



# 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-1U35 (350W 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: 350W 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:	35A	18A	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 175W.  
The combined total power from 5V and 12V & 3.3V shall not exceed 328W
5. +5V SB DC Output 2A.

### 1.3 PS-ON

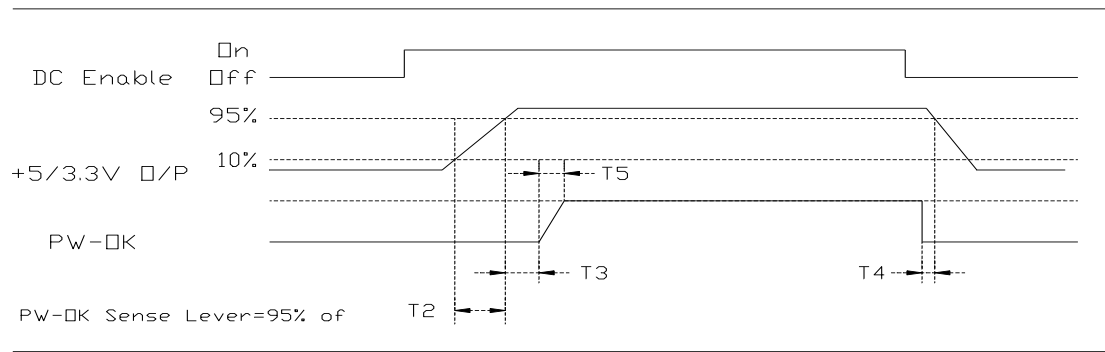
#### Remote On/Off Control:

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

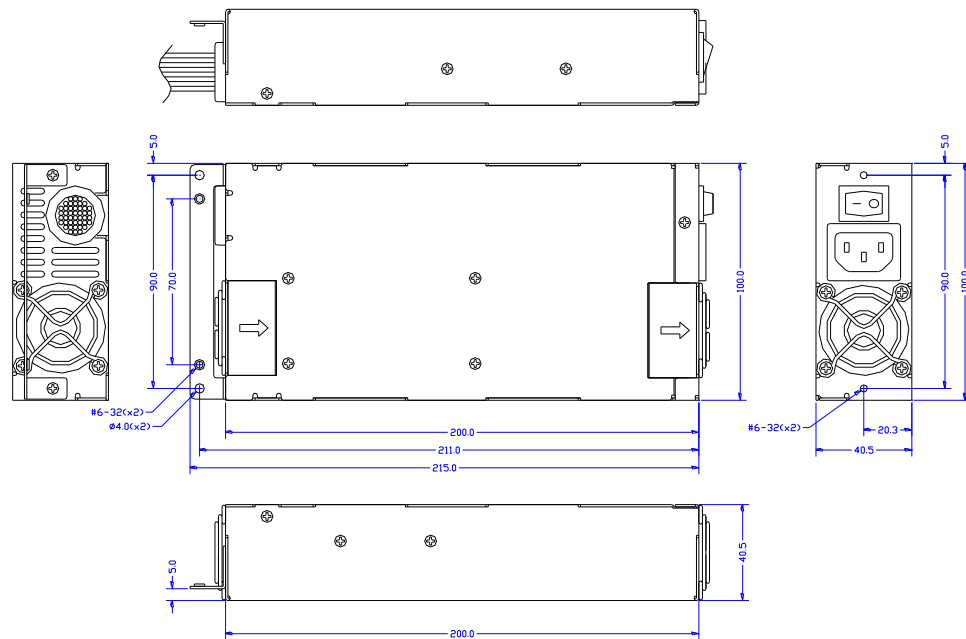
EN55022 CISPR22 Class A,

EN61000-3-3;1995

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

## 7. DIMENSION

L 200 x W 100 x H 40.5 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 5 ,  
Floppy x 1.

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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)	560mm/18AWG
	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	

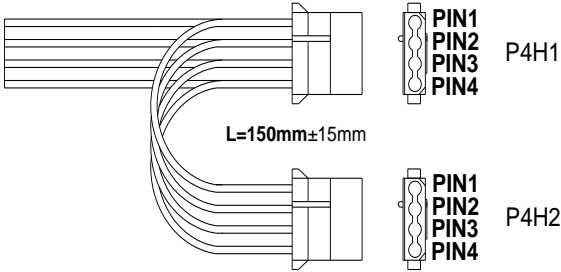
  

公差: TOLERANCES: .XXX= .XX= .X=	材料規格 MATERIAL	審核者 APPROVE BY:	繪圖者 DRAW BY:	單位 UNITS: mm	
投影法: PROJECTION: 第三角法	日期 DATE: 2010.12.23	簽名 SIGNATURE: Kevin	圖號 DRAW NO:	圖號 SHEET OF:	

REVISIONS			
REV	DESCRIPTION	SIGN	DATE
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L=480mm±15mm

**HDD 4P-480L+ HDD 4P-150L**

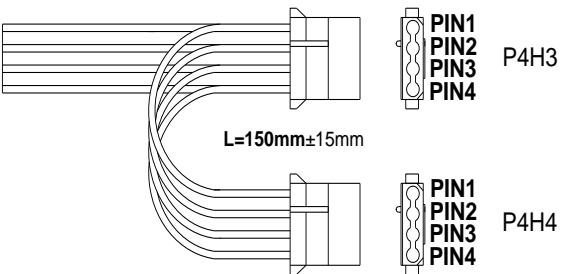


4Pins(HD/CD-ROM/RW):P4H1~P4H4  
Connector HOUSING: AMP 480424-0 or equivalent  
TERMINAL:AMP 60619-4 or equivalent  
4Pins(FLOPPY DISK):P4F  
Connector HOUSING: AMP 171822-4 or equivalent  
TERMINAL: AMP 170262-2 or equivalent

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	
		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	

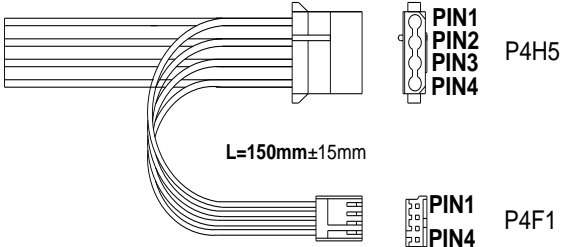
L=480mm±15mm

**HDD 4P-480L+ HDD 4P-150L**



L=480mm±15mm

**HDD 4P-480L+ FDD 4P-150L**



公差: TOLERANCES: .XXX= .XX= .X=	材料規格 MATERIAL	單位 UNITS	mm			
批准者 APPROVE BY:	審核者 CHECK BY:	繪圖者 DRAW BY:	圖號 DRAW NO:			
投影法 PROJECTION: 第三角法		日期 DATE	張數 SHEET	OF	姓名 MODEL NO	TC-1U30.35 HARNESS
		日期 DATE	2010.12.23	料號 PART NO		

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

2014/5/16