



SURE STAR COMPUTER CO., LTD

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Model: TC-600PF (ATX PS II 600W)

1. Specification

AC Input Voltage: 100~240V (Active PFC) Frequency: 47 to 63 Hz..

DC Output: 600W maximum

	Output	Output	Output	Output	Output
Voltage:	+5V DC	+12V DC	-5V DC	-12V DC	+3.3V DC
Maximum Load:	30A	V1:18A / V2:18A	0.8A	1A	30A
Minimum Load:	0.5A	0.5A / 0.5A	0A	0A	0.5A
Ripple:	50mv	120mv	50mv	120mv	40mv
Ripple/Noise:	100mv	150mv	100mv	240mv	40mv
Line Regulation:	±1%	±1%	±1%	±1%	±1%
Output Regulation:	±5%	±5%	±10%	±10%	±5%
Cross Regulation:	±5%	±5%	±10%	±10%	±5%

+5VSB: 2A

2. Hold-up time (Typ.): 16ms at maximum load & normal input voltage

3. RISE TIME: 20ms at full Load

4. Efficiency: 78% TYPICAL (Normal Line)

5. FUNCTION

5.1 REMOTE ON/OFF CONTROL : Power off: PS-ON = 2V min.

Power on: PS-ON = 0.8V max.

5.2 POWER GOOD SIGNAL : ON DELAY 100 ms ~ 500 ms

