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Version: VA2

Model Name: SS-1U40ES

400W Power Supply for Single 1U with High Efficiency

1. Specification

1.1.AC Input Voltage Range: 100VAC ~ 240VAC, $\pm 10\%$, 47 to 63 Hz.

1.2.INPUT CURRENT:8.0 A (RMS) FOR 115VAC /4.0 A (RMS) FOR 230VAC.

1.3. Input Power Factor: The minimum power factor at full load shall be
0.98/115V 60 Hz and 0.95/230V 50 Hz.

1.4. Inrush current: 35A MAX. FOR 115 VAC / 55A MAX. FOR 230 VAC.

1.5.DC Output: 400W maximum.

	Output-1	Output-2	Output-3	Output-4	Output-5
Output Voltage	+5V DC	+12V DC	-12V DC	+3.3V DC	+5VSB
Output Current (Max.)	25A	32A	0.8A	25A	3.5A
Output Current (Min.)	0.5A	2A	0A	0.5A	0.1A
Ripple/Noise Max.(P-P):	60mV	120mV	120mV	60mV	60mV
Line Regulation:	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$	$\pm 1\%$
Load Regulation:	$\pm 5\%$	$\pm 5\%$	$\pm 5\%$	$\pm 5\%$	$\pm 5\%$

Note:

1. Noise Test – Noise bandwidth is from DC to 20 MHz.
2. Ripple frequencies greater than 1MHz shall be attenuated by the measurement System.
3. Add 0.1uF/10uF capacitor at output connector terminals for ripple and noise measurements.
4. The combined total power from 5V & 3.3V shall not exceed 160W.

1.6. PS-ON

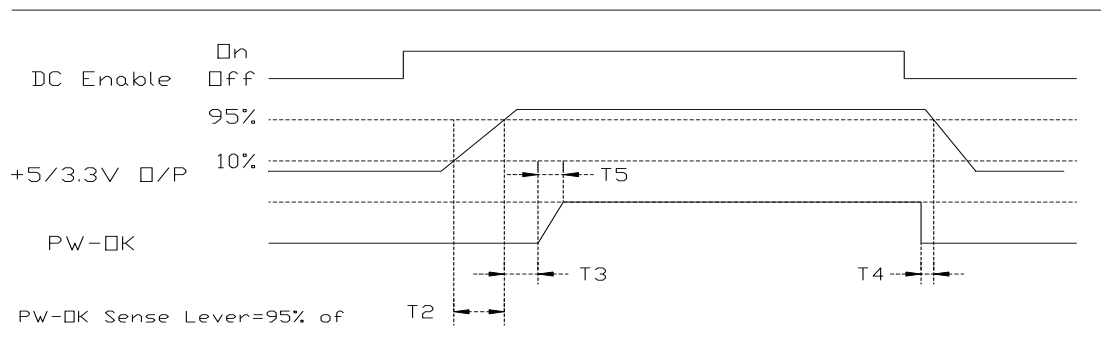
Remote On/Off Control:

When PS-ON is pulled to TTL Low, the DC output is to be enabled.

When PS-OFF is pulled to TTL high, the DC output is to be disabled.

1.7. PW-OK

PW-OK is power good signal and should be asserted high by the power supply to indicate that +5VDC and +3.3VDC output are above the under voltage thresholds of the power supply TTL compatible signal out with 100ms to 500ms.



Timing of PS-ON, PW-OK, and Germane Voltage Rails

Although there is no requirement to meet specific timing parameters,

The following signal timings are recommended:

$$2\text{ms} \leq T2 \leq 200\text{ms}$$

$$100\text{ms} \leq T3 \leq 500\text{ms}$$

$$T4 > 1\text{ms}$$

$$T5 \leq 10\text{ms}$$

1.8 Efficiency: TYPICAL >86% AT 115VAC, FULL LOAD.

1.9 Hold-Up Time: 16ms at maximum load & normal input voltage.

2. PROTECTIONS

2.1. OVER-VOLTAGE PROTECTION

OUTPUT	Min	Max
+3.3V	3.7V	4.1V
+5V	5.7V	6.5V
+12V	13.1V	14.5V

2.2. SHORT CIRCUIT PROTECTION

A short circuit placed between the DC Return and the output shall cause No damage and the power supply shall shutdown.

2.3. OVER POWER PROTECTION

The power supply shall shut down when output power exceeds 110% to 160% of full load and require a power on cycle be performed by the operate

2.4 NO LOAD OPERATION

No parts shall be damaged on the power supply.

3. ENVIRONMENT TEMPERATURE

3.1. Operation Temperature: 0°C to 45°C

3.2. Cooling: ONE 40mm DC FANS.

3.3. Storage Temperature:-20°C to 70°C

3.4. Humidity: 5 to 90% non-condensing.

4. Mean Time Between Failure(MTBF)

Using MIL - HDBK -217F the calculated MTBF=100,000 hours at 25°C 75% loading.

