

## **FEATURES**

- 2 Year Warranty
- 100% Full Load Burn-In Test
- Universal AC Input/ Full Range
- Low Leakage Current < 0.75mA
- Cooling by Free Air Convection
- Fixed Switching Frequency at 65KHz
- Short Circuit, Overload, and Over Voltage Protected





SPECIFICATIONS: PSPT65 Series								
All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted.								
We reserve the right to change specifications based on technological advances.								
INPUT SPECIFICATIONS	00 204\/AC (427 270\/DC)							
Input Voltage	90 – 264VAC (127 – 370VDC)							
Input Frequency	47 ~ 440Hz							
AC Current (typical)	1.5A @ 115VAC							
Inrush Current	20A @ 115VAC cold start 40A @ 230VAC cold start.							
Leakage Current	< 0.75mA							
OUTPUT SPECIFICATIONS								
Output Voltage	See Table							
Voltage Tolerance (See Note 3)	PSPT-65A,B,C: CH 1: ±4% CH.2: ±7% CH 3: ±5% PSPT-65D: CH 1: ±4% CH.2: ±6% CH 3: ±6%							
Voltage Adjustment Range	CH1: 4.75 ~ 5.5V							
Output Power (max)	Rated output power for convection; 72W with 18CFM min. forced air.							
Line Regulation	PSPT-65A,B,C: CH 1: ±1% CH.2: ±2% CH 3: ±1%							
Line Regulation	PSPT-65D: CH 1: ±1% CH.2: ±2% CH 3: ±3%							
Load Regulation	PSPT-65A,B,C: CH 1: ±3% CH.2: ±4% CH 3: ±1% PSPT-65D: CH 1: ±2% CH.2: ±5% CH 3: ±5%							
Output Current	See Table							
Ripple & Noise (See Note 2)	See table							
Setup, Rise Time	800ms, 20ms at full load							
Hold Up Time	60ms at full load							
Temperature Coefficient	±0.04%/°C (0~50°C) on +5V output.							
PROTECTION								
Over Voltage Protection	CH.1: 5.75 ~ 6.75VDC on CH 1							
Over voltage Protection	Protection Type: Hiccup mode, recovers automatically after fault condition is removed.							
Overload Protection	73 ~ 95W rated output power.							
	Protection Type: Hiccup mode, recovers automatically after fault condition is removed.							
GENERAL SPECIFICATIONS								
Switching Frequency (fixed)	65KHz							
Efficiency (typical)	See table							
Withstand Voltage	3KVAC (input to output), 1.5KVAC (input to FG), 0.5KVAC (output to FG). All for one minute.							
Isolation Resistance	100MΩ / 500VDC (input to output, input to FG, output to FG)							
ENVIRONMENTAL SPECIFICATIONS								
Working Temperature	-10°C to +60°C (refer to output load derating curve)							
Storage Temperature	-20°C to +85°C							
Working Humidity (non-condensing)	20% ~ 90% RH non-condensing							
Storage Humidity (non-condensing)	10% ~ 95% RH							
Vibration	10~500Hz, 2G 10min./1cycle, Period for 60 minutes each along X, Y, and Z axes.							
MTBF	277,200 hours min. MIL-HDBK-217 (25°C)							
PHYSICAL SPECIFICATIONS								
Weight	28 oz.							
Dimensions	127(L) x 76(W) x 42(H) mm							
Warranty	2 years							
SAFETY & EMC								
Safety Standards	UL60950-1, TUV EN60950-1 Approved							
EMI Conduction and Radiation	Compliance to EN55022 (CISPR22) Class B							
Harmonic Current	Compliance to EN61000-3-2,3							
EMS Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11; ENV50204, EN55024, Light industry level, criteria A.							



