

User's Manual



## ■ Features :

- Universal AC input / Full range
- Low leakage current <250µA
- Protections: Short circuit / Overload / Over voltage
- Cooling by free air convection
- Medical safety approved (2 x MOPP between primary to secondary)
- 100% full load burn-in test
- Fixed switching frequency at 45KHz
- 3 years warranty

## ■ GTIN CODE

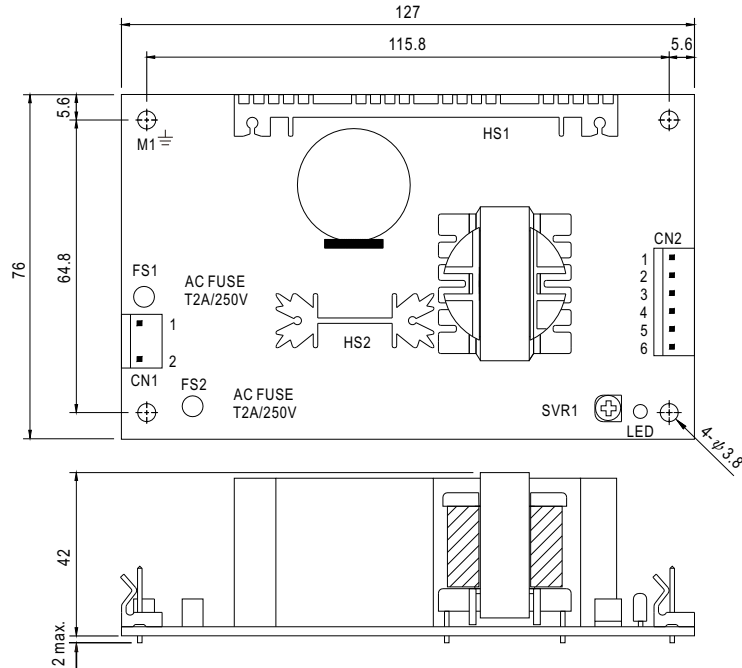
MW Search: <https://www.meanwell.com/serviceGTIN.aspx>

## SPECIFICATION

MODEL	MPT-65A			MPT-65B			MPT-65C				
OUTPUT	OUTPUT NUMBER	CH1	CH2	CH3	CH1	CH2	CH3	CH1	CH2	CH3	
	DC VOLTAGE	5V	12V	-5V	5V	12V	-12V	5V	15V	-15V	
	RATED CURRENT	5.5A	2.5A	0.5A	5.5A	2.5A	0.5A	5.5A	2A	0.5A	
	CURRENT RANGE	0.4 ~ 7A	0.2 ~ 3.2A	0 ~ 0.7A	0.4 ~ 7A	0.2 ~ 3.2A	0 ~ 0.7A	0.4 ~ 7A	0.2 ~ 2.6A	0 ~ 0.7A	
	RATED POWER	60W			63.5W			65W			
	OUTPUT POWER (max.)	72W with 18CFM min. Forced air convection									
	RIPPLE & NOISE (max.) Note.2	60mVp-p	120mVp-p	60mVp-p	60mVp-p	160mVp-p	100mVp-p	60mVp-p	180mVp-p	100mVp-p	
	VOLTAGE ADJ. RANGE	CH1:4.5 ~ 5.5V									
	VOLTAGE TOLERANCE Note.3	±4.0%	+10,-7%	±5.0%	±4.0%	+10,-7%	±5.0%	±4.0%	+10,-7%	±5.0%	
	LINE REGULATION	±1.0%	±2.0%	±1.0%	±1.0%	±2.0%	±1.0%	±1.0%	±2.0%	±1.0%	
	LOAD REGULATION	±3.0%	±4.0%	±1.0%	±3.0%	±4.0%	±1.0%	±3.0%	±4.0%	±1.0%	
SETUP, RISE TIME	800ms, 20ms/230VAC			800ms, 20ms/115VAC at full load							
HOLD UP TIME (Typ.)	80ms/230VAC			12ms/115VAC at full load							
INPUT	VOLTAGE RANGE	90 ~ 264VAC		127 ~ 370VDC							
	FREQUENCY RANGE	47 ~ 63Hz									
	EFFICIENCY(Typ.)	74%			74%			74%			
	AC CURRENT (Typ.)	1.6A/115VAC		1A/230VAC							
	INRUSH CURRENT (Typ.)	COLD START 20A/115VAC			40A/230VAC						
LEAKAGE CURRENT Note.7	Earth leakage current < 250µA/264VAC , Touch current < 60µA/264VAC										
PROTECTION	OVERLOAD	73 ~ 95W rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed									
	OVER VOLTAGE	5.75 ~ 6.75VDC on CH1 Protection type : Hiccup mode, recovers automatically after fault condition is removed									
ENVIRONMENT	WORKING TEMP.	-10 ~ +55°C (Refer to "Derating Curve")									
	WORKING HUMIDITY	20 ~ 90% RH non-condensing									
	STORAGE TEMP., HUMIDITY	-20 ~ +85°C, 10 ~ 95% RH									
	TEMP. COEFFICIENT	±0.04%/°C (0 ~ 50°C) on +5V output									
VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes										
SAFETY & EMC (Note 4)	SAFETY STANDARDS	ANSI/AAMI ES60601-1, TUV EN60601-1, IEC60601-1 approved									
	ISOLATION LEVEL	Primary-Secondary: 2xMOPP, Primary-Earth:1xMOPP									
	WITHSTAND VOLTAGE	I/P-O/P:4KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC 1min.									
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG:100M Ohms / 500VDC / 25°C / 70% RH									
	EMC EMISSION	Compliance to EN55011 (CISPR11) Class B, EN61000-3-2,-3									
EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN60601-1-2, medical level										
OTHERS	MTBF	2952.3K hrs min. Telcordia SR-332 (Bellcore) ; 402.8K hrs min.			MIL-HDBK-217F (25°C)						
	DIMENSION	127*76*42mm (L*W*H)									
	PACKING	0.27Kg; 54pcs/16.8Kg/1.28CUFT									
NOTE	<ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature.</li> <li>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</li> <li>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>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 <a href="http://www.meanwell.com">http://www.meanwell.com</a>)</li> <li>5. Mounting holes M1 and M2 should be grounded for EMI purposes.</li> <li>6. Heat Sink HS1,HS2 can not be shorted.</li> <li>7. Touch current was measured from primary input to DC output.</li> </ol>										

