



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

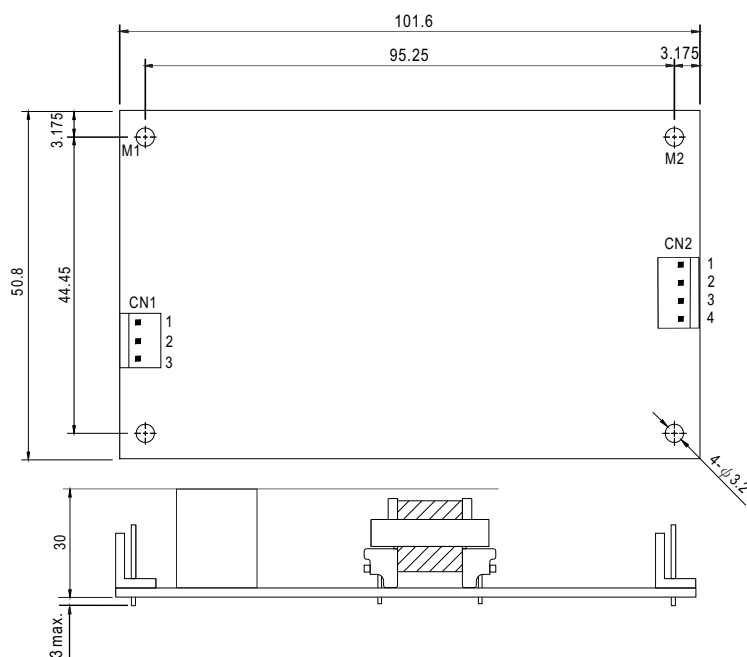

EAC CB CE UK
 TPTC004 IEC62368-1

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.) <small>Note.2</small>	100mVp-p			120mVp-p			150mVp-p		
	VOLTAGE ADJ. RANGE	4.5 ~ 5.5VDC			11 ~ 13.5VDC			22 ~ 26VDC		
	VOLTAGE TOLERANCE <small>Note.3</small>	±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°C (Refer to output load derating curve)								
	WORKING HUMIDITY	20 ~ 90% RH non-condensing								
	STORAGE TEMP., HUMIDITY	-20 ~ +85°C, 10 ~ 95% RH								
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)								
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, 60min. each along X, Y, Z axes								
SAFETY & EMC <small>(Note 4)</small>	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 55024, light industry level, criteria A, EAC TP TC 020								
OTHERS	MTBF	902.4K hrs min. MIL-HDBK-217F(25°C)								
	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°C 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°C/1000m with fanless models and of 5°C/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									

Mechanical Specification

Unit:mm



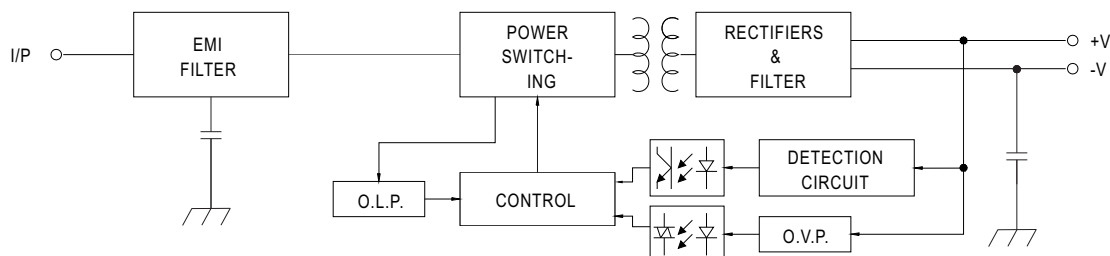
DC Input Connector (CN1) : JST B3P-VH-B or equivalent

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

