



6 W POWER SUPPLY

Engineering specification

Model : SYS1196-0605-W2E

Part No: SYS1196-0605

Item No.		page
0	General	
1	Input Requirements	2
2	Output Requirements	3
3	Protection	5
4	PLD	6
5	COOLING	7
6	EMC	7
7	Leakage Current	8
8	Safety Approval	8
9	Hi-Pot	8
10	Environment	8
11	Vibration	8
12	MTBF	8
13	Mechanical	9
14	DC output connector type and pin assignment	9
15	Label specification	9
16	Package	9

6 W POWER SUPPLY

Engineering specification

Model : SYS1196-0605-W2E

Part No: SYS1196-0605

General

The specification defines the performance characteristics of a 6 W, Single Output level switching power supply for _____. The power supply has designed highly reliable and meet international safety and radiation requirements.

1.0 Input requirements

1.1 Input voltage range

Type	Low range	High range
Nominal	115Vac	230Vac
Minimum	90Vac	185Vac
Maximum	132Vac	264Vac
Frequency	47-63Hz sine wave 1 ϕ	47-63 Hz sine wave 1 ϕ

Auto range - switch at approximately 150Vac \pm 5Vac

Universal range - 90~264Vac

Range - Selectable by jumper connector or wire.

Range - Selectable by switch.

1.2 Input Current

0.3A rms max	At AC low line input and DC output full load
--------------	--

1.3 Input protection

1A Fuse	The power supply shall be protected against power line surges and any abnormal condition.
---------	---

1.4 Input surge current

50A max	At power supply cold start, ambient temperature 25°C @ 230Vac nominal AC input.
---------	--

6 W POWER SUPPLY

Engineering specification

Model : SYS1196-0605-W2E

Part No: SYS1196-0605

1.5 Efficiency

60%min	At AC nominal input@ output full load
--------	---------------------------------------

1.6 Hold up time

10ms min	At AC nominal input@ output full load (1 half cycle)
----------	---

1.7 Power consumption

1.0W rms max	At AC nominal input@output min load
--------------	-------------------------------------

2.0 Output requirements

2.1 Turn on delay

3000 ms max	At AC low line input@output full load
-------------	---------------------------------------

* Test on delay is measured from 0 voltage output to the main output regulation.

2.2 DC output regulation

Voltage	Loading(A)			Tolerance Range	Regulation	
	Min	Normal	Max	Total Regulation	Line	Load
+5V	0		1.2A	±5%		

* Total regulation involved line regulation load regulation cross regulation---etc

* Line regulation is measured from 90Vac to 132Vac or 185vac to 264vac

* Load regulation is measured all output from min load to max load at 115vac
or 230vac nominal AC input voltage.

6 W POWER SUPPLY

Engineering specification

Model : SYS1196-0605-W2E

Part No: SYS1196-0605

2.3 Ripple/noise *

Voltage	Low frequency *1	High frequency *2	* 3	* 4
(DC)	Ripple mv(p-p)	Ripple mv(p-p)	Noise mv(p-p)	Ripple/Noise(p-p)
+5V	—	—	—	150mV

* The ripple is measured from peak to peak with band width limit of 20MHZ

(By passed at the end of connector with 10uf electrolytic and 0.1uf ceramic disk capacitor under DC output full Load, AC nominal input 25°C ambient temperature).

* 1.2.3.4 Unless has special requirements otherwise * 4 is the testing spec.

2.4 Output transient response (dv , tmax)

0.3 v dv max	At AC nominal input loading from 50% load to max load or peak load.
3.5ms t max	Dynamic rise time 10uS max , duty 40mS max , Dynamic load step is slew rate of 0.5A/Us

* Test only for main output or designed by customer.

2.5 Burn in test : Will be defined after meeting.

2.6 Led display : None

6 W POWER SUPPLY

Engineering specification

Model : SYS1196-0605-W2E

Part No: SYS1196-0605

3.0 Protection

3.1 Short protection / Over current protection

The power supply will self-protect any output to ground, And auto recovery when abnormal circuit faults remove.

