

ELECTRICAL SPECIFICATION

Change List			
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ELECTRICAL SPECIFICATION

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ELECTRICAL SPECIFICATION

1. Description

This product is a AC to DC power transfer device, it can provide for a 90W single DC Output with constant voltage source. The 90W universal AC adapter with LED , provides reliable power equipment to personal notebook computer and digital products, by replacing output DC connector plug, the adapter controls output power automatically, obtains precise voltage and current, thus guarantee the external instrument power supply effectively. Besides, through display output voltage data by the LED module, it may effectively avoid damage to external equipment, and it is safer and more humanity.

2. Electrical

2.1 Input voltage

- a.100-240Vac Nominal
- b.90-265Vac universal

2.2 Input Frequency

47-63HZ

2.3 Input Current

1.5A max .at 90Vac input & dc output full-loading.

2.4 Inrush Current

50/100A max .at cold-start and 25°C,dc output full-loading and 115/230Vac input.

2.5 Hold-Up time

4m sec. min. at dc output full-loading and 115Vac input.

2.6 Input wattage

Less than 1.2W at 240Vac input & no load condition.

2.7 Efficiency

83% min. at dc output full-loading and 115/230Vac input.

2.8 Safety Test

- a.Leakage current less than 0.25mA at 254Vac,50Hz.
- b.Hi-Pot test: 3000Vac,10mA, 3 Sec. between Primary to Secondary ground.
- c.Insulation: at dc 500Vdc, 1 Sec. between Primary to Secondary circuit. IR shall \geq 20M Ω .

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2.9 Output Voltage and Current

NO	DC plug NO	DC plug spec
1	A	ϕ 6.0*4.5*12.5mm
2	B	ϕ 6.5*2.5*11.5mm
3	C	ϕ 3.5*1.2*10.7
4	D	ϕ 6.3*3.0*12.7mm
5	E	ϕ 5.0*1.6*10mm
6	F	ϕ 5.5*2.5*12mm
7	G	ϕ 5.0*3.5*12.5 and ϕ 0.6 mm
8	H	W7.3*7.4mm

2.10 Ripple and Noise

Low frequency ripple (<100KHz) \leq 360mVp-p, and Total composite Ripple and Noise. Less than 500mVp-p, tested by dc loading side parallel with a 10uF/EC, and 0.1uF/Ceramic. Capacitors and Measured Band Width 20MHz.

2.11 Over-Shoot and under-shoot

Less than 10% of nominal Voltage value.

2.12 Protection

a.SCP: Short circuit protection with auto recovery function.

b.OVP: Over voltage protection with shut down & latch off function.

Tripped voltage will be less than 34Vdc.

c.OCP: Over current protection with auto recovery function.

Current limit: 7.0 A(max.).

2.13 LED Indication

LED light for Nominal operation.

Blank or Flash for SCP mode.

2.14 Rise time

Rise time shall be less than 50msec, it should be measured from 10% to 90% of the output voltage.

2.15 Temperature Coefficient

Less than 0.2%/°C

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3. Environment

3.1 Temperature

- a. Operation: 0 to 40 °C.
- b. Storage: -20 to 70 °C.

3.2 Humidity

- a. Operation: 20 to 80%.
- b. Storage: 10 to 90%.

3.3 Altitude

From sea level to 2000m (operation) and above (Non operation).

4. EMC

4.1 EMS

Test Item	Test Specification	IEC Standards
ESD	Contact +/-8KV	61000-4-2
ESD	Air +/-15KV	61000-4-2
RS	FR: 26MHz-1.0GHz Field Strength: 3V/M	61000-4-3
EFT	+/-2KV on AC power line	61000-4-4
SURGE	+/-1KV (DM) & +/-2KV(CM)	61000-4-5
CS	3V/M	61000-4-6
DIPS	0% 250CY,40% 5CY,70%5CY	61000-4-11

4.2 EMI

Standards	Specification
FCC	Part 15,class B
VCCI	Class B
CISPR	Part 22,class B

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5. Reliability

5.1 Life

12,000 hours

At DC output full-loading, AC 115/230Vac input & ambient temperature 25°C.

5.2 M.T.B.F.

37,500 Power On Hours at 25°C.

5.3 Temperature Rise.

Less than 45°C at nominal AC input/DC output full-loading and Environment temperature 25+/-1°C on Top/Bottom of plastic case.

5.4 Bum-in

100% bum-in with 80~100% full-loading & 35~45°C Environment Temperature.

5.5 Vibration Test

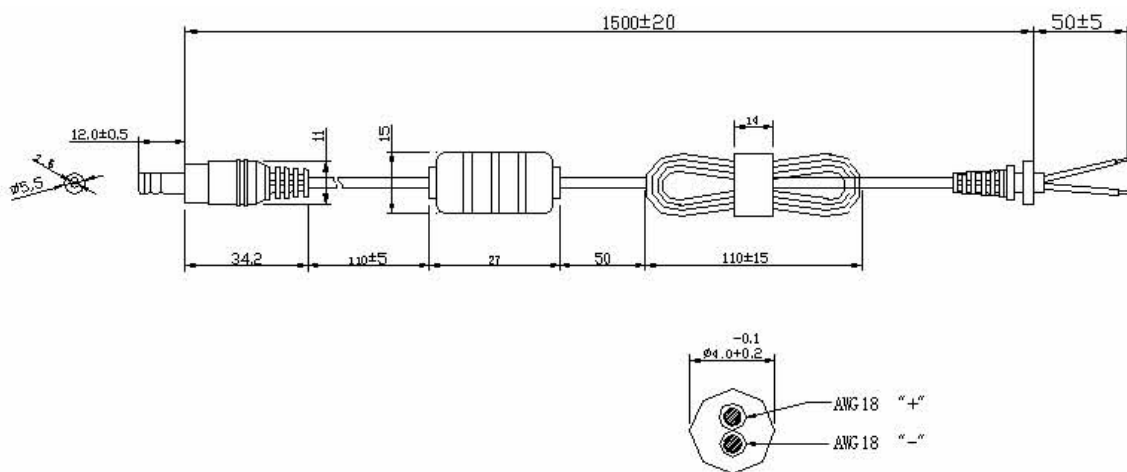
- a. Non operation vibration with shipping container shall be 2G'S Peak/7-50Hz, 4G'S/ 50-500Hz, after test o abnormally to be found.
- b. Operation vibration shall be 0.5G'S peak/10-60Hz, 3 AXES, after Test no abnormally to be noted.

5.6 Drop-Test

Test height is 100cm, after drop test no function abnormally to be noted.

6. Product Frame picture

6.1 Output Power Supply line (Uinit: mm)



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6.2 Tip connect



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6.3 Product figure frame picture