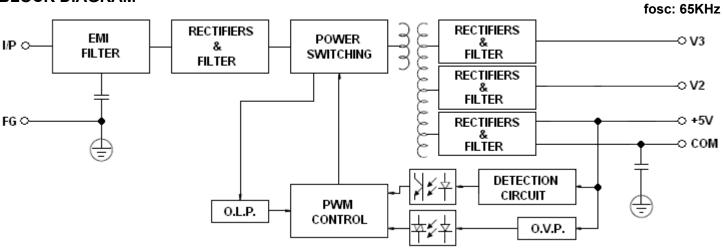
### **OUTPUT VOLTAGE / CURRENT RATING CHART**

Мо	del	Input Voltage	Output Voltage	Output Current Range	Rated Output Current	Ripple & Noise	Output Power	Efficiency
PSPT-65A	Channel 1		5 VDC	0.4 ~ 7A	5.5A	50mVp-p	60W	76%
	Channel 2		12 VDC	0.2 ~ 3.2A	2.5A	120mVp-p		
	Channel 3		-5 VDC	0 ~ 0.7A	0.5A	50mVp-p		
PSPT-65B	Channel 1		5 VDC	0.4 ~ 7A	5.5A	50mVp-p		
	Channel 2		12 VDC	0.2 ~ 3.2A	2.5A	120mVp-p	63.5W	77%
	Channel 3	90~264 VAC	-12 VDC	0 ~ 0.7A	0.5A	100mVp-p		
PSPT-65C	Channel 1	(127~370 VDC)	5 VDC	0.4 ~ 7A	5.5A	50mVp-p		
	Channel 2		15 VDC	0.2 ~ 2.6A	2A	120mVp-p	65W	77%
	Channel 3		-15 VDC	0 ~ 0.7A	0.5A	100mVp-p		
PSPT-65D	Channel 1		5 VDC	0.5 ~ 5A	4A	50mVp-p		
	Channel 2		12 VDC	0.2 ~ 4A	2A	100mVp-p	68W	79%
	Channel 3		24 VDC	0.2 ~ 1.3A	1A	200mVp-p		

### **NOTES**

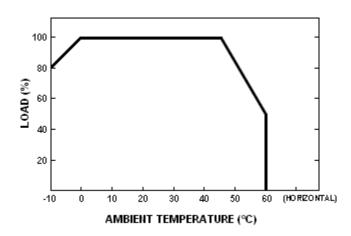
- 1. All parameters not specially mentioned are measured at 230VAC input, rated load, and 25°C ambient temperature.
- 2. Ripple & noise are measured at 20MHz using a 12" twisted pair-wire terminated with 0.1uF & 47uF capacitors in parallel.
- 3. Tolerance: includes set up tolerance, line regulation, and load regulation.
- 4. The power supply is considered a component, which will be installed into final equipment. The final equipment must be reconfirmed that it still meets EMC directives.
- 5. Mounting holes M1 and M2 should be grounded for EMI purposes.

# **BLOCK DIAGRAM**

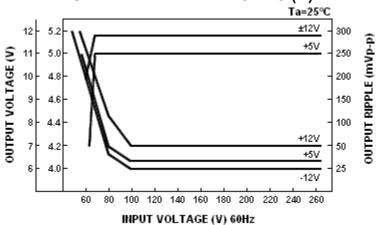




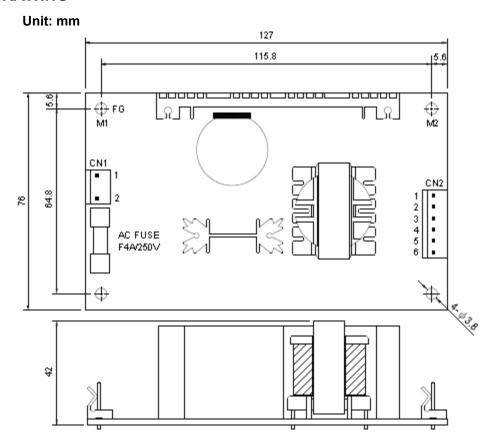
## **DERATING CURVE**



# **STATIC CHARACTERISTICS (B)**



## **MECHANICAL DRAWING**



AC INPUT CONNECTOR (CN1)				
Pin. No	Assignment			
1	AC/N			
2	AC/L			

	DC OUT	DC OUTPUT CONNECTOR (CN2)				
	Pin No. Assignment					
	1	V2				
ĺ	2,3	+5V				
ĺ	4,5	COM				
	6	V3				

PIN 2: +5V PIN 3,4,5: COM only for PSPT-65D