

Model: RS-04/15-S335 Series 60W 15V/4A

1. Introduction

This specification defines **60 W** power adapter functional requirements, the power adapter transformed a AC into stable, continuous DC voltage output.

1.1 Description

SMPS Adaptor (Wall mount)
Open Frame
Others

SMPS Adaptor (Desk-top)
SMPS Unit (With Case)



2. Electrical Specification

2.1 Input Voltage

Operating voltage range **90-264V~**, rated operating voltage **100-240V~**, the power shall work normally and meet all electrical requirements as per the load range specified in section 2.7.

2.2 Input Frequency

Input AC voltage frequency range **47~63Hz**.

Input rated AC voltage frequency range **50/60Hz**.

2.3 Inrush Current

Peak inrush current shall be limited to **50 A** while the cold start at 25 degrees C and rated input voltage, and shall not result in a permanent damage of the power supply under any conditions of load and input voltage as specified at any input voltage in section 2.1.

2.4 Input Current Limiting

The input current should be less than **1.2 A**, under minimum AC input and full loads.

2.5 Efficiency

The power supply efficiency shall be greater than **87 %** under rated input voltage. It will be measured at the typical load; no load input watt $\leq 0.3W$.

2.6 DC Output voltage range

15V 14.25V—15.75V (measure the terminal of output wire in the adapter)

2.7 DC Output Current

Table 1: DC output current limits

Output	Min.	Max.	Unit
4	0	4	A

2.8 Output Ripple and Noise

The following table 2 is output ripple and noise requirements, it will be met throughout the load ranges specified in Section 2.6 and under all input voltage conditions as specified Section 2.1, Measurements will be made with an oscilloscope set to 20MHz bandwidth limit. The outputs will be bypassed with one **0.1uF** multilayer (type X7R) and one **10uF** tantalum electrolytic (low ESR) capacitors.

Table 2: Output ripples and noise limits

Output	Max.
≤150MV	150MV

2.9 Overshoot at turn-on/ turn-off

Any overshoot at turn on or turn off shall be less than 110% of rated output voltage.

2.10 Over Voltage Protection

The power supply will provide over voltage protection function as defined below.

Table 3: Over Voltage Protection limits

Output	Min.	Max	Unit
15V	NA	NA	V

2.11 Short Circuit Protection

An output short circuit will automatically enter the protected status .The power supply will protect without damage to overseers of to the unit (components, connectors, etc) under the protection of process.

2.12 Over Current Protection

The power supply shall meet the limitation requirement as below table without any damage, the unit shall recover the function after the protection is removed.

Table 4: Over Current Protection limits

Output	Min.	Max	Unit
4	4.8	8.8	A

2.13 Hold up Time

Hold-up time no less than 10 mS at 100 Vac input, the output loading should be set up with full load during the test.

2.14 Startup Time

Startup time no more than 3 seconds at 100 Vac input, the output loading should be set up with full load during the test.

3 Environment Requirement

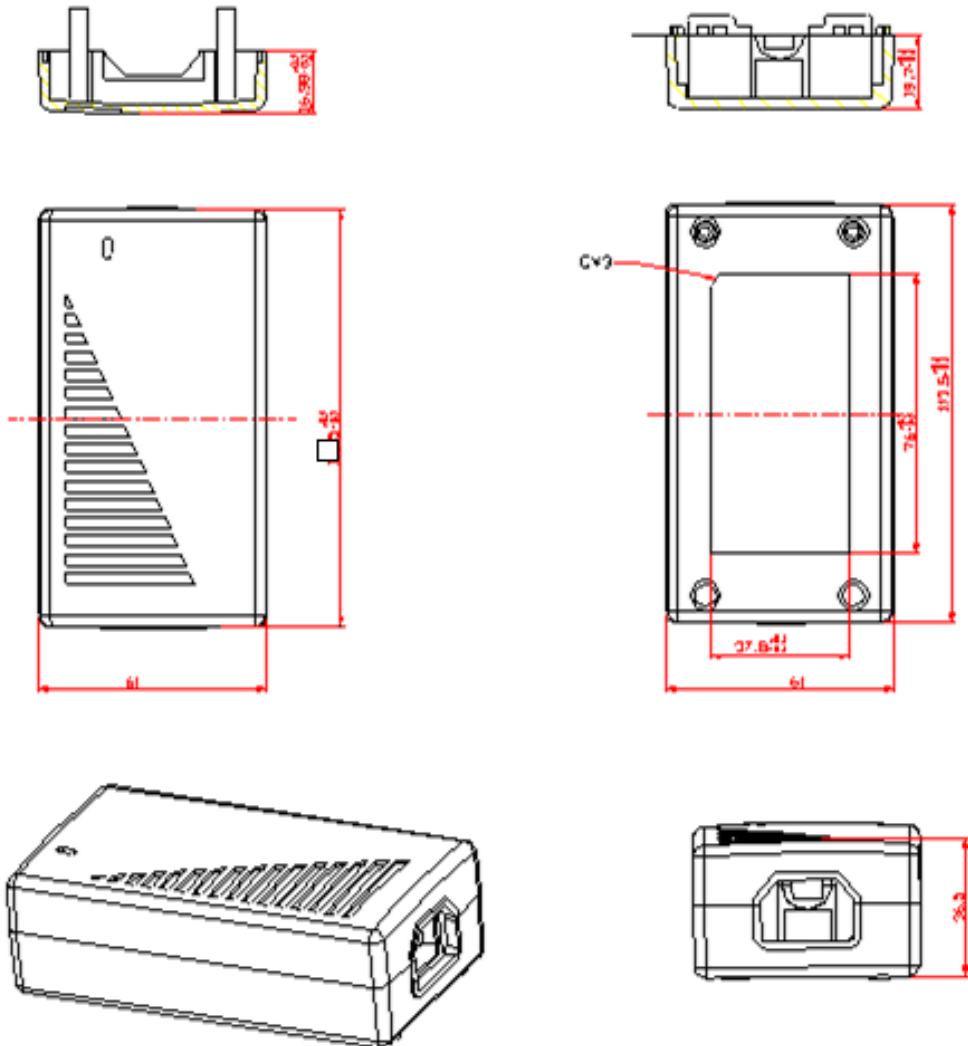
3.1 Temperature

Operating Ambient: 0-+40°C

Non-operating Ambient: -20-+75°C

3.2 Humidity

Operating: 20%~85%relative humidity (Non- condensing)



113.5MM	61MM	36.5MM
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