5.3 POWER FAIL DELAY: > 1msec.

6. PROTECTION

6.1 OVER VOLTAGE PROTECTION : +3.3V Output 4.1Vdc max.
+5V Output 6.5Vdc max.
+12V Output 14.3Vdc max.

6.2 OVER CURRENT PROTECTION: Not over 240VA for every output voltage.

6.3 SHORT CIRCUIT PROTECTION : All output equipped with short circuit.
(Shut down o/p voltage, re-power on to recover)

7. SAFETY & EMC

7.1 SAFETY STANDARDS:

MEET CUL UL 60950-1

MEET CB IEC60950-1

7.2 WITHSTAND VOLTAGE: I/P-O/P:1.5KVAC I/P-FG:1.5KVAC

7.3 ISOLATION RESISTANCE: I/P-O/P,I/P-FG,O/P-FG: 500VDC , 50M ohms min.

7.4 EMI CONDUCTION: Compliance CISPR22 Class B, FCC Class B

7.5 HARMONIC CURRENT: Compliance EN61000-3-2,-3

8. ENVIRONMENTS

8.1 Operating Temperature: 0°C to +40°C

8.2 Storage Temperature : -20°C to +70°C

8.3 OPERATING HUMIDITY : 20% to 90%,non-condensing

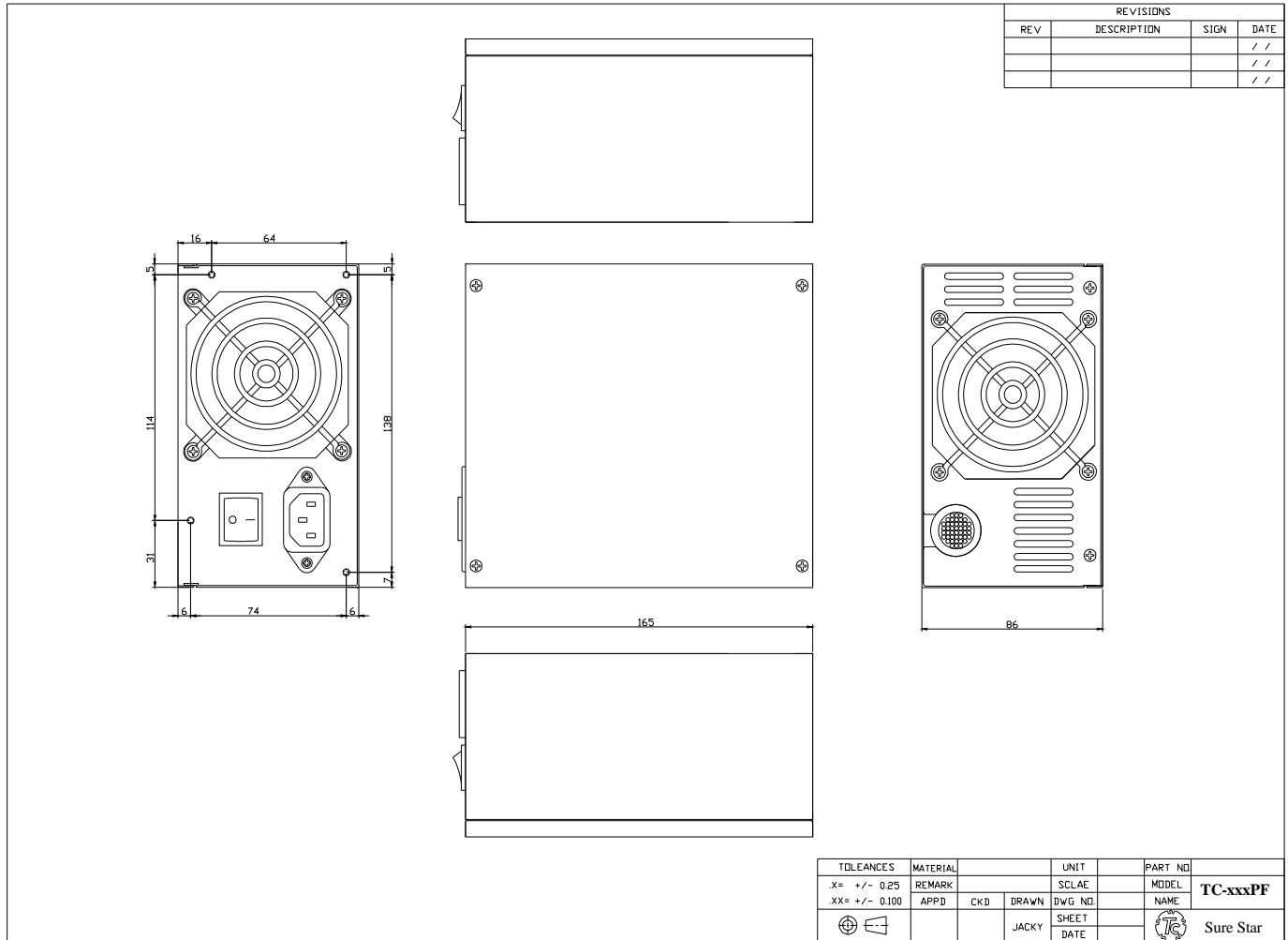
8.4 STORAGE HUMIDITY: 5% to 95%, non-condensing

