



SURE STAR COMPUTER CO., LTD

NO.2-1,DAAN ROAD, SHULIN .DIST., NEW TAIPEI CITY 238 , TAIWAN.

E-mail: info@surestar.com.tw

Tel: +886 2 2682 2505

http: //www.surestar.com.tw

Fax: +886 2 2682 2515

MODEL:TC-1U40 (400W for 1U Single)

1. Specification

1.1 AC Input Voltage: 90 to 132 or 180 to 264 Auto selectable 50 to 60 Hz.

1.2 DC Output: 400W maximum

	Output-1	Output-2	Output-3	Output-4	Output-5
Voltage:	+5V DC	+12V DC	-5V DC	-12V DC	+3.3V DC
Maximum Load:	40A	20A	0.3A	0.8A	20A
Minimum Load:	3A	2A	0.1A	0.1A	0.3A
Ripple:	50mv	120mv	50mv	120mv	50mv
Ripple/Noise:	100mv	150mv	100mv	240mv	50mv
Line Regulation:	±1%	±1%	±1%	±1%	±1%
Output Regulation:	±5%	±5%	±10%	±10%	±5%
Cross Regulation:	±5%	±5%	±10%	±10%	±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 200W.
The combined total power from 5V and 12V & 3.3V shall not exceed 378W
5. +5V SB DC Output 2A.

1.3 PS-ON

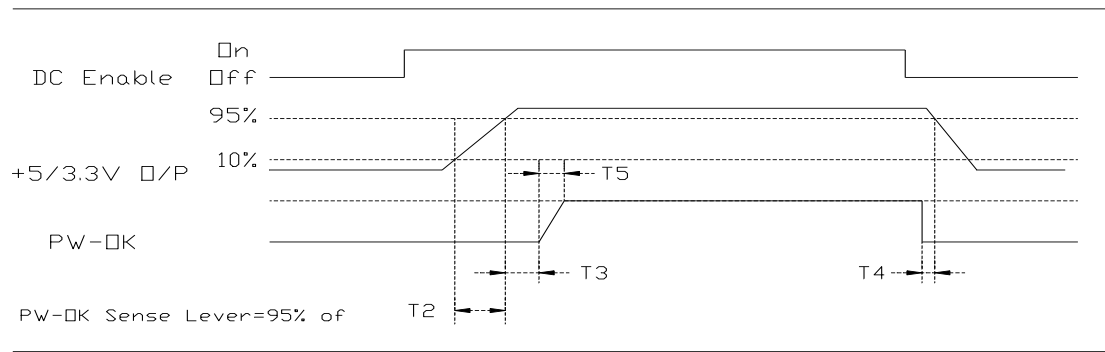
Remote On/Off Control:

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.

1.4 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:

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

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

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

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

1.5 Efficiency: $\geq 70\%$ at full load.(Normal Line)

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

2. PROTECTIONS

2.1 OVER-VOLTAGE PROTECTION

Standard on +5.0V output, set at 6.25VDC \pm 0.75VDC.

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 130% 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 40°C

3.2 Cooling: By forced air

3.3 Storage Temperature:-20°C to 70°C

3.4 Humidity: 5 to 90% non-condensing.

4. RELIABILITY

4.1 MTBF OF POWER SUPPLY ELECTRONIS

100,000 hours at full load and 25°C ambient temperature

4.2 LIFE EXPECTANCY OF FAN

40,000 hours at 40°C

5. AGENCY APPROVALS

UL 1950 QQGQ2

UL 1950 QQGQ8

TUV Rheinland (EN60950-1+A12; IEC:60950)

