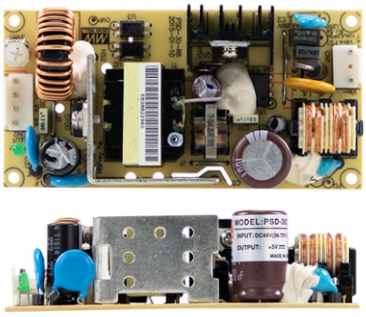
30W Single Output DC-DC Converter

PSD-30 series



■ Features :

- 2:1 wide input range
- Protections: Short circuit / Overload / Over voltage/ Reverse polarity
- 1500VAC I/O isolation
- Cooling by free air convection
- Built-in EMI filter, low ripple noise
- 100% full load burn-in test
- Low cost
- High reliability
- 2 year warranty

User's Manual

■ GTIN CODE

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

TPTC004 IEC62368-1

SPECIFICATION

MODEL		PSD-30A-5	PSD-30B-5	PSD-30C-5	PSD-30A-12	PSD-30B-12	PSD-30C-12	PSD-30A-24	PSD-30B-24	PSD-30C-24
OUTPUT	DC VOLTAGE	5V			12V			24V		
	RATED CURRENT	5A			2.5A			1.25A		
	CURRENT RANGE	0 ~ 5A			0 ~ 2.5A			0 ~ 1.25A		
	RATED POWER	25W			30W			30W		
	RIPPLE & NOISE (max.) Note.2	100mVp-p			120mVp-p			150mVp-p		
	VOLTAGE ADJ. RANGE	4.5 ~ 5.5VDC			11 ~ 13.5VDC			22 ~ 26VDC		
	VOLTAGE TOLERANCE Note.3	±2.0%			±1.0%			±1.0%		
	LINE REGULATION	±1.0%			±1.0%			±1.0%		
	LOAD REGULATION	±1.0%			±1.0%			±1.0%		
	SETUP, RISE, HOLD UP TIME	2s, 50ms, ------ at full load								
INPUT	VOLTAGE RANGE	A:9 ~ 18VDC	B:18 ~ 36VDC		C:36 ~ 72VDC					
	EFFICIENCY (Typ.)	77%	79%	80%	77%	80%	82%	78%	83%	83%
	DC CURRENT	4.5A/12V			2.5A/24V			1.1A/48V		
PROTECTION	OVERLOAD	105 ~ 150% rated output power								
		Protection type : Hiccup mode, recovers automatically after fault condition is removed								
	OVER VOLTAGE	6 ~ 7.5V			14 ~ 16.5V			27 ~ 32.5V		
		Protection type : Hiccup mode, recovers automatically after fault condition is removed								
	REVERSE POLARITY	By internal fuse open								
ENVIRONMENT	WORKING TEMP.	-20 ~ +60℃ (Refer to output load 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, 60min. each along X, Y, Z axes								
SAFETY & EMC (Note 4)	SAFETY STANDARDS	EAC TP TC 004 approved, IEC 62368-1 CB approved by Dekra, Design refer to BS EN/EN62368-1								
	WITHSTAND VOLTAGE	I/P-O/P:1.5KVAC I/P-FG:2.0KVAC O/P-FG:0.5KVAC								
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms/500VDC								
	EMI CONDUCTION & RADIATION	Compliance to BS EN/EN55032 (CISPR32) Class B, EAC TP TC 020								
	EMS IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,6,8; BS EN/ENV50204, BS EN/EN 55035, light industry level, EAC TP TC 020								
OTHERS	MTBF	3871.7K hrs min. Telcordia SR-332 (Bellcore) ; 639.9K hrs min. MIL-HDBK-217F (25℃)								
	DIMENSION	101.6*50.8*30mm (L*W*H)								
	PACKING	0.15kg；72pcs/10.8kg/0.82CUFT								

NOTE

1. All parameters NOT specially mentioned are measured at 12,24,48VDC 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. The final equipment must be re-confirmed that it still meets EMC directives.
5. 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).