An output short circuit is defined as any output impedance of less than 0.1 ohms.

Short current and over current can not exceed 8A max after 1 min. at nominal line input.

Voltage	OCP Current(A)	Power in(W)	OCP method		
			latch off	Current limit	Fold back
+5V	2.5 ±1		□	□	☒
			□	□	□
			□	□	□
			□	□	□
			□	□	□

3.2 Over voltage protection

Voltage	OVP range	OVP Method		
		Latch off	Auto recovery	Voltage limit
+5V	7±1V	□	□	☒
		□	□	□
		□	□	□
		□	□	□
		□	□	□



6 W POWER SUPPLY

Engineering specification

Model : SYS1196-0605-W2E

Part No: SYS1196-0605

3.3 No load protection

The power supply is provided with noload operation to prevent the power supply and system from damage.

4.0 PLD (power line disturbance)

4.1 LINE POWER SURGE

The power supply shall meet its specification with a rise in AC voltage to 120% of maximum rated line voltage (288 voltage for 100-240 Vac operation)for a maximum of 20 milliseconds at 50Hz and 16 millisecond at 60Hz.The surge is to be applied five times with an internal of one minute between surges.

4.2 LINE VOLTAGE SAG

The power supply shall continue to meet its specifications with a line voltage drop (and subsequent return to minimum rated voltage)to 68 Vac with a total power sag cycle time of 20 ms (rise and fall time shell equal 10 ms each).

5.0 COOLING

Cooling Method	
By ___ mm fan force air cooling	<input type="checkbox"/>

PROPERTY OF SUNNY COMPUTER TECHNOLOGY CO.,LTD. DO NOT BE USED OR DUPLICATED WITHOUT PERMISSION OF THE OWNER	DATE : 04 / 06 / 10 FINAL REV : V1.0 FILE ADDRESS : TCRD1738.DOC
---	--



6 W POWER SUPPLY

Engineering specification

Model : SYS1196-0605-W2E

Part No: SYS1196-0605

By nature air.	<input checked="" type="checkbox"/>
----------------	-------------------------------------

6.0 EMC

Meet EN55022 class B, Fcc part 15 Sub part B class B.

6.1 CE spec.

EN55022 Limits and methods of measurement of radio disturbance characteristics of information technology equipment.

EN55011 Limits and methods of measurement of radio disturbance characteristics of industrial, scientific and medical(ISM) high frequency equipment.

EN55014 Limits and methods of measurement of radio disturbance characteristics of household electrical appliances, portable tools and similar electrical apparatus.

EN61000-3-2 By household appliances and similar electrical equipment "Harmonics".

EN61000-3-3 By household appliances and similar electrical equipment "Voltage fluctuations".

EN50082-1 By EMS TEST:

ESD Measurement(EN61000-4-2)

RF Field strength Susceptibility Measurement(EN61000-4-3).

Electrical Fast Transient/Burst Measurement(EN61000-4-4).

Surge Immunity Test(EN61000-4-5).

7.0 Leakage current : 0.25 mA max.

8.0 Safety approval

A : TUV D : _____ G : _____

B : CB E : _____ H : _____

C : _____ F : _____ I : _____

9.0 HI-POT

PROPERTY OF SUNNY COMPUTER TECHNOLOGY CO.,LTD. DO NOT BE USED OR DUPLICATED WITHOUT PERMISSION OF THE OWNER	DATE : 04 / 06 / 10 FINAL REV : V1.0 FILE ADDRESS : TCRD1738.DOC
---	--

6 W POWER SUPPLY

Engineering specification

Model : SYS1196-0605-W2E

Part No: SYS1196-0605

HI-POT---A IEC 320 3pin primary to secondary (FG) 1500Vac 10mA 1min

HI-POT---B IEC 320 2pin primary to secondary 3000Vac 10mA 1min

10. Environment

TEMPERATURE AND HUMIDITY

OPERATING TEMPERATURE _____ 0 DEGREES C TO 40 DEGREES C.