■ Mechanical Specification

Unit:mm



AC Input Connector (CN1) : Molex 5277-02 or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	AC/L	Molex 5195 or equivalent	Molex 5194 or equivalent
2	AC/N		

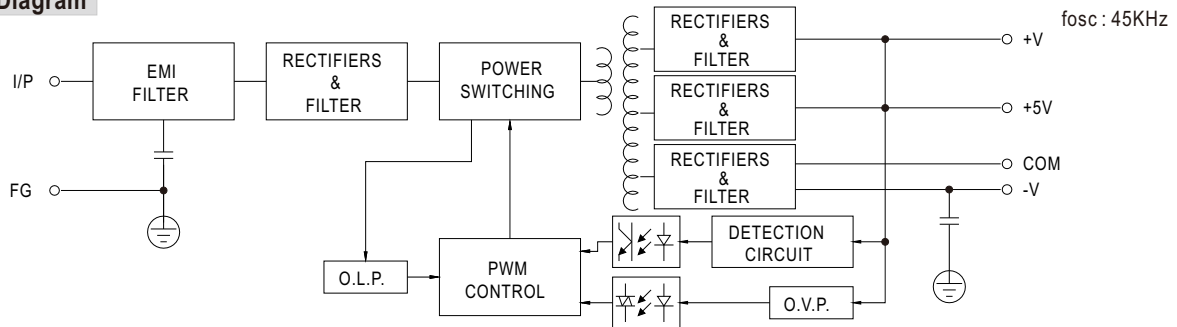
DC Output Connector (CN2) : Molex 5273-06 or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	+V	Molex 5195 or equivalent	Molex 5194 or equivalent
2,3	+5V		
4,5	COM		
6	-V		

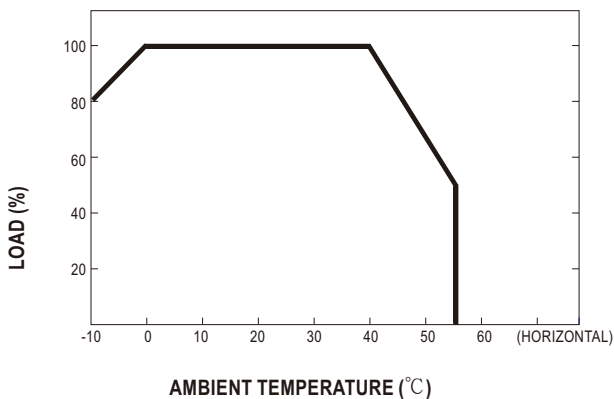
⊥ : Grounding Required

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

■ Block Diagram



■ Derating Curve



■ Static Characteristics