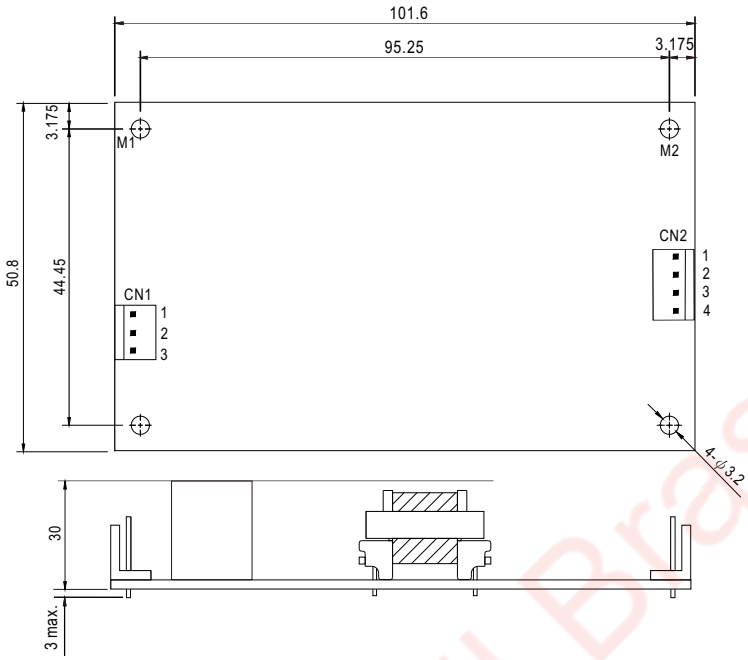
(As available on http://www.meanwell.com)

※ Product Liability Disclaimer : For detailed information, please refer to https://www.meanwell.com/serviceDisclaimer.aspx

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■ Mechanical Specification

Unit:mm



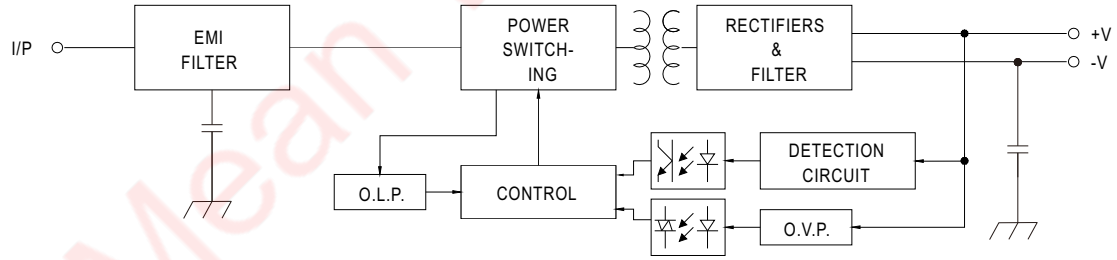
DC Input Connector (CN1) : JST B3P-VH-B or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1	DC-	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
3	DC+		
2	NC		

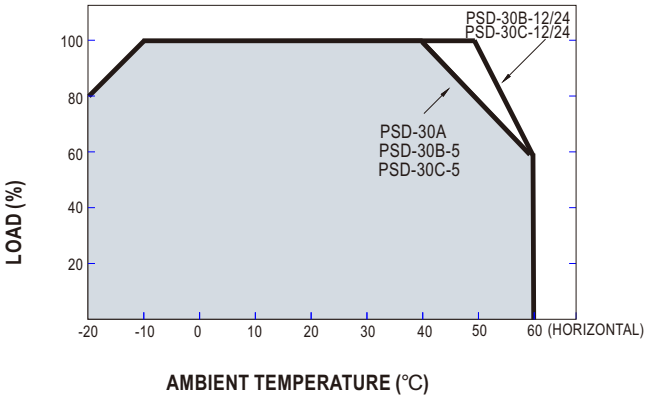
DC Output Connector (CN2) : JST B4P-VH-B or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1,2	+V	JST VHR or equivalent	JST SVH-21T-P1.1 or equivalent
3,4	-V		

■ Block Diagram



■ Derating Curve



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