OPERATING HUMIDITY _____ 8% TO 90% RH.(RELATIVE HUMIDITY).

STORAGE TEMPERATURE _____ -20 DEGREES C TO 85 DEGREES C.

STORAGE HUMIDITY _____ 5% TO 95% RH.(RELATIVE HUMIDITY).

11. Vibration

SWEEP AND RESONANCE SEARCH

FREQUENCY	DURATION	AXIS	AMPLITUDE
5-20-500	30 MINUTES	X,Y,Z	1G

12. M.T.B.F

Shall be 35000 power on hours on greater under 25 degrees C of ambient temperature MTBF under evaluated under.

13. Mechanical

13.1 Dimension unit : (mm)(max)

L×W×H= 55 × 28 × 42

13.2 Weight (g) :

13.3 Drawing : As Attachment()



6 W POWER SUPPLY

Engineering specification

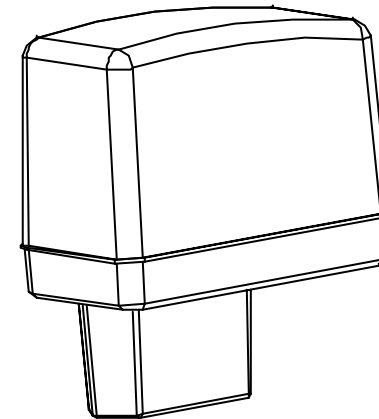
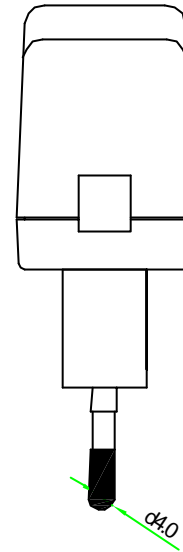
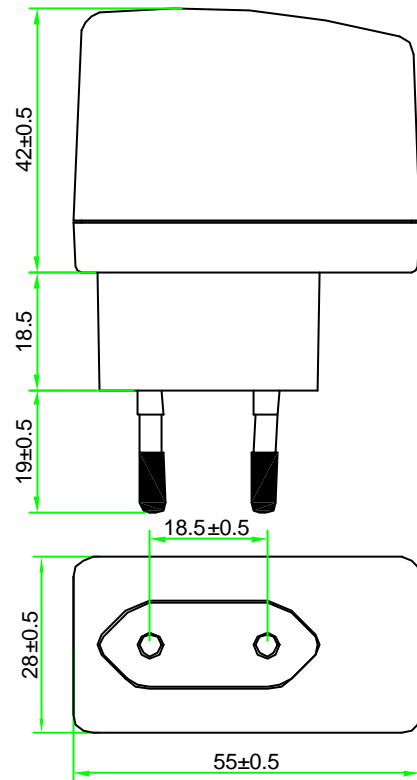
Model : SYS1196-0605-W2E

Part No: SYS1196-0605

14. DC output connector type and pin assignment : As Attachment()

15. Label specification : As Attachment()

16. Package : As Attachment()



TEL:(0769)3377756-9 3377358

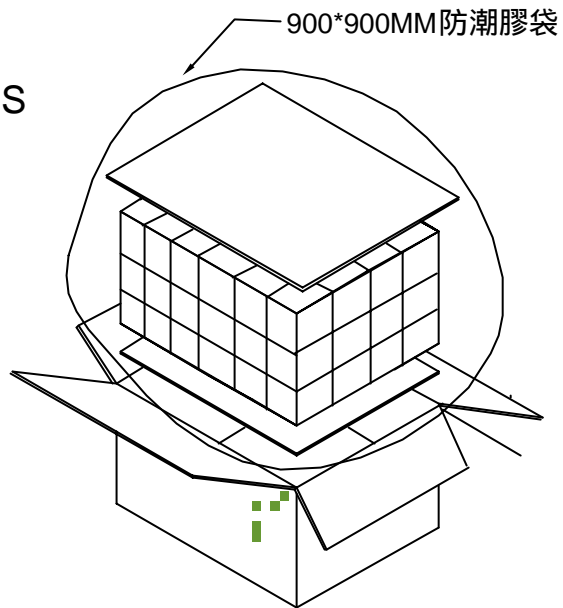
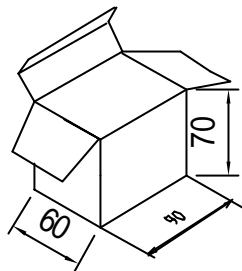
FAX:(0769)3377351-2

