



SPECIFICATION

MODEL NO. : PUC1500V
1500 WATTS SWITCHING POWER SUPPLY
VERSION 0.2
< MAY. 04. 2007 >

DESCRIPTION	SPECIFICATION FOR 1500W POWER SUPPLY		
MODEL NO.	<i>PUC1500V</i>		
APPROVED BY	CHECKED BY	DESIGNED BY	PREPARED BY
			SAM

HEAD OFFICE : 3F-2,888 Jing – Gwo Rd., Taoyuan City, Taiwan, R.O.C

TEL : 886 - 3 - 222 -0268

FAX : 886-3-222-0213~

1.0 INPUT:	3
1.1 VOLTAGE	3
1.2 FREQUENCY	3
1.3 CURRENT	3
1.4 INRUSH CURRENT	3
1.5 POWER EFFICIENCY	3
1.6 LEAKAGE CURRENT	3
1.7 POWER FACTOR.....	3
2.0 OUTPUT:	3
2.1 REMOTE ON/OFF.....	4
2.2 HOLD-UP TIME.....	4
2.3 POWER GOOD DELAY	4
2.4 POWER FAIL DELAY.....	4
2.5 TURN-ON DELAY TIME.....	4
2.6 TRANSIENT OVERSHOOT	5
2.7 RISE TIME	5
3.0 PROTECTION:	5
3.1 OVER CURRENT PROTECTION	5
3.2 OVER VOLTAGE PROTECTION.....	5
3.3 SHORT PROTECTION	5
3.4 UNDER VOLTAGE PROTECTION.....	5
4.0 ENVIRONMENT:	5
4.1 OPERATING TEMP	5
4.2 STORAGE TEMP.....	6
4.3 OPERATING HUMIDITY	6
4.4 STORAGE HUMIDITY.....	6
4.5 OPERATING ALTITUDE	6

4.6 STORAGE ALTITUDE.....6

5.0 HI-POT:.....6

5.1 PRIMARY TO SECONDARY..... 6

5.2 INSULATION RESISTANCE6

6.0 CE REQUIREMENTS:.....6

6.1 CONDUCTED EMI.....6

6.2 SAFETY STANDARDS6

6.3 HARMONIC.....7

7.0 MTBF at 25⁰C (demonstrated).....7

8.0 DIMENSIONS.....7

1.0 INPUT:**1.1 VOLTAGE**

MINIMUM	NOMINAL	MAXIMUM	UNITS
180	230	264	Vrms

1.2 FREQUENCY

47Hz ~ 63Hz

1.3 CURRENT

230Vac / 10A max.

1.4 INRUSH CURRENTAC input 230Vac at 25⁰C cold start power no damage.**1.5 POWER EFFICIENCY****80% (min.) at full load(typical) and 230Vac input.****1.6 LEAKAGE CURRENT**

3.5mA max.

1.7 POWER FACTOR

PF > 0.9

2.0 OUTPUT:

Voltage	+12V1	+12V4	+3.3V	+12V2	+12V3	+5V	-12V	+5Vsb
Max load	20.0A	40.0A	30.0A	20.0A	40.0A	30.0A	0.8A	3.5A
Min load	1A	1A	0.5A	1A	1A	0.5A	0.0A	0.0A
*1 Ripple	120mV	120mV	50mV	120mV	120mV	50mV	120mV	50mV
*1 Ripple & Noise	240mV	240mV	100mV	240mV	240mV	100mV	240mV	100mV
Regulation	+3,-3%	+3,-3%	+3,-3%	+3,-3%	+3,-3%	+3,-3%	+10,-10%	+3,-5%
Max output power	750W			750W			9.6W	17.5W
Total power	1500W							

* 1.Add 0.1uF and 47uF capacitors across output terminal during ripple & noise test.

* 2. The all of output can not connect use because they all work are independent.

LOAD REGULATION TEST TABLE:

	+12V1	+12V2	+12V3	+12V4	+5V	+3.3V	-12V	+5Vsb
LOAD1	1A	1A	1A	1A	0.5A	0.5A	0A	0.1A
LOAD2	3A	3A	5A	5A	5.5A	5.5A	0.15A	0.5A
LOAD3	4.5A	4.5A	7A	7A	9A	9A	0.25A	1A
LOAD4	5.5A	5.5A	10A	10A	11A	12A	0.35A	1.3A
LOAD5	7.5A	7.5A	12A	12A	15A	14A	0.4A	1.7A
LOAD6	8.5A	8.5A	14.5A	14.5A	19A	18A	0.5A	2A
LOAD7	9.5A	9.5A	17.5A	17.5A	21A	21A	0.6A	2.3A
LOAD8	10.5A	10.5A	20A	20A	25A	25A	0.7A	2.8A
LOAD9	12.5A	12.5A	22A	22A	27.5A	27.5A	0.7A	3.1A
LOAD10	13.5A	13.5A	22A	28A	30A	30A	0.8A	3.5A
LOAD11	20A	20A	31A	31A	30A	30A	0.8A	3.5A
LOAD12	10.9A	10.9A	40A	40A	30A	30A	0.8A	3.5A

