

# **MEAN WEL**

### SWITCHING POWER SUPPLY **ISO-9001 CERTIFIED MANUFACTURER**

## **PSP-500 SERIES**

LOW COST, HIGH RELIABILITY

BUILT IN EMI FILTER, CURRENT SHARING CIRCUIT

BUILT IN REMOTE CONTROL, REMOTE SENSE,

POWER GOOD SIGNAL

.100% FULL LOAD BURN-IN TEST .105°C OUTPUT CAPACITOR .BUILT IN PFC CIRCUIT PFC>=0.95, COMPLIES WITH EN61000-3-2



.SHORT CIRCUIT, OVERLOAD, OVER VOLT	TAGE, OVER TE	MP. PROTECTE	ED 🕥			Marie		MAM. TOOX.COM
MODEL SPECIFICATION	PSP-500 -5	PSP-500 -12	PSP-500 -13.5	PSP-500 -15	PSP-500 -24	PSP-500 -27	PSP-500 -48	TIMM.
DC OUTPUT VOLTAGE	5V (	12V	√ 13.5V	15V	24V	27V	48V	TANN OUT CO
OUTPUT V. TOLERANCE	±2%	±1%	±1%	±1%	±1%	±1%	±1%	WW. 100X.C
OUTPUT RATED CURRENT	80A	41.5A	37A	33A	20.8A	18.5A	10.5A	MMM.100X
OUTPUT CURRENT RANGE	0-80A	0-41.5A	0-37A	0-33A	0-20.8A	0-18.5A	0-10.5A	INMM:Inc
RIPPLE & NOISE(Vp-p)	100m	150m	150m	150m	150m	150m	200m	
LINE REGULATION	±0.5%	±0.3%	±0.3%	±0.3%	±0.2%	±0.2%	±0.2%	
LOAD REGULATION	±2%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	MAM.TO
DC OUTPUT POWER	400W	498W	499.5W	495W	499.2W	499.5W	504W	CM MMM'I
EFFICIENCY	76%	82%	82%	82%	84%	84%	86%	LM MM
DC VOLTAGE ADJ.	4.75-5.5V	10-13.2V	12-15V	13.5-18V	20-26.4V	24-30V	41-56V	TH WWW
INPUT VOLTAGE RANGE	90~264VAC	47~63Hz; 127~	370VDC		W	MW.	NY.CO	TW WWY
AC CURRENT	7A/115V 3.5A/230V						DATA W	
POWER FACTOR	0.98/100VAC 0.95/230VAC							M.T. W.
INRUSH CURRENT	20A/115V 40A/230V							OWITH A
LEAKAGE CURRENT	<1mA/240VAC							COM.TV
OVERLOAD PROTECTION	110~125% TYPE:CONSTANT CURRENT LIMITING RESET:AUTO RECOVERY							COMITY
OVER VOLTAGE PROTECTION	5.75~6.75	13.8~16.2V	15.5~18.2V	18~21V	27.6~32.4V	31~36.5V	57.6~67.2V	COM.TW
OVER TEMP.PROTECTION	RTH2>=95°C OUTPUT SHUTDOWN							Y.CO.
REMOTE CONTROL	RC+/RC-: 0~0	RC+/RC-: 0~0.8V=POWER ON; 4~10V=POWER OFF SINK CURRENT 4~10mA						勝 特 力 材 料 886-3-
TEMP. COEFFICIENT	±0.03% / °C (0-50°C)						胜特力电子(上海) 86-21-	
SETUP, RISE, HOLD UP TIME	1.5s, 50ms, 15ms						胜特力电子(深圳) 86-75	
VIBRATION	10~500Hz, 20	10~500Hz, 2G 10min./1cycle, PERIOD FOR 60min. EACH AXES						Http://www.100y.c
WITHSTAND VOLTAGE	I/P-O/P:3KVA0	VP-O/P:3KVAC VP-FG:1.5KVAC O/P-FG:0.5KVAC						N. No.
ISOLATION RESISTANCE	VP-O/P, VP-FG, O/P-FG:500VDC / 100M Ohms					W.100Y.COM.TW		
WORKING TEMP., HUMIDITY	-10°C~+60°C(REFER TO OUTPUT DERATING CURVE), 20%-90% RH WITH 30CFM FORCED AIR						1 100Y.C	
STORAGE TEMP., HUMIDITY	-20°C~+85°C, 10%~95% RH						I N A A A A	
DIMENSION	278*127*63.5mm							
WEIGHT	2.5 Kgs							
SAFETY STANDARDS	UL1950, TUV EN60950 APPROVED							
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券特力材料886-3-5753170 生特力电子(上海) 86-21-54151736 性特力电子(深圳) 86-755-83298787

Http://www.100y.com.tw

EMC STANDARDS NOTE:

1.ALL PARAMETERS ARE SPECIFIED AT 230VAC INPUT, RATED LOAD, 25°C 70% RH. AMBIENT.

