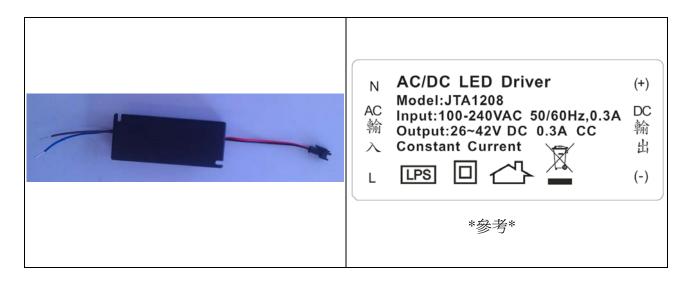
MODEL NO.	JTA1208NM	SHEET NO	1
DESCRIPTION	SWITCHING MODE	ISSUED DATE:	2012/09/19
DESCRIPTION	POWER SUPPLY	REVISED DATE:	

APPROVAL SIGNATURE
DATA:

Customer: 亞達特

Model: JTA1208NM 亞達特 REV:00

Input Voltage	100-240Vac	DC Output	42V/0.3A	PC /
DC 0/D1-1-	22AWG(2C 紅	/黑)100+Housing(	2.5mm)	
DC O/P cable	22AWG(紅/黑):	母座(2.5)+150+10	mm(鍍錫)	
AC plug	20#1007 藍棕絲	泉 100mm	Packaging	PE 袋



# 亞達特科技股份有限公司

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MODEL NO.	JTA1208NM	SHEET NO	2
DESCRIPTION	SWITCHING MODE	ISSUED DATE:	2012/09/19
DESCRIPTION	POWER SUPPLY	REVISED DATE:	

Version History:

Data	Version	Description
2012/09/19	00	First released

MODEL NO.	JTA1208NM	SHEET NO	3
DESCRIPTION	SWITCHING MODE	ISSUED DATE:	2012/09/19
DESCRIPTION	POWER SUPPLY	REVISED DATE:	

# **CONTAINS:**

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## INTRODUCTION

This documents specifies <u>ONE</u> voltage <u>+42V</u> power supply for electronic data processing equipment. The power supply will provide power to all system components.

# 1.0 INPUT REQUIREMENTS

1.1 Input Voltage Designing Range: 90-264 VAC

1.2 Line Rated Frequency: \_\_50 HZ to \_\_60 HZ.

1.3 Input Current: 0.3 A max. at 90Vac/47Hz with full load.

1.4. Power Factor: The P.F. SHALL  $\ge 0.95$  AT 115Vac and  $\ge 0.9$  AT 240Vac FULL LOAD

# 2.0 OUTPUT REQUIREMENTS

2.1Output Power (Rated Power)

The unit total output power from all voltage under steady state condition will not exceed 12.6 watts.

## 2.2Output Regulation

Label Information per Safety Agencies according to UL1950 and or EN60950 Requirements.

- 2.2.1 Input Rated Voltage Range: 100-240 VAC
- 2.2.2 Line Rated Frequency: \_\_50 HZ to \_\_60 HZ.
- 2.2.3 Static Load

#### **TABLE 2.2.3**

Output	Voltage	Minimum Load	Maximum Load	Range
1	+42V	0A	300 <u>+</u> 30mA (CV)	+26V~+42V

# 2.2.4Output Voltage

The output voltage shall be statically regulated for all combinations of load (min./max.), line and environment, including cross regulation (if any)as shown:

**TABLE 2.2.4** 

Output	Voltage	Range	Tolerance
1	+42V	+42V~+46V(No Load)	

NOTE: Test measurement will be made at the output connector on the power Supply output cord and well connected on the mating connector.

### 2.2.5 Ripple and Noise

Differential ripple and noise at the power supply output shall be as shown below when measured under constant load range of <u>12.6W</u> with an oscilloscope at bandwidth of 20MHz.

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#### **TABLE 2.2.5**

Output	Voltage	Maximum peak to peak ripple and noise
1	+42V	

NOTE: Test measurement will be made at the output connector on the power Supply output cord. With used an aluminum Electrolytic capacitor of 10uf and ceramic of 0.1uf parallel on output terminal can prevent unknown noise pick up.

# 2.3 Transient Response and Deviation

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#### 2.4 Turn on Time

During turn on and turn off, no voltage shall exceed its nominal voltage by more than 10% and no output will change its polarity with respect to its return line. All outputs shall reach their steady state values within 3 seconds of turn on tested at 115 VAC/60HZ input with maximum load on output.