2.1 REMOTE ON/OFF

TTL High/PS-OFF; TTL Low/PS-ON

$V_{IL}=0.8V_{max}$, $I_{IL}=-1.6mA_{max}$ @ $V_{in}=0.4V$

$V_{IH}=2.0V_{min}$ @ $I_{in}=-200\mu A$, $V_{IH}=5.25V_{max}$ @ open ckt.

2.2 HOLD-UP TIME

13msec (minimum) 80% load at 230Vac input.

2.3 POWER GOOD DELAY

100-500 msec.

2.4 POWER FAIL DELAY

>1 msec.

2.5 TURN-ON DELAY TIME

2000 msec max. At Nominal Line Full Load.

2.6 TRANSIENT OVERTHOOT

+/- 10% max with 20% load change on all outputs are 50% of the rated.

Load slew rated 0.5A/uS and capacitive load as below :

+5V	+3.3V	+12V1	+12V2	+12V3	+12V4	-12V	+5Vsb
1000uF	1000uF	2200uF	2200uF	2200uF	2200uF	NA	1uF

2.7 RISE TIME

20ms max at full load.

3.0 PROTECTION:

When OCP, OVP ,UVP,OTP,OPP,or short protection is triggered, the main outputs will be latched off. The main outputs can be reset by cycling the DC remote on/off or AC power. +5Vsb output is auto recovery when fault condition removed.

3.1 OVER CURRENT PROTECTION

+12V1 & +12V2 22A~35A

+12V3 & +12V4 42A~60A

+5V 33A~50A

+3.3V 33A~50A

3.2 OVER VOLTAGE PROTECTION

+3.3V output 4.5 Vmax.

+5.0V output 7.0 Vmax.

+12.0V output 15.6 Vmax.

3.3 SHORT PROTECTION

All output to GND.

3.4 UNDER VOLTAGE PROTECTION

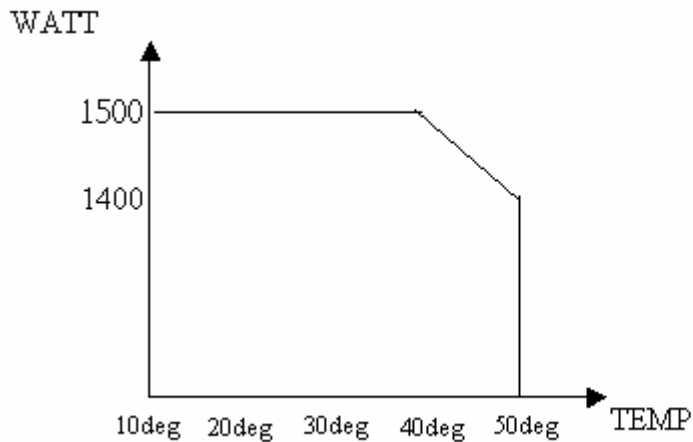
+3.3V output 2.0 Vmin.

+5.0V output 3.3 Vmin.

+12.0V output 8.5 Vmin.

4.0 ENVIRONMENT:

4.1 OPERATING TEMP. 10 °C to +50 °C



4.2 STORAGE TEMP. -20 °C to +70 °C

4.3 OPERATING HUMIDITY 20% to 90%,non-condensing

4.4 STORAGE HUMIDITY 5% to 95%, non-condensing

4.5 OPERATING ALTITUDE 0 to 10,000 feet

4.6 STORAGE ALTITUDE 0 to 50,000 feet

5.0 HI-POT:(Input/Output isolation)

5.1 PRIMARY TO SECONDARY

3535Vdc for 3 seconds

5.2 INSULATION RESISTANCE

Primary to earth ground 500Vdc , 50M ohms Min.

6.0 CE REQUIREMENTS

6.1 CONDUCTED EMI

1. MEET FCC : Class B
2. MEET CISPR 22 : Class B
3. MEET BSMI : Class B

6.2 SAFETY STANDARDS

1. MEET CUL (UL 60950)
2. MEET TUV EN60950
3. MEET CB (IEC60950)

4. MEET CE

5. MEET CCC

6.3 HARMONIC

MEET IEC1000-3-2,Class D

7.0 MTBF at 25°C(demonstrated)

100K hrs minimum

8.0 DIMENSIONS

WxLxH=150x200x86mm