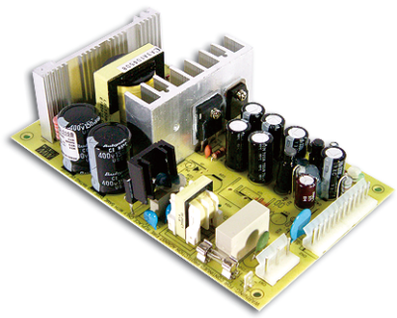
110W Dual Output Switching Power Supply

PD-110 series



■ Features :

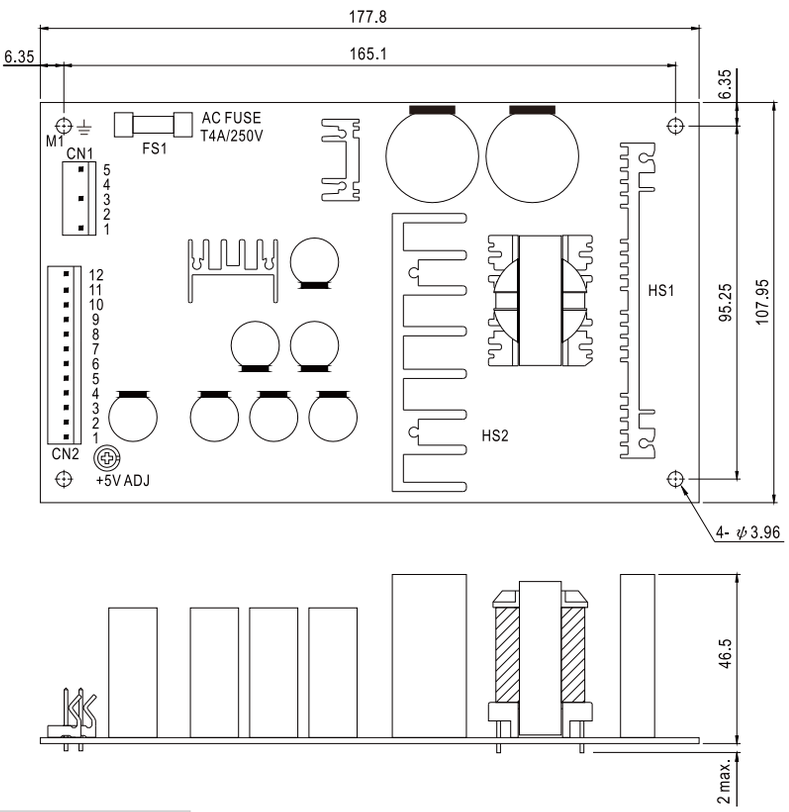
- Universal AC input / Full range
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- With power good signal output(Optional)
- 100% full load burn-in test
- Fixed switching frequency at 45KHz
- 2 years warranty

SPECIFICATION

MODEL		PD-110A		PD-110B	
OUTPUT	OUTPUT NUMBER	CH1	CH2	CH1	CH2
	DC VOLTAGE	5V	12V	5V	24V
	RATED CURRENT	5A	6.5A	5A	3.5A
	CURRENT RANGE	0.5 ~ 5A	0.5 ~ 6.5A	0.5 ~ 5A	0.5 ~ 3.5A
	RATED POWER	103W		109W	
	RIPPLE & NOISE (max.) Note.2	100mVp-p	150mVp-p	100mVp-p	200mVp-p
	VOLTAGE ADJ. RANGE	CH1:4.75 ~ 5.5V		CH1:4.75 ~ 5.5V	
	VOLTAGE TOLERANCE Note.3	±2.0%	±6.0%	±2.0%	±6.0%
	LINE REGULATION	±1.0%	±2.0%	±1.0%	±2.0%
	LOAD REGULATION	±1.0%	±5.0%	±1.0%	±5.0%
	SETUP, RISE TIME	1200ms, 50ms at full load			
	HOLD UP TIME (Typ.)	80ms at full load			
INPUT	VOLTAGE RANGE	100 ~ 264VAC 141 ~370VDC (90 ~ 100VAC 90% load max.) [DC input operation possible by connecting AC/N(-), AC/L(+)]			
	FREQUENCY RANGE	47 ~ 63Hz			
	EFFICIENCY(Typ.)	75%		78%	
	AC CURRENT (Typ.)	3A/115VAC 1.5A/230VAC			
	INRUSH CURRENT (Typ.)	COLD START 45A			
	LEAKAGE CURRENT	<1mA /240VAC			
PROTECTION	OVERLOAD	105% ~ 135% rated output power			
		Protection type : Hiccup mode, recovers automatically after fault condition is removed			
	OVER VOLTAGE	CH1: 5.75 ~ 6.75VDC			
		Protection type : Hiccup mode, recovers automatically after fault condition is removed			
ENVIRONMENT	WORKING TEMP.	-10 ~ +50℃,60 ℃ with cooling fan (Refer to "Derating Curve")			
	WORKING HUMIDITY	20 ~ 90% RH non-condensing			
	STORAGE TEMP., HUMIDITY	-20 ~ +85℃, 10 ~ 95% RH			
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 50℃)			
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes			
SAFETY & EMC (Note 4)	SAFETY STANDARDS	UL60950-1, TUV EN60950-1, EAC TP TC 004 approved			
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC			
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25℃/ 70% RH			
	EMC EMISSION	Compliance to EN55032 (CISPR32) Class B, EN61000-3-2,-3, EAC TP TC 020			
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,11, light industry level, criteria A, EAC TP TC 020			
OTHERS	MTBF	323K hrs min. MIL-HDBK-217F (25℃)			
	DIMENSION	177.8*107.95*46.5mm (L*W*H)			
	PACKING	0.51Kg; 24pcs/13.1Kg/1.19CUFT			
NOTE	1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃ of ambient temperature. 2. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. 3. Tolerance : includes set up tolerance, line regulation and load regulation. 4. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to “EMI testing of component power supplies.” (as available on http://www.meanwell.com) 5. Heat Sink HS1,HS2 can not be shorted. 6. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft).				

