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300W、400W Mini Redundant Power Supply

Model Name：SS-300R8P、SS-400R8P

1. General Description

This specification defines the characteristic of output 300W、400W 4Unit redundant power supply, also called mini redundant power supply, ***SURE STAR*** model name SS-300R8P、SS-400R8P.

2. Specification

2.1 Input : 100VAC~240VAC ±10%, 47Hz ~ 63Hz,
with IEC60320 C14 inlet rated for 8A/250VAC.

2.2 Output DC as below :

VOLTAGE	+5V	+12V	+3.3V	-12V	+5VSB
MAX. LOAD	20/25A	22/28A	20/25A	0.8A	2A
MIN. LOAD	3A	2A	0.3A	0.1A	0.1A
REGULATION	± 5%	± 5%	± 5%	±10%	± 5%
RIPPLE and NOISE	50mV	120mV	50mV	120mV	50mV

Note:

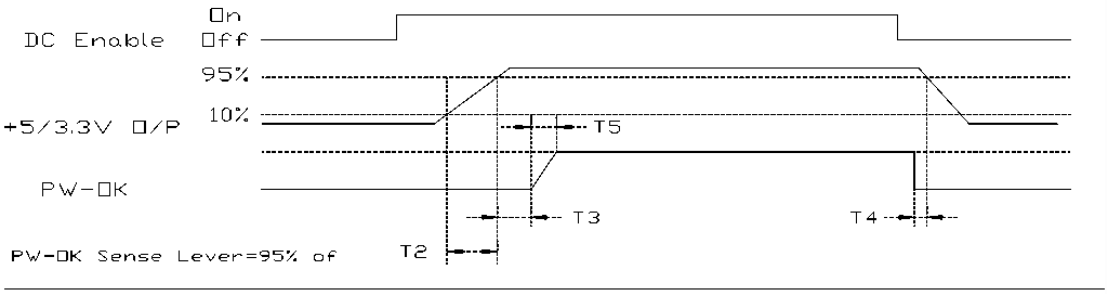
1. The combined power from +3.3V and +5V shall not exceed 120W/150W.
2. The max total power shall not exceed 300W/400W.
3. Ripple and Noise bandwidth is set to 20MHz
4. Add a 0.1uF ceramic capacitor in parallel with a 10uF tantalum capacitor at output connector terminals for ripple and noise measurement.

2.3 PSON remote on/off control

When PSON is pulled to TTL Low, the DC output is to be enabled.
When PSON is pulled to TTL high, the DC output is to be disabled.

2.4 PW-OK

PW-OK is power good signal and should be asserted high by the power supply to indicate that all output voltages are in regulation and ready for use. It is a TTL compatible signal within 100ms to 500ms delay time for PG on.



Timing of PSON, PW-OK, and output rails

The following signal timings are recommended:

0.1ms≦T2≦20ms.

100ms≦T3≦500ms.

T4＞1ms.

T5≦10ms.

2.5 Efficiency : ≧ 73% with full load.

2.6 Hold-Up Time: 18ms with full load after loss of AC input.

3. Protection

3.1 Over Voltage Protection

VOLTAGE	MIN.	MAX.
+3.3V	3.7V	4.1V
+5V	5.7V	6.5V
+12V	12.8V	13.9V

3.2 Short Circuit Protection

The power supply shall shutdown and latch off.

3.3 Over Power Protection

The power supply shall shutdown when output power exceeds 110% to 150% load and requires a power on cycle to be performed.

3.4 No Load Operation

No damage or hazardous condition shall occur with all the DC output connectors disconnected from the load. The power supply may latch into the shutdown state.

4. Environmental Requirement

4.1 Operation Temperature: 0℃ to 40℃.

4.2 Storage Temperature:-20℃ to 70℃.

4.3 Humidity: 5% to 95% non-condensing.

5. Reliability

MTBF 100,000 hours at full load and 25℃ ambient temperature.

6. Safety

CB、CE、TUV、UL、BSMI、CCC.