5. SAFETY:

CB 、 CE 、 TUV 、 UL 、 BSMI 、 CCC.

Please visit our website and get the latest safety certificate.

6. EMC:

CE 、 FCC 、 BSMI 、 CCC.

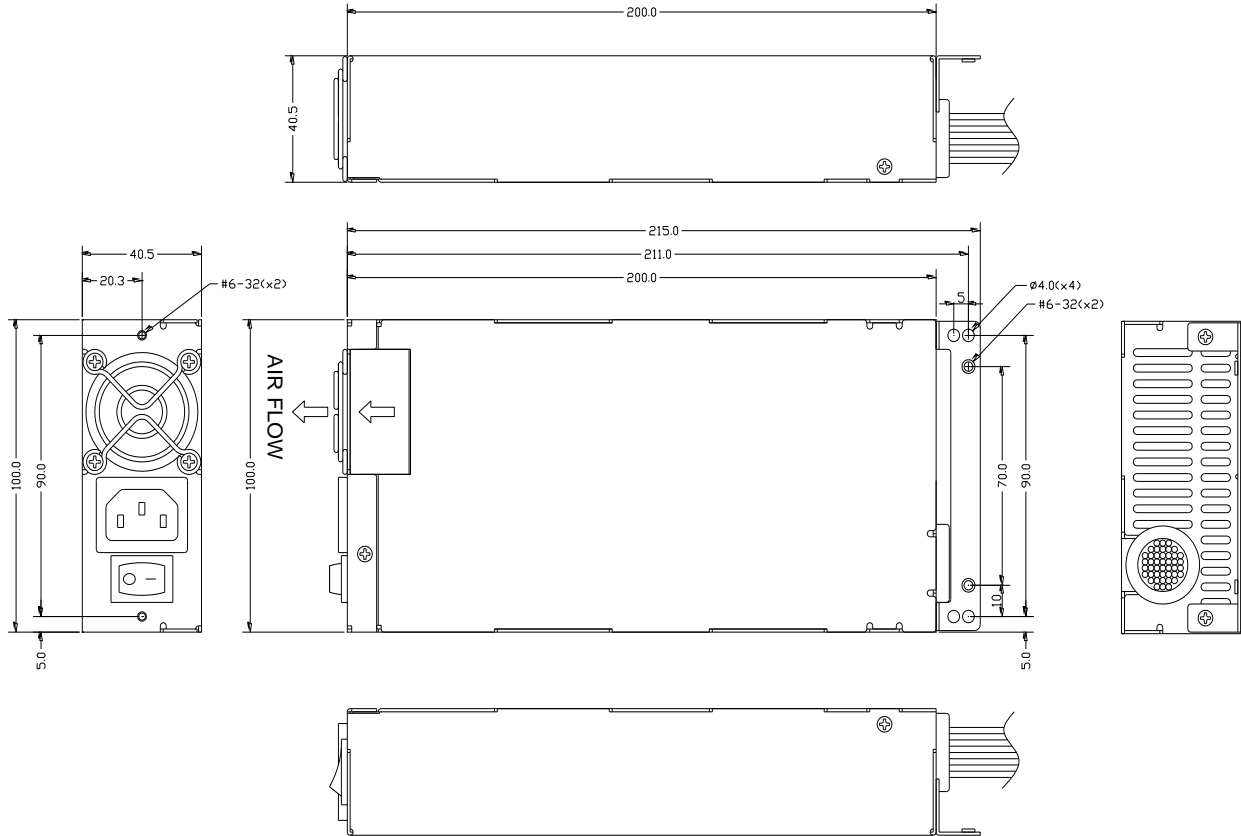
Please visit our website and get the latest EMC certificate.

