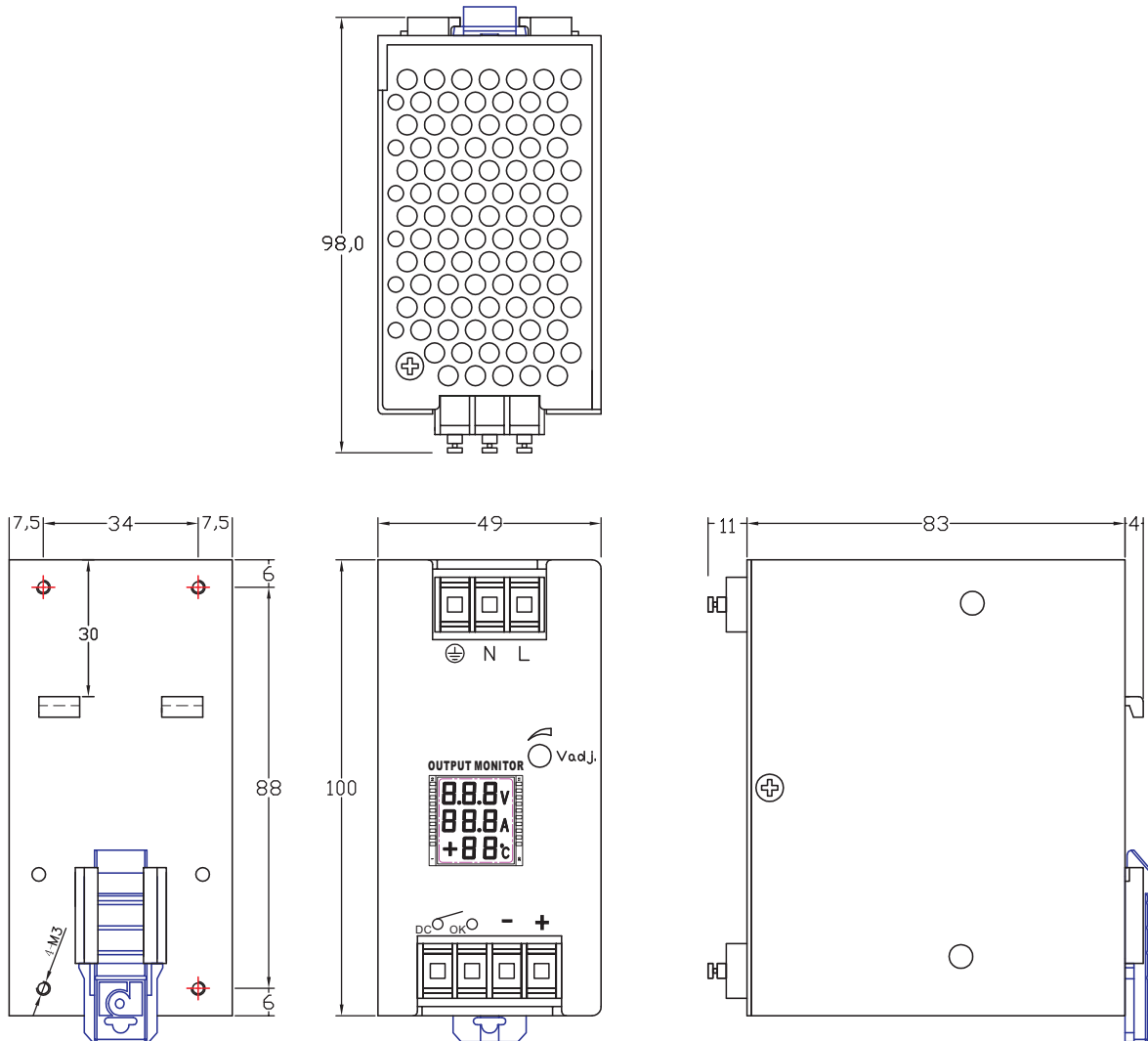
**NOTE**

1. Each output can provide up to maximum load, but total load can not exceed rated output power.
2. Line regulation is measured from low line to high line at rated load.
3. Load regulation is measured from 20% to 100% of rated load at 220VAC input.
4. Ripple & Noise are measured with 20MHz oscilloscope at 220VAC by using a 20cm long 12" twisted pair-wire with a 0.1uF/630V metal capacitor & a 47uF electrolytic capacitor parallel on the test point.
5. Efficiency is measured at rated load and 220VAC input.
6. Hold-up time is measured at rated load and 220VAC input.
7. Output Voltage Adjustable is measured on 5% of rated load.
8. The product uses metal enclosure for cooling. To ensure product lifespan, a clearance of at least 1 cm at the side of the product, 2 cm at top and bottom of the product should be maintained when installing.
9. Reign Power reserve the right to change specifications at any time without notice.



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Mechanical Details



Panel Designation

CASE NO. : RPH1120DD
UNIT : mm
DIMENSION : 100(H)\*83(D)\*49(W)
MATERIAL : ALUMINUM
COLOR : ORIGINAL ALUMINUM

Table with 2 columns: Symbol and Description. It lists terminals L, N, Grounding, DC Positive Output Terminal, DC Negative Output Terminal, OUTPUT MONITOR, V adj., and DC OK with their respective descriptions.



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Circuit Block Diagram