# 2.5 Efficiency

The efficiency (watt out/watt in) shall be a minimum of \_\_75\_\_ % under line input \_\_115Vac/60Hz\_\_ and full load.

## 3.0 PROTECTION

#### 3.1 Input Current

An input fuse with a rating of 2A/250V Amps, shall be provided to protect the power supply and the input wiring. Note: The fuse shall be an unchangeable unit.

# 3.2 Over Voltage Protection (OVP)

The power supply shall shut down all outputs when any output voltage reaches to it's over voltage protection trigger point.

Note: This is not a repeatable test, when it triggers it is a perennial shut down.

## 3.3 Over Current Protection (OCP)

Overload conditions shall cause both the output current and the output voltages to decrease. Removal of an output overload conditions shall permit automatic recovery of the output voltage. The over current protection point Maximum=200% for all outputs.

Note: The total output power should not over Rated power to operate, otherwise will caused the power supply to damage.

#### 3.4 Short Circuit Protection (SCP)

The power supply shall be protected from damage of accidentally short on the output terminal.

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## 4.0 MECHANICAL

#### 4.1 Introduction

The power supply will provide Output power connector show as in

Table 4.1

#### FRONT VIEW OF OUTPUT CONNECTOR

Table 4.1 Pin out for DC Connector

PIN	Output Voltage		
1 BLACK(-)			
2	RED(+)		
Pin1 - +			

# 4.2 General Requirements

The power supply must not exceed an audible noise level of 32 dB while operating under any combination of specified load and input voltages and frequencies. This noise level shall be measured according to IEC standards 651 type 1, with the sound level meter pointed directly at the power supply in a free-field condition, at a distance of 1 meter and by selecting nominal "A" weighting frequency attenuation.

## 4.3 Power Supply Dimensions

The dimensions of the power supply are shown: (See Outlooking)

## 4.4 Input / Output Connection

AC PLUG	20#1007 藍棕線 100mm	
DC OUTPUT	22AWG(2C 紅/黑)100+Housing(2.5mm)	
	22AWG(紅/黑)母座(2.5)+150+10mm(鍍錫)	

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# 5.0 RELIABILITY AND QUALITY CONTROL

# 5.1 Reliability

The design and construction of this power supply shall exhibit a minimum mean time between failure of 300,000 hours full rated load operation at \_25.0°C, According to Telcordia SR-332, Issue 2.

## 5.2 Burn-In

The power supply will be performed 100% burn-in at  $40^{\circ}\text{C}(\pm 5^{\circ}\text{C})$  under 80%-100% of full load on all power supplies.

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## 6.0 ENVIRONMENTAL CONDITIONS

#### 6.1 Storage

The power supply shall be capable of withstanding the following environmental conditions for extended periods of time, without sustaining electrical and/or mechanical damage and subsequent operational deficiencies:

6.1.1 Ambient temperature:  $-20^{\circ}\text{C} \sim +70^{\circ}\text{C}$ 

6.1.2 Relative Humidity:  $5\% \sim 90\%$ 

# 6.2 Operation

The power supply shall be capable of operating continuously in any mode without performance deterioration in the following environmental conditions:

6.2.1 Ambient Temperature:  $-20^{\circ}$ C  $\sim 40^{\circ}$ C

6.2.2 Relative Humidity: 20%  $\sim$ 80%.

## 7.0 EMI EMISSIONS

The power supply meets the radiated and conducted emission requirements for a FCC part 15B(classB)(DoC) and CISPR22(EN55022) class B

# 8.0 SAFETY

The power supply must be certified or meet of the following safety standards:

	Certified	Meet

8.1 Dielectric Strength (Hi-Pot) Test System:

Withstand AC 3 K V/10mA, for 2 sec./ min., primary to secondary.

8.2 Insulation Resistance:

Primary to secondary: <u>10 M OHM at 500 VDC</u>.

8.3 Leakage current:  $\leq 0.25 \text{mA}$ 

# 9.0 ENVIRONMENTAL PROTECTION

### 9.1 RoHS and WEEE

This product from design to production all the parts and process should meet the requirement of Restriction of the use of certain hazardous substances in electrical and electronic equipment RoHS directive 2002/95/EC and also meet the directive 2002/96/EC of Waste electrical and electronic equipment (WEEE) .

10 OPACK AGING: P	F 垈
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# 11.0 OUTLOOKING