7. DIMENSION

L 200 x W 100 x H 40.5 mm

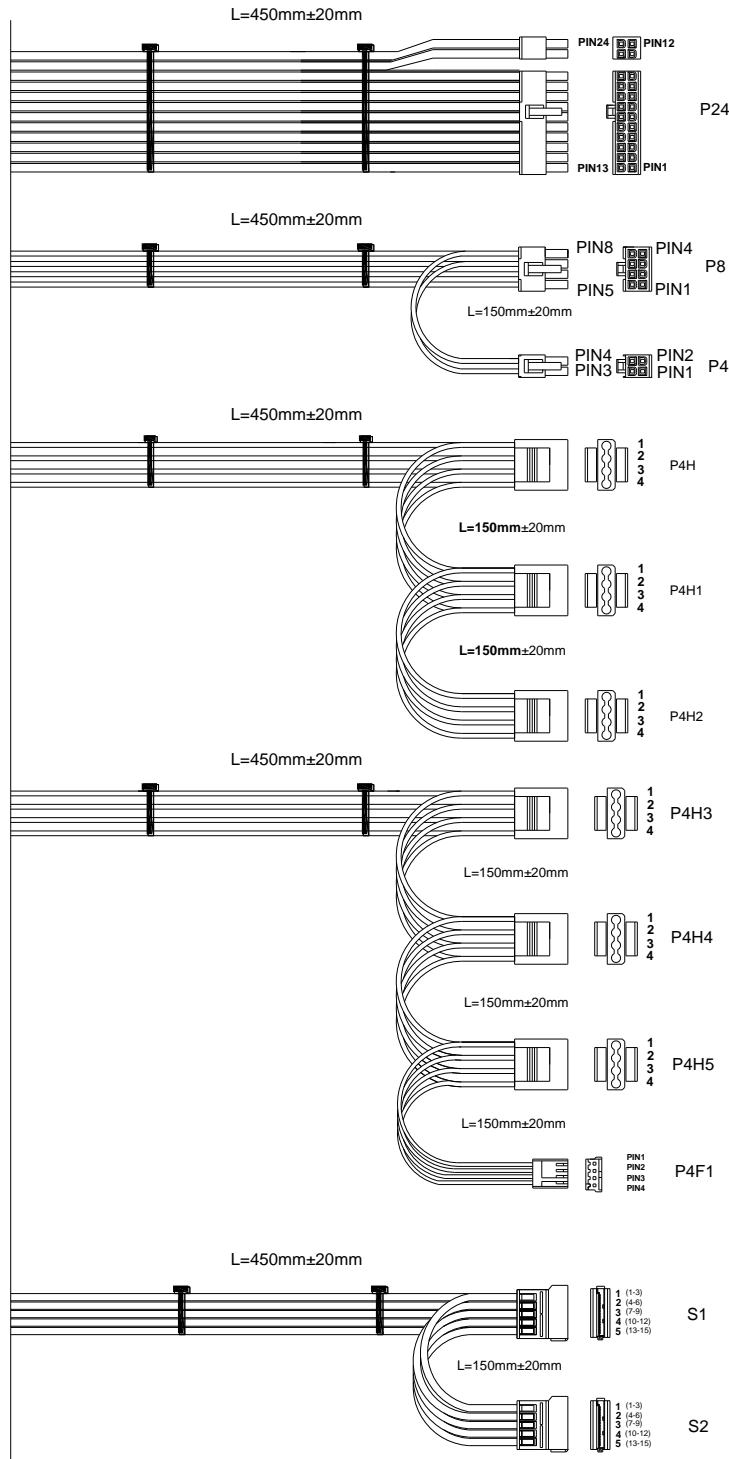
SS-1U52ES
SS-1U46ES
SS-1U40ES

REVISIONS			
REV	DESCRIPTION	SIGN	DATE
A1	後支架貼平下蓋底		Mar/29/2012
A2	增加後支架4mm兩孔		Apr/03/2012



公差等級 TOLERANCES: .XXX ± .025 .XX ± .05 .X ± .1	材料規格 MATERIAL 標記符 APPROVE BY	SPCC T1.0 鍍錫 審核者 CHECK BY	單位 UNITS 圖號 DRAW NO.	mm JACKY REV NO A2 DATE Mar.29.2012		品名 MODEL NO SS-1UXXES-3 料號 PART NO
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8. PINOUTS OF CONNECTORS



20+4Pins(EPS12V)
 Connector HOUSING(BLACK): MOLEX 39-01-2240 or equivalent
 TERMINAL: MOLEX 39-00-0039 or equivalent
 WIRE:UL1007

Housing	Pin No.	WIRE COLOR	LENGTH	Pin No.	WIRE COLOR	LENGTH
P24	1	ORANGE(+3.3V)	450mm/18AWG	13	ORANGE(+3.3V)	450mm/18AWG
	2	ORANGE(+3.3V)	450mm/18AWG	14	BLUE(+12V)	450mm/18AWG
	3	BLACK(GND)	450mm/18AWG	15	BLACK(GND)	450mm/18AWG
	4	RED(+5V)	450mm/18AWG	16	GREEN(PS-ON)	450mm/20AWG
	5	BLACK(GND)	450mm/18AWG	17	BLACK(GND)	450mm/18AWG
	6	RED(+5V)	450mm/18AWG	18	BLACK(GND)	450mm/18AWG
	7	BLACK(GND)	450mm/18AWG	19	BLACK(GND)	450mm/18AWG
	8	GRAY(PG)	450mm/20AWG	20	N/C	
	9	PURPLE(+5VSB)	450mm/18AWG	21	RED(+5V)	450mm/18AWG
	10	YELLOW(+12V)	450mm/18AWG	22	RED(+5V)	450mm/18AWG
	11	YELLOW(+12V)	450mm/18AWG	23	RED(+5V)	450mm/18AWG
	12	ORANGE(+3.3V)	450mm/18AWG	24	BLACK(GND)	450mm/18AWG