Please visit our website and get the latest safety certificate.

7. EMC

CE、FCC、BSMI、CCC. (Class B)

Please visit our website and get the latest EMC certificate.

8. Instruction

When one power module is failed, LED would blink and buzzer would sound.

Press the alarm reset button can stop the buzzer sound.

Redundancy : Offer redundant function for building power system.

Hot-swap : When one power module fails, you can easily replace it.

Buzzer : A warning buzzer sounds when one power module fails.

The warning buzzer can be reset by reset button.

LED : If one power module fails, LED of power supply unit would be blinking.

9. Hot-swap Procedure

Please refer to the followings when the power module fails.

A) Find the failed power module, could check by the LED.

B) Turn off then unlock and remove the failed power module.

C) Insert another power module into the power supply unit, it would be auto-locked.

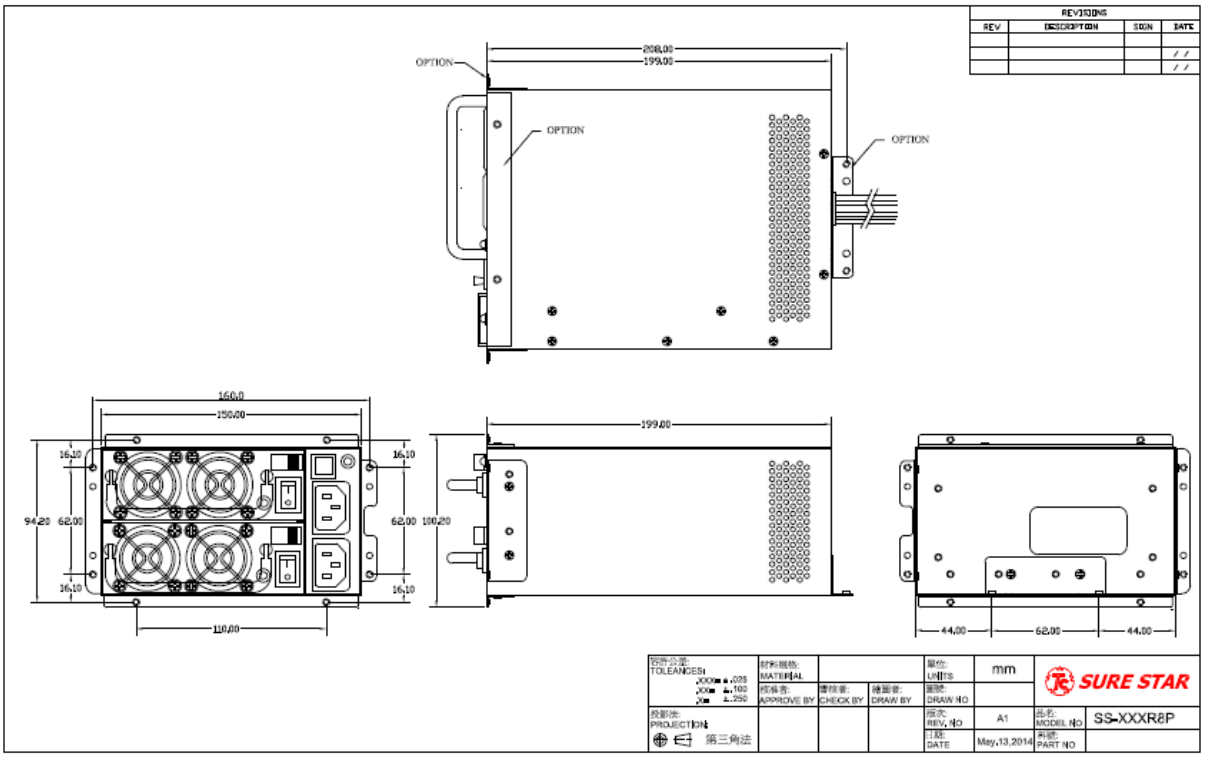
D) Turn on the power module and check the LED.