9. OTHERS

7.1 MTBF: 100K hrs min. MIL-HDBK-217F ,Notice2, (25°C)

10. DIMENSION

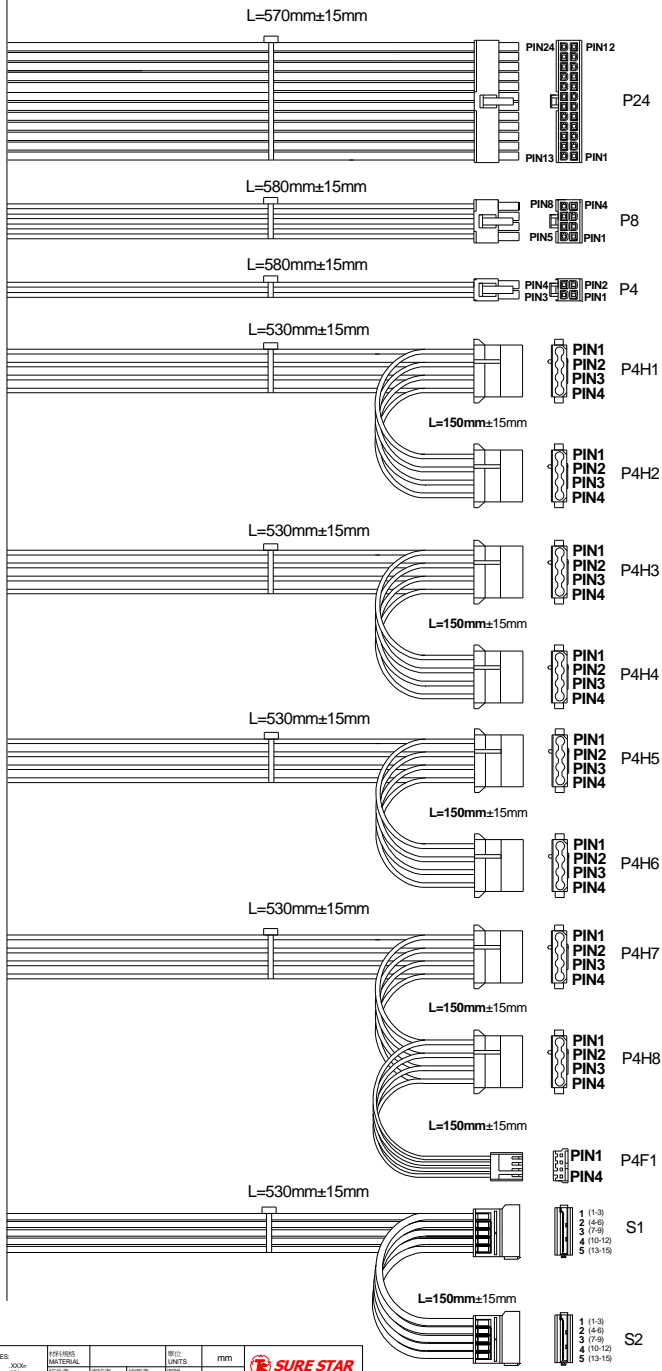
L 165 x W 150 x H 86 mm



11. PINOUTS OF CONNECTORS

Main power connector 24 Pin x 1 ,
 M8P +12V Power Connector x 1 ,
 M4P +12V Power Connector x 1
 Peripheral power connector x 8 ,
 Floppy Drive connector x 1,
 Serial ATA power connector x 2.

WIRE OUTPUT FROM PSU CASE



DESIGN TOLERANCES	DIFF. MESH MATERIAL	REV. UNITS	mm	
±0.05	±0.05	mm		
PRODUCTION	DATE	2010.12.23	2010.12.23	TC-300PF HARNESS

REVISONS			
REV	DESCRIPTION	SIGN	DATE
03			/ /

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)	570mm/18AWG	13	PURPLE(+3.3V)	570mm/18AWG
	2	PURPLE(+3.3V)	570mm/18AWG	14	PURPLE(+3.3V)	570mm/22AWG
	3	PURPLE(+3.3V)	570mm/18AWG	15	BLUE(-12V)	570mm/18AWG
	4	BLACK(GND)	570mm/18AWG	16	BLACK(GND)	570mm/18AWG
	5	RED(+5V)	570mm/18AWG	17	GRAY(PS-ON)	570mm/20AWG
	6	RED(+5V)	570mm/18AWG	18	BLACK(GND)	570mm/18AWG
	7	BLACK(GND)	570mm/18AWG	19	BLACK(GND)	570mm/18AWG
	8	ORANGE(PG)	570mm/18AWG	20	WHITE(-5V)	570mm/18AWG
	9	BROWN(+5VSB)	570mm/18AWG	21	RED(+5V)	570mm/18AWG
	10	YELLOW(+12V)	570mm/18AWG	22	RED(+5V)	570mm/18AWG
	11	YELLOW(+12V)	570mm/18AWG	23	RED(+5V)	570mm/18AWG
	12	PURPLE(+3.3V)	570mm/18AWG	24	BLACK(GND)	570mm/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	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	

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	

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	530mm ±15mm
P4H3	2	BLACK	COM	18AWG	
P4H5	3	BLACK	COM	18AWG	
P4H7	4	RED	+5V	18AWG	

Housing	Pin No.	WIRE COLOR	SIGNAL	WIRE SIZE	LENGTH
P4H2	1	YELLOW	+12V	18AWG	150mm ±15mm
	2	BLACK	COM	18AWG	
	3	BLACK	COM	18AWG	
	4	RED	+5V	18AWG	

Housing	Pin No.	WIRE COLOR	SIGNAL	WIRE SIZE	LENGTH
P4F1	1	YELLOW	+12V	22AWG	150mm ±15mm
	2	BLACK	COM	22AWG	
	3	BLACK	COM	22AWG	
	4	RED	+5V	22AWG	

SATA-530L+ SATA-150L

HOUSING	Pin No.	WIRE COLOR	LENGTH
S1	1	Orange/Orange	530mm±15mm
	2	Black/Black	530mm±15mm
	3	Red / Red	530mm±15mm
	4	Black/Black	530mm±15mm
	5	Orange/Orange	530mm±15mm
S2	1	Orange	150mm±15mm
	2	Black	150mm±15mm
	3	Red	150mm±15mm
	4	Black	150mm±15mm
	5	Yellow	150mm±15mm