Email:sales@sunny-group.com.tw

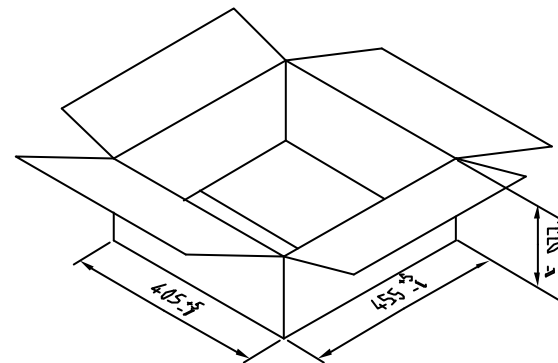
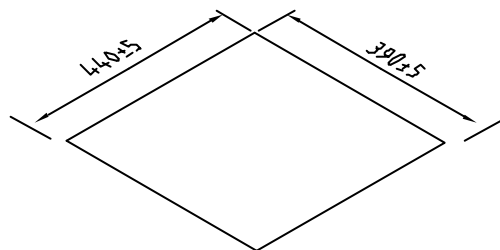
MODEL NAME	SYS1196-W2E			APPROVAL2		ISSUED STAMP			
PART NO.		UNIT	mm	APPROVAL1					
DRAWING NAME	APPEARANCE	TOLERANCES UNLESS OTHERWISE SPECIFIED		ENGINEER					
PART NAME		LINEAR	0.0±0.1	DRAWING BY	HUANG DE SHENG 29				
			0.00±0.01						
DWG PATH:			0.000±0.005	DOC.NO.		SCALE	1:1	SHEET	1 of 1
		ANGLE	±2°						

* PROPERTY OF SUNNY COMPUTER TECHNOLOGY CO.,LTD.DO NOT BE USED OR DUPLICATED WITHOUT PERMISSION OF THE OWNER.STYLE:192-V1.0

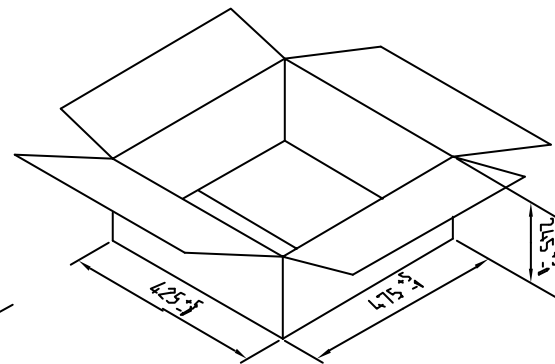
小白盒:90(L)*60(W)*70(H) 72PCS



天地板X2Pcs



內箱



外箱

外箱: 475(L)x425(W)x245(H)

內箱: 455(L)x405(W)x220(H)