10. Customization Note

Customization note shall be listed here.

11. Mechanical Drawing

Outline(bracket optional) : W150＊H86＊D199mm.



12. Output Wire (could be customization)

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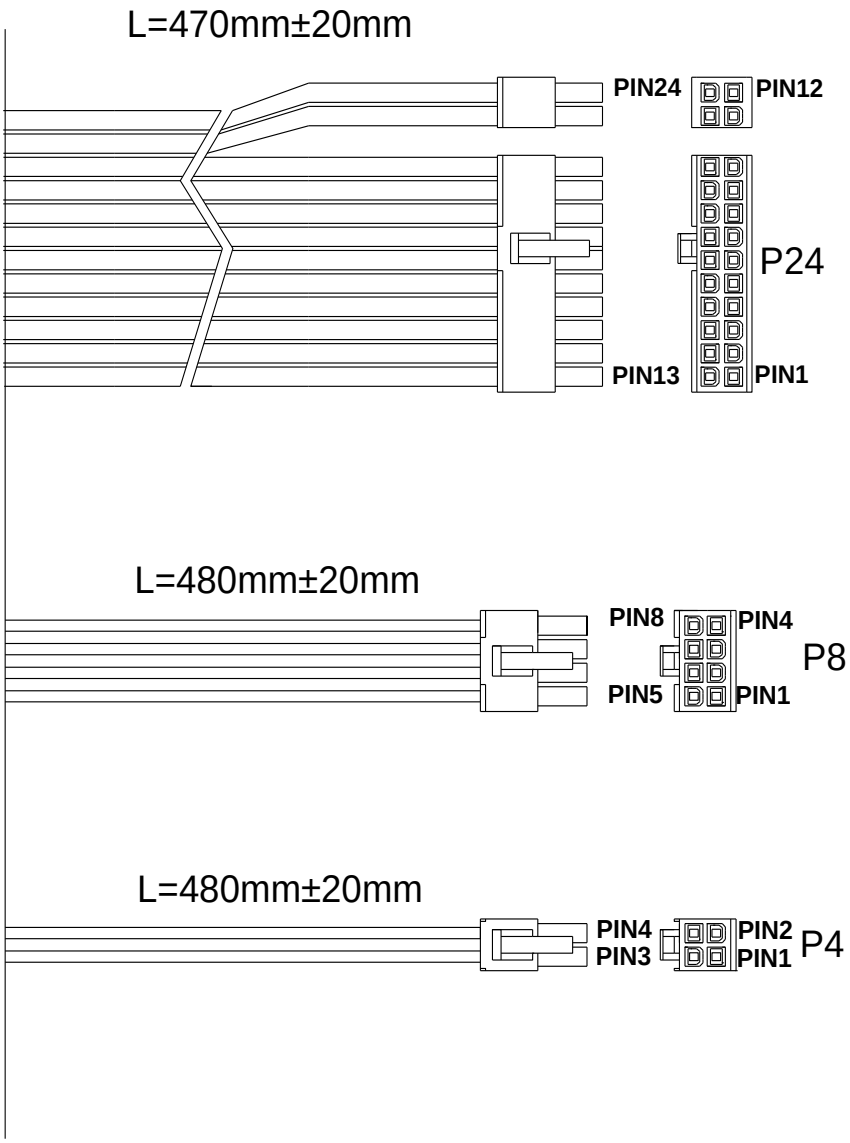

24Pins(EPS12V)
Connector HOUSING: MOLEX 39-01-2240 or equivalent
TERMINAL: MOLEX 39-00-0039 or equivalent