6. EMI

FCC part 15, Subpart B, Class A

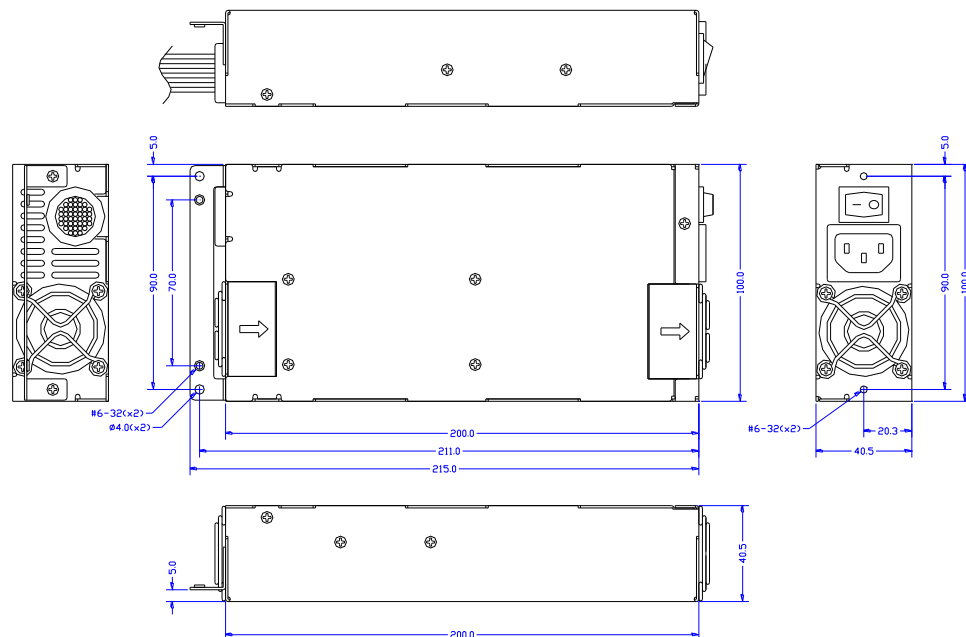
EN55022 CISPR22 Class A,

EN61000-3-3;1995

EN61000-4-2, -3, -4, -5, -6, -11

7. DIMENSION

L 200 x W 100 x H 41.5 mm



8. PINOUTS OF CONNECTORS

ATX or EPS (20+4)Pin x 1 ,
M8P +12V Power Connector x 1 ,
M4P +12V Power Connector x 1 ,
H.D.D. x 6 ,
Floppy x 2.

REVISIONS			
REV	DESCRIPTION	SIGN	DATE
03			/ /

L=560mm±15mm

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	PURPLE(+3.3V)	560mm/18AWG	13	PURPLE(+3.3V) PURPLE(+3.3Vs)	560mm/18AWG 560mm/22AWG
	2	PURPLE(+3.3V)	560mm/18AWG	14	BLUE(-12V)	560mm/18AWG
	3	BLACK(GND)	560mm/18AWG	15	BLACK(GND)	560mm/18AWG
	4	RED(+5V)	560mm/18AWG	16	GRAY(PS-ON)	560mm/20AWG
	5	BLACK(GND)	560mm/18AWG	17	BLACK(GND)	560mm/18AWG
	6	RED(+5V)	560mm/18AWG	18	BLACK(GND)	560mm/18AWG
	7	BLACK(GND)	560mm/18AWG	19	BLACK(GND)	560mm/18AWG
	8	ORANGE(PG)	560mm/18AWG	20	WHITE(-5V)	560mm/18AWG
	9	BROWN(+5VSB)	560mm/18AWG	21	RED(+5V)	560mm/18AWG
	10	YELLOW(+12V)	560mm/18AWG	22	RED(+5V)	560mm/18AWG
	11	YELLOW(+12V)	560mm/18AWG	23	RED(+5V)	560mm/18AWG
	12	PURPLE(+3.3V)	560mm/18AWG	24	BLACK(GND)	560mm/18AWG

L=580mm±15mm

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	580mm ±15mm
	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	

L=580mm±15mm

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	580mm ±15mm
	2	BLACK	COM	18AWG	
	3	YELLOW	+12V	18AWG	
	4	YELLOW	+12V	18AWG	

公差: TOLERANCES: .XXX= .XX= .X=	材料規格 MATERIAL	審核者 CHECK BY:	繪圖者 DRAW BY:	單位 UNITS: mm	
投影法 PROJECTION:	批准者 APPROVE BY:	日期 DATE:	Kevin	圖號 DRAW NO:	料號 PART NO:
第三角法		日期 DATE: 2010,12,23		圖號 SHEET: OF	料號 PART NO: TC-1U30.35 HARNESS

REVISIONS			
REV	DESCRIPTION	SIGN	DATE
03			/ /

4Pins(HD/CD-ROM/RW):P4H1~P4H6
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	
P4F1	1	YELLOW	+12V	22AWG	150mm ±15mm
	2	BLACK	COM	22AWG	
		BLACK	COM	22AWG	
	4	RED	+5V	22AWG	
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	
P4F2	1	YELLOW	+12V	22AWG	150mm ±15mm
	2	BLACK	COM	22AWG	
	3	BLACK	COM	22AWG	
	4	RED	+5V	22AWG	

公差: TOLERANCES: .XXX= .XX= .X=	材料規格: MATERIAL 核准者: APPROVE BY. CHECK BY.	繪圖者: DRAW BY.	單位: UNITS mm		圖號: DRAW NO. 圖名: MODEL NO. 日期: DATE 零件號: PART NO.
投影法: PROJECTION: 第三角法		Kevin	圖號: SHEET 日期: DATE	圖名: MODEL NO. 零件號: PART NO.	TC-1U30.35 HARNESS

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

2014/5/16