2.TOLERANCE GINCLUDE SET UP TOLERANCE, LINE REGULATION, LOAD REGULATION.

3.RIPPLE & NOISE ARE MEASURED AT 20MHz BY USING A 12" TWISTED PAIR TERMINATED WITH A 0.1uF & 47uF CAPACITOR.

4.LINE REGULATION IS MEASURED FROM LOW LINE TO HIGH LINE AT RATED LOAD.

5.LOAD REGULATION IS MEASURED FROM 0% TO 100% RATED LOAD. 6 REFER TO OUTPUT DERATING CURVE VS INPUT VOLTAGE

7.IN PARALLEL CONNECTION, MAYBE ONLY ONE UNIT OPERATED, IF THE TOTAL OUTPUT LOAD LESS THAN 5% OF RATED LOAD CONDITION

CISPR22(EN55022)CLASS B, EN61000-4-2,3,4,5,6,8,11;ENV50204 EN61000-3-2 VERIFICATION

2002-07-23

勝 特 力 材 料 886-3-5753170 PSP-500 SERIES 胜特力电子(上海) 86-21-54151736 胜特力电子(深圳) 86-755-83298787 CURRENT BLOCK DIAGRAM Http://www.100y.com.tw FAN **SHARING** PF o PF RECTIFIERS RECTIFIERS **POWER** 1/P 0-SWITCH-FILTER P.F.C. FILTER ING O.C.P. FG o DETECTION 0.L.P. **PWM** CIRCUIT CONTROL O.T.P. 0.V.P. fosc: 134KHz OUTPUT DERATING VS INPUT VOLTAGE OUTPUT DERATING VS LOAD 90 PSP-500-12~48 100 80 LOAD (%) 60 70 40 50 20 40 50 60 10 20 30 115 135 230 AMBIENT TEMP. (♥) INPUT VOLTAGE (V) 60Hz DIMENSION (mm) **⊠ CONTROL PIN NO. ASIGNMENT** MATING CONNECTOR **⊠ CASE** : 919 ☑ Molex 5559-NP Uses 5558 Male Crimp Terminal ☑ Molex 5557-NR Uses 5556 Female ☑ I/P TERMINAL PIN NO. ASSIGNMENT ☑ PIN 1 : P(CURRENT SHARE) Crimp Terminal ☑ PIN 1,2 : AC INPUT ☑ PIN : -5 ☑ PIN 7 : +S Receptacle ☑ PIN 8 : RC+ ⊠ O/P TERMINAL PIN NO. ASSIGNMENT ⊠ PIN 4 : RC-☑ PIN 1,2,3: DC OUTPUT +V **⊠** PIN : NC ☑ PIN 4.5,6: DC OUTPUT -V ☑ PIN 6 : PF(POWER FAIL SIGNAL) **4-N3** TOP VIEW



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## PSP-500-P **SERIES**

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MODEL SPECIFICATION	PSP-500 -5P	PSP-500 -12P	PSP-500 -13.5P	PSP-500 -15P	PSP-500 -24P	PSP-500 -27P	PSP-500 -48P
DC OUTPUT VOLTAGE	5V	12V	√ 13.5V	15V	24V	27V	48V
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OUTPUT CURRENT RANGE	0-80A	0-41.5A	0-37A	0-33A	0-20.8A	0-18.5A	0-10.5A
RIPPLE & NOISE(Vp-p)	100m	150m	150m	150m	150m	150m	200m
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DC OUTPUT POWER	400W	498W	499.5W	495W	499.2W	499.5W	504W
EFFICIENCY	76%	82%	82%	82%	84%	84%	86%
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INPUT VOLTAGE RANGE	90~264VAC	47~63Hz; 127~	370VDC		W	WW.F	B B
AC CURRENT	7A/115V 3.5A/230V						
POWER FACTOR	[0.98/100VAC 0.95/230VAC						1
INRUSH CURRENT	20A/115V 40A/230V						
LEAKAGE CURRENT	<1mA/240VAC						
OVERLOAD PROTECTION	110~125% TYPE:CONSTANT CURRENT LIMITING RESET:AUTO RECOVERY						
OVER VOLTAGE PROTECTION	5.75~6.75	13.8~16.2V	15.5~18.2V	18~21V	27.6~32.4V	31~36.5V	57.6~67.2V