Housing	Pin No.	WIRE COLOR	LENGTH	Pin No.	WIRE COLOR	LENGTH
P24	1	ORANGE(+3.3V)	470mm/18AWG	13	ORANGE(+3.3V) ORANGE(+3.3Vs)	470mm/18AWG 470mm/22AWG
	2	ORANGE(+3.3V)	470mm/18AWG	14	BLUE(-12V)	470mm/18AWG
	3	BLACK(GND)	470mm/18AWG	15	BLACK(GND)	470mm/18AWG
	4	RED(+5V)	470mm/18AWG	16	GREEN(PS-ON)	470mm/20AWG
	5	BLACK(GND)	470mm/18AWG	17	BLACK(GND)	470mm/18AWG
	6	RED(+5V)	470mm/18AWG	18	BLACK(GND)	470mm/18AWG
	7	BLACK(GND)	470mm/18AWG	19	BLACK(GND)	470mm/18AWG
	8	GRAY(PG)	470mm/20AWG	20	NC	
	9	PURPLE(+5VSB)	470mm/18AWG	21	RED(+5V)	470mm/18AWG
	10	YELLOW(+12V)	470mm/18AWG	22	RED(+5V)	470mm/18AWG
	11	YELLOW(+12V)	470mm/18AWG	23	RED(+5V)	470mm/18AWG
	12	ORANGE(+3.3V)	470mm/18AWG	24	BLACK(GND)	470mm/18AWG

8Pins(EPS12V)
Connector HOUSING: MOLEX 39-01-0280 or equivalent
TERMINAL: MOLEX 39-00-0060 or equivalent

Housing	Pin No.	WIRE COLOR	SIGNAL	WIRE TYPE	LENGTH
P8	1	BLACK	COM	18AWG	480mm ±20mm
	2	BLACK	COM	18AWG	
	3	BLACK	COM	18AWG	
	4	BLACK	COM	18AWG	
	5	YELLOW	+12V	18AWG	
	6	YELLOW	+12V	18AWG	
	7	YELLOW	+12V	18AWG	
	8	YELLOW	+12V	18AWG	

4Pins(ATX12V,FOR P4)
Connector HOUSING: MOLEX 39-01-0280 or equivalent
TERMINAL: MOLEX 39-00-0060 or equivalent

Housing	Pin No.	WIRE COLOR	SIGNAL	WIRE TYPE	LENGTH
P4	1	BLACK	COM	18AWG	480mm ±20mm
	2	BLACK	COM	18AWG	
	3	YELLOW	+12V	18AWG	
	4	YELLOW	+12V	18AWG	

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	核准者 APPROVE BY.	審核者 CHECK BY.	繪圖者 DRAW BY.	編號 DRAW NO		
投影法: PROJECTION: 第三角法			Kevin	編號 SHEET	OF	品名 MODEL NO: SS-R8P Series
				日期 DATE	2011,11,02	料號 PART NO

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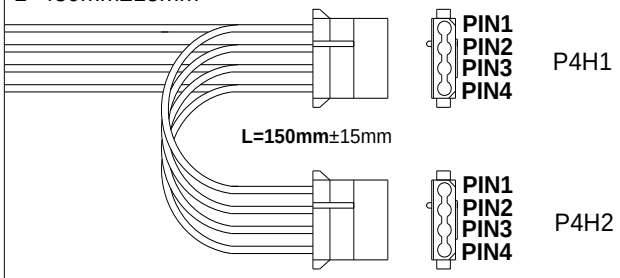
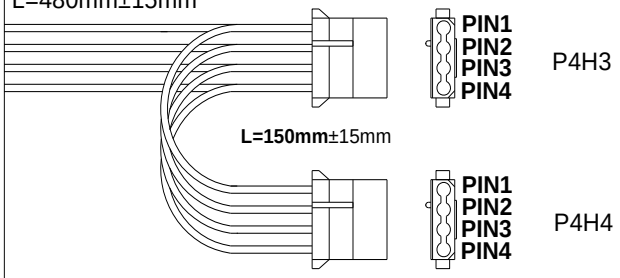
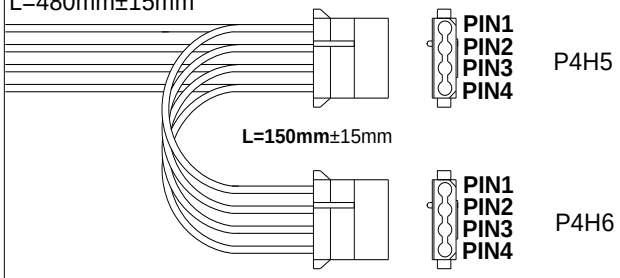
HDD 4P-480L+ HDD 4P-150L
L=480mm±15mm