Q'TY: 6(L)x4(W)x3(H)=72PCS



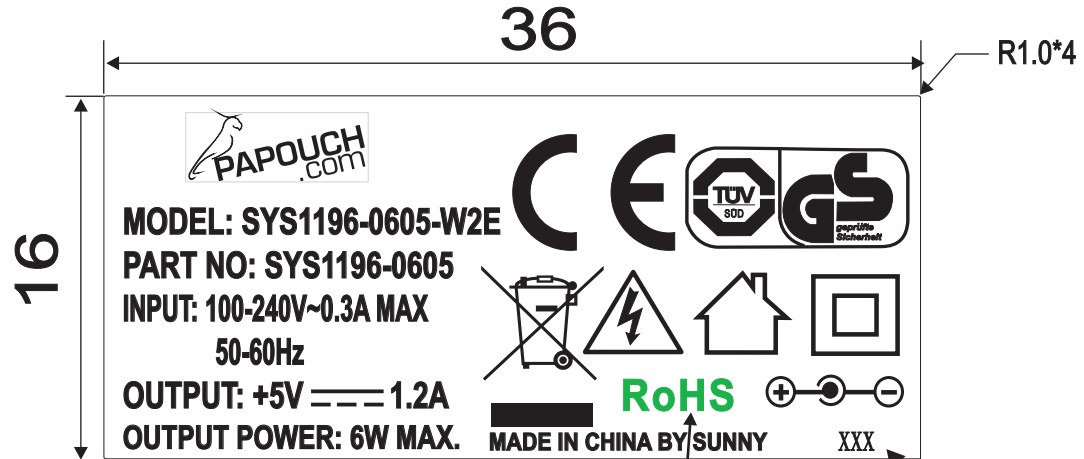
Sunny

包裝規定

機種: SYS1196系列	天地板: G11740023A0**A=A	裝箱量: 72PCS
外箱: G11720028A0**A=A	蜂巢組: _____	層數: 3
內箱: G11720030A0**A=A	防潮袋: G1175089*****	Page : 1/1
白盒: G11710238A0**	PE袋: _____	Date : 2005/06/23
核准: _____	審核: _____	NO. : M62090506010
	制作: 韋瑞恭	REV : V1.0



SCALE:1.0X



Green color:PANTONE 7488C

LABEL maker code

SCALE:3.0X

NOTE:

1>黑底白字雾面

2>.Material: PVC

3>.Thickness : 180#

4>.Tolerance:+/-0.1mm

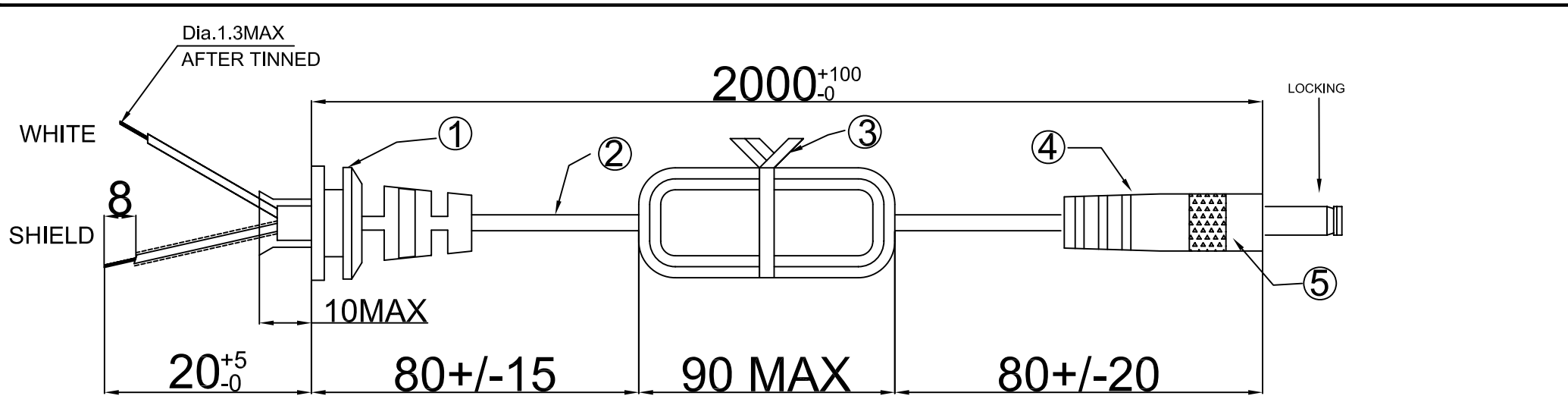


TEL : (0769)8337756-9 83377358

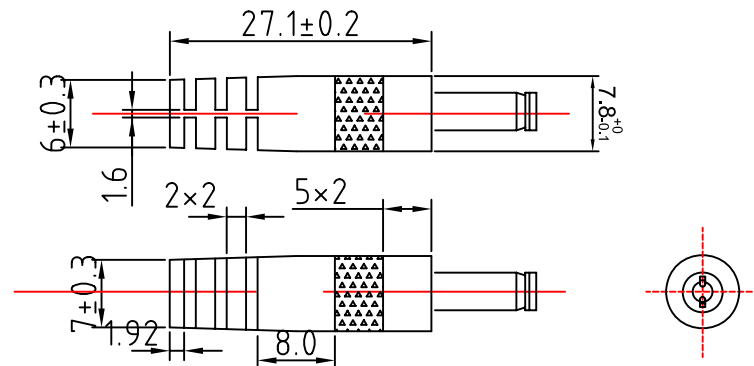
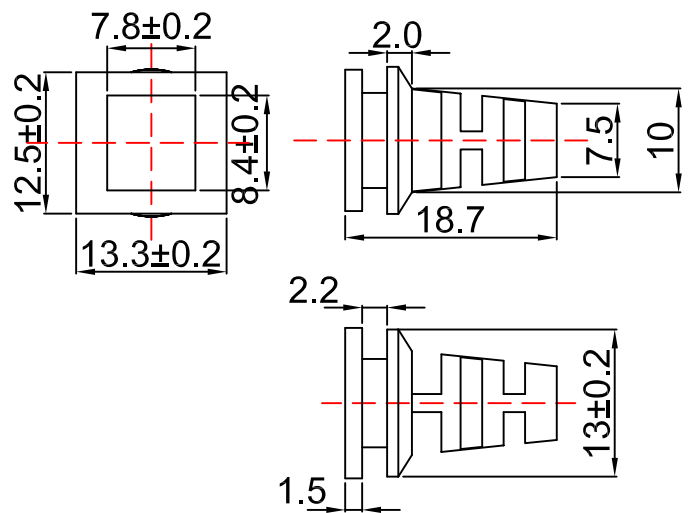
FAX:(0769)83377351-2

Email:sales@sunny-group.com

MODEL NAME	SYS1196-0605-W2E			APPROVAL2		ISSUED STAMP
PART NUMBER	G1151050125A0	UNIT	mm	APPROVAL1	Cynthia 8/16	
DRAWING NAME	LABEL	TOLERANCES UNLESS OTHERWISE SPECIFIED		ENGINEER		
PART NAME		LINEAR	0.0 +/- 0.1 0.00+/- 0.01 0.000+/- 0.001	DRAWING BY	LU SUN 8/16	
DWG PATH:DICOREL\LABEL		ANGEL	+/- 2degree	DOC.NO.		SCALE 1:1 SHEET 1 Of 1



#1196-0605-W2E



WHITE(POSITIVE) —●— SHIELD(NEGATIVE)

NO.	SPECIFICATION	Q' TY	REMARK
5	FEMALE BARREL/SPRING LOADAED/ LOCKING/ BLACK	1 PC	1.35*3.5*10
4	PLUG P073	1 PC	
3	MINI TIE=130mm BLACK	1 PC	
2	1185#20*1C+SHIELD PVC. BLACK 80°C.	1 PC	UL APPROVAL
1	SR18 軟材質	1 PC	

Sunny
 TEL:(0769)8337756-9 83377358
 FAX:(0769)83377351~2
 Email:Sales@Sunny-group.com

MODEL NAME	
PART NO	G1074600339003020*
DRAWING NAME	DC CABLE
PART NAME	DC CABLE
DWG PATH:	

UNIT	mm
TOLERANCES UNLESS OTHERWISE SPECIFIED	
LINEAR	0.0 +/-0.1
	0.00±/-0.01
	0.000±/-0.005
ANGLE	+/-2 degree

APPROVAL 2	
APPROVAL 1	Cynthia 8/16
ENGINEER	
ENGINEER	Linda 8/16
DOC.NO.	

ISSUED STAMP	
SCALE	
SHEET	1 OF 1