■ Mechanical Specification

Unit:mm



AC Input Connector (CN1) : Molex 5273-05 or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	FG ⏚	Molex 5195 or equivalent	Molex 5194 or equivalent
2,4	No Pin		
3	AC/N(-)		
5	AC/L(+)		

DC Output Connector (CN2) : Molex 5273-12 or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1,2,3	V1	Molex 5195 or equivalent	Molex 5194 or equivalent
4,5,6,7	COM		
8,9,10	V2		
11,12	V3(Option)		

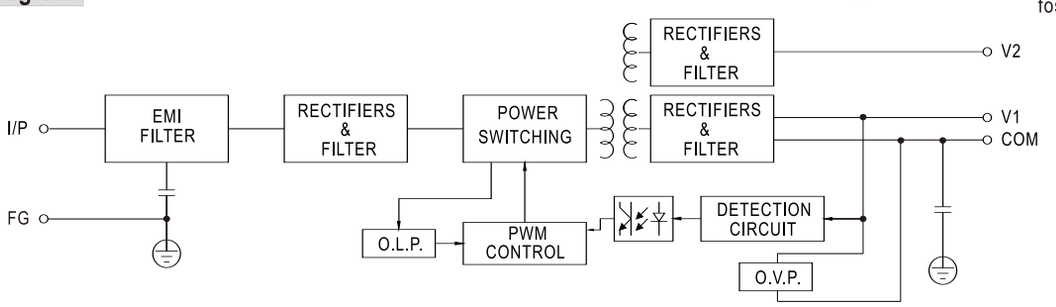
MODEL / Pin No.	PD-110A	PD-110B
1,2,3	+5V	+5V
8,9,10	+12V	+24V

⏚ : Grounding Required

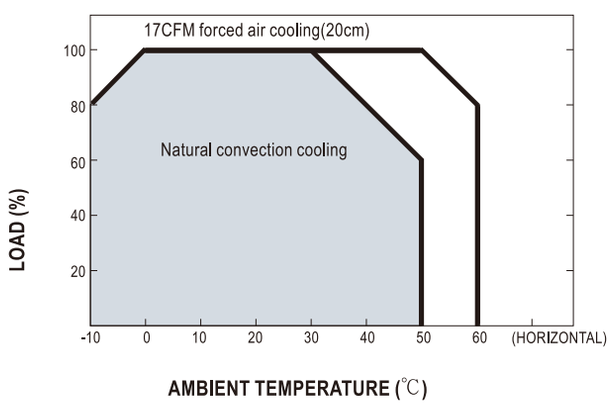
⚠ 1.HS1,HS2 cannot be shorted
2.M1 is safety ground

■ Block Diagram

fosc : 45KHz

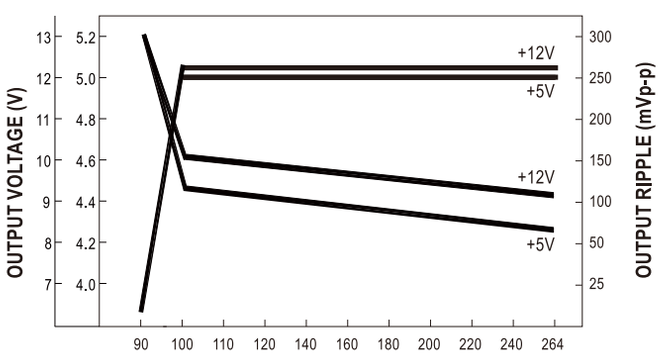


■ Derating Curve



AMBIENT TEMPERATURE (℃)

■ Static Characteristics (A)



INPUT VOLTAGE (V) 60Hz