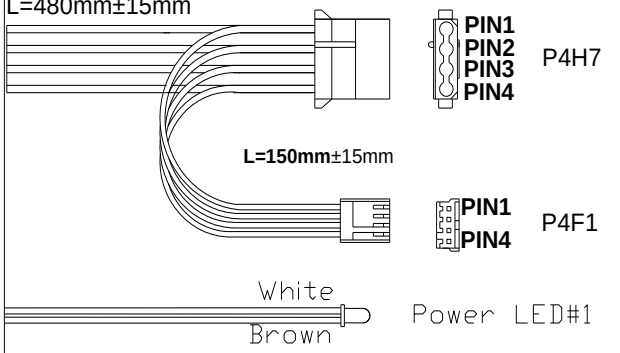
HDD 4P-480L+ HDD 4P-150L
L=480mm±15mm



HDD 4P-480L+ HDD 4P-150L
L=480mm±15mm



HDD 4P-480L+ FDD 4P-150L
L=480mm±15mm



4Pins(HD/CD-ROM/RW):P4H1~P4H7
Connector HOUSING: AMP 480424-0 or equivalent
TERMINAL:AMP 60619-4 or equivalent
4Pins(FLOPPY DISK):P4F
Connector HOUSING: AMP 171822-4 or equivalent
TERMINAL: AMP 170262-2 or equivalent

Housing	Pin No.	WIRE COLOR	SIGNAL	WIRE SIZE	LENGTH
P4H1	1	YELLOW	+12V	18AWG	480mm ±15mm
	2	BLACK	COM	18AWG	
	3	BLACK	COM	18AWG	
	4	RED	+5V	18AWG	
P4H2	1	YELLOW	+12V	18AWG	150mm ±15mm
	2	BLACK	COM	18AWG	
	3	BLACK	COM	18AWG	
	4	RED	+5V	18AWG	
P4H3	1	YELLOW	+12V	18AWG	480mm ±15mm
	2	BLACK	COM	18AWG	
	3	BLACK	COM	18AWG	
	4	RED	+5V	18AWG	
P4H4	1	YELLOW	+12V	18AWG	150mm ±15mm
	2	BLACK	COM	18AWG	
	3	BLACK	COM	18AWG	
	4	RED	+5V	18AWG	
P4H5	1	YELLOW	+12V	18AWG	480mm ±15mm
	2	BLACK	COM	18AWG	
	3	BLACK	COM	18AWG	
	4	RED	+5V	18AWG	
P4H6	1	YELLOW	+12V	18AWG	150mm ±15mm
	2	BLACK	COM	18AWG	
	3	BLACK	COM	18AWG	
	4	RED	+5V	18AWG	
P4H7	1	YELLOW	+12V	18AWG	480mm ±15mm
	2	BLACK	COM	18AWG	
	3	BLACK	COM	18AWG	
	4	RED	+5V	18AWG	
P4F1	1	YELLOW	+12V	22AWG	150mm ±15mm
	2	BLACK	COM	22AWG	
	3	BLACK	COM	22AWG	
	4	RED	+5V	22AWG	

容許公差: TOLERANCES: .XXX= .XX= .X=	材料規格 MATERIAL			單位 UNITS	mm	SURE STAR
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投影法: PROJECTION: 第三角法			Kevin	編號 SHEET	OF	品名 MODEL NO: TC-XXXR8.R8A.R8P HARNESS
				日期 DATE	2010,12,23	料號 PART NO

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Note : This data is subject to change without notice.