8Pins(EPS12V)
 Connector HOUSING(BLACK): MOLEX 39-01-0280 or equivalent
 TERMINAL: MOLEX 39-00-0060 or equivalent
 WIRE:UL1007

4Pins(ATX12V, FOR P4)
 Connector HOUSING(BLACK): MOLEX 39-01-2040 or equivalent
 TERMINAL: MOLEX 39-00-0059/79 or equivalent
 WIRE:UL1007

Housing	Pin No.	WIRE COLOR	SIGNAL	WIRE TYPE	LENGTH
P8	1	BLACK/BLACK	COM	18AWG/18AWG	450mm±20mm
	2	BLACK/BLACK	COM	18AWG/18AWG	
	3	BLACK/BLACK	COM	18AWG/18AWG	
	4	BLACK/BLACK	COM	18AWG/18AWG	
	5	YELLOW	+12V	18AWG	
	6	YELLOW	+12V	18AWG	
	7	YELLOW	+12V	18AWG	
	8	YELLOW	+12V	18AWG	
P4	1	BLACK	COM	18AWG	150mm±20mm
	2	BLACK	COM	18AWG	
	3	YELLOW	+12V	18AWG	
	4	YELLOW	+12V	18AWG	

4Pins(HD/CD-ROM/RW):P4H1-P4H4
 Connector HOUSING(BLACK):AMP 480424-0 or equivalent
 TERMINAL:AMP 60619-4 or equivalent
 WIRE:UL1007

Housing	Pin No.	WIRE COLOR	SIGNAL	WIRE SIZE	LENGTH
P4H	1	YELLOW/YELLOW	+12V	18AWG	450mm ±20mm
	2	BLACK/BLACK	COM	18AWG	
	3	BLACK/BLACK	COM	18AWG	
	4	RED/RED	+5V	18AWG	
P4H1	1	YELLOW/YELLOW	+12V	18AWG	150mm ±20mm
	2	BLACK/BLACK	COM	18AWG	
	3	BLACK/BLACK	COM	18AWG	
	4	RED/RED	+5V	18AWG	
P4H2	1	YELLOW	+12V	18AWG	150mm ±20mm
	2	BLACK	COM	18AWG	
	3	BLACK	COM	18AWG	
	4	RED	+5V	18AWG	

4Pins(HD/CD-ROM/RW):P4H10-P4H12
 Connector HOUSING(BLACK):AMP 480424-0 or equivalent
 TERMINAL:AMP 60619-4 or equivalent
 WIRE:UL1007

4Pins(FLOPPY DISK):P4F1
 Connector HOUSING(BLACK): AMP 171822-4 or equivalent
 TERMINAL: AMP 170262-2 or equivalent
 WIRE:UL1007

Housing	Pin No.	WIRE COLOR	SIGNAL	WIRE SIZE	LENGTH
P4H3	1	YELLOW/YELLOW	+12V	18AWG	450mm±20mm
	2	BLACK/BLACK	COM	18AWG	
	3	BLACK/BLACK	COM	18AWG	
	4	RED/RED	+5V	18AWG	
P4H4	1	YELLOW/YELLOW	+12V	18AWG	150mm ±20mm
	2	BLACK/BLACK	COM	18AWG	
	3	BLACK/BLACK	COM	18AWG	
	4	RED/RED	+5V	18AWG	
P4H5	1	YELLOW/YELLOW	+12V	18AWG	150mm ±20mm
	2	BLACK/BLACK	COM	18AWG	
	3	BLACK/BLACK	COM	18AWG	
	4	RED/RED	+5V	18AWG	
P4F1	1	YELLOW	+12V	22AWG	150mm ±20mm
	2	BLACK	COM	22AWG	
	3	BLACK	COM	22AWG	
	4	RED	+5V	22AWG	

SATA HDD
 Connector HOUSING(BLACK): MOLEX 675820000 or equivalent
 TERMINAL: MOLEX 675810000 or equivalent
 WIRE UL 1007

Housing	Pin No.	WIRE COLOR	SIGNAL	WIRE TYPE	LENGTH
S1	1	BROWN/ORANGER	+3.3V	18AWG	450mm±20mm
	2	BLACK/BLACK	COM	18AWG	
	3	RED/RED	+5V	18AWG	
	4	BLACK/BLACK	COM	18AWG	
	5	YELLOW/YELLOW	+12V	18AWG	
S2	1	ORANGE	+3.3V	18AWG	150mm ±20mm
	2	BLACK	COM	18AWG	
	3	RED	+5V	18AWG	
	4	BLACK	COM	18AWG	
	5	YELLOW	+12V	18AWG	

Note: Specification and wiring diagram subject to change without notice.

Jul. 15, 2016