特力材料886-3-5753170 特力电子(上海) 86-21-54151736 特力电子(深圳) 86-755-83298787

Http://www. 100y. com. tw

NW.100Y.COM.TW

INRUSH CURRENT	ZUA/115V 4UA/23UV						
LEAKAGE CURRENT	<1mA/240VAC						
OVERLOAD PROTECTION	110~125% TYPE:CONSTANT CURRENT LIMITING RESET:AUTO RECOVERY						
OVER VOLTAGE PROTECTION	5.75~6.75   13.8~16.2V   15.5~18.2V   18~21V   27.6~32.4V   31~36.5V   57.6~67.2V						
OVER TEMP.PROTECTION	RTH2>=95°C OUTPUT SHUTDOWN						
REMOTE CONTROL	RC+/RC-: 0~0.8V=POWER ON; 4~10V=POWER OFF SINK CURRENT4~10mA						
TEMP. COEFFICIENT	±0.03% / °C (0~50°C)						
SETUP, RISE, HOLD UP TIME	1.5s, 50ms, 15ms						
VIBRATION	10~500Hz, 2G 10min./1cycle, PERIOD FOR 60min. EACH AXES						
WITHSTAND VOLTAGE	VP-O/P:3KVAC VP-FG:1.5KVAC O/P-FG:0.5KVAC						
ISOLATION RESISTANCE	VP-O/P, VP-FG, O/P-FG:500VDC / 100M Ohms						
WORKING TEMP., HUMIDITY	-10°C~+60°C(REFER TO OUTPUT DERATING CURVE), 20%-90% RH WITH 30CFM FORCED AIR						
STORAGE TEMP., HUMIDITY	-20°C~+85°C, 10%~95% RH						
DIMENSION	250*123*55mm						
WEIGHT	1.3 Kgs						
SAFETY STANDARDS	UL1950, TUV EN60950 APPROVED						
EMC STANDARDS	MEET CISPR22(EN55022)CLASS B, EN61000-4-2,3,4,5,6,8,11;ENV50204 EN61000-3-2						
NOTE: 1 ALL PARAMETERS ARE SPECIFIE	FD AT 230VAC INPUT RATED LOAD 25°C, 70% RH. AMRIENT						

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2002-07-23

#### 勝 特 力 材 料 886-3-5753170 PSP-500P SERIES 胜特力电子(上海) 86-21-54151736 胜特力电子(深圳) 86-755-83298787 FAN POWER SOURCE **CURRENT** Http://www. 100y. com. tw BLOCK DIAGRAM **SHARING** o PF → +S RECTIFIERS & FILTER **RECTIFIERS POWER** → +V I/P o SWITCH-**FILTER** P.F.C. FILTER ING O.C.P. FG o **DETECTION** 0.L.P. **PWM** CIRCUIT CONTROL 0.V.P. → +RC → -RC fosc: 134KHz DERATING VS OUTPUT DERATING VS INPUT OUTPUT Tal VOLTAGE 12~48V 100 LOAD 100 90 80 80 LOAD **5V** 60 70 WITH 30CFM FORCED AIR (CROSS SELECTION IS 2.5"x5.0") 60 40 50 20 40 10 20 30 40 50 135 176 230 115 AMBIENT TEMP. (℃) INPUT VOLTAGE (V) 60Hz DIMENSION (mm) □ TERMINAL 1 PIN NO. ASSIGNMENT ○ CONNECTOR PIN NO. ASSIGNMENT $\boxtimes$ PIN 1 : FG $\pm$ ☑ CN1 : JST B2B-XH ☑ CN2 : JST B7B-XH ☑ PIN 2,3 : AC INPUT ☑ PIN ☑ PIN 1 : P(CURRENT SHARE) 1 : GND □ TERMINAL 2 PIN NO. ASSIGNMENT ⊠ PIN 2 : +12V ☑ PIN : +S ☑ PIN 1,2,3: DC OUTPUT +V **MATERIAL POWER SOURCE** ☑ PIN 3 : -S☑ PIN 4,5,6: DC OUTPUT -V ☑ PIN 0.3A max. 4 : GND **⊠** PIN 5 : POWER FAIL SIGNAL ☑ PIN 6 : RC+ **FAN** ☑ PIN 7 : RC-**™** MATING CONNECTORS 123 **⊠** CN1,2 MATING CONNECTOR TYPE JST XHP SERIES OR 88 **EQUIVALENT WITH JST** SXH-001T-P0.6 OR 9.5 SVR1 **EQUIVALENT CRIMP TERMINALS** 153 5 ⊠ SVR1 VO ADJ. SVR2 IO ADJ. 20