



## MEAN WELL MPS-30 Series 30W Single Output for Medical Type Instruction Manual

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30W Single Output for Medical Type  
M P S – 3 0 series



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## Features

- Universal AC input / Full range
- Low leakage current <200pA
- Protections: Short circuit / Overload / Over voltage / Over temperature
- Medical safety approved (2 x MOPP between primary to secondary)
- Fixed switching frequency at 100KHz
- Low cost
- High reliability
- 3 years warranty



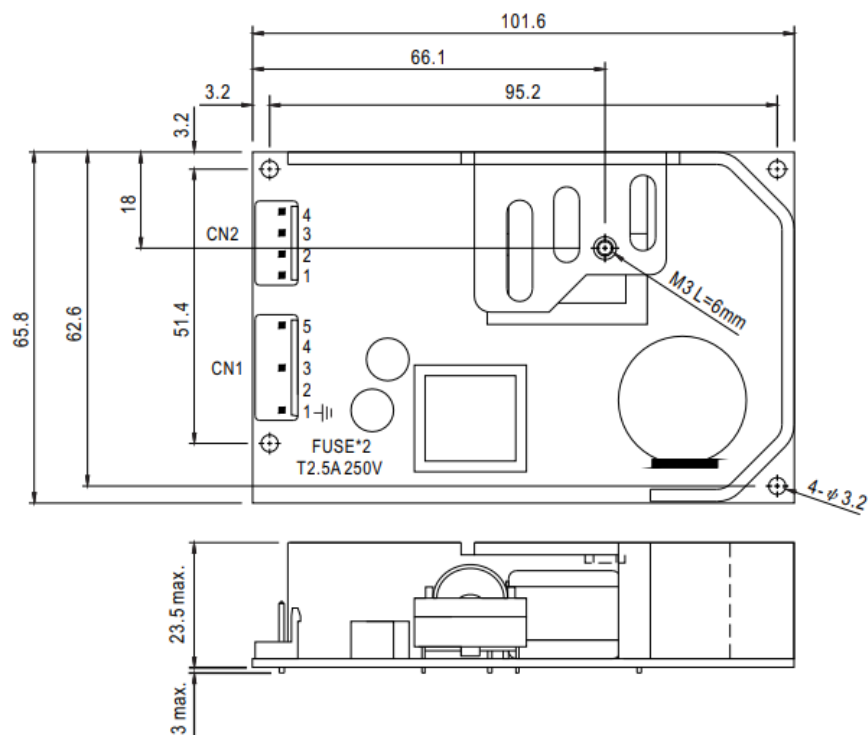
## SPECIFICATION

MODEL		MPS-30-5	MPS-30.12	MPS-30-15	MPS-30-24	MPS-30-27	MPS-30-48
OUTPUT	DC VOLTAGE	5V	12V	15V	24V	27V	48V
	RATED CURRENT	5A	2.5A	2A	1.2A	1.1A	0.6A
	CURRENT RANGE	0 – 5A	0 – 2.5A	0 – 2A	0 – 12A	0-1.1A	0 – 0.6A
	RATED POWER	25W	30W	30W	28.8W	29.7W	282W
	RIPPLE & NOISE (ma) Note.2	80mVp-p	120mVp-p	150mVp-p	240mVp-p	240mVp-p	240mVp-p
	VOLTAGE TOLERANCE Note.3	± 3.0%	± 3.0%	13.0%	13.0%	13.0%	12.0%
	LINE REGULATION	11.0%	11.0%	11.0%	11.0%	11.0%	11.0%
	LOAD REGULATION	12.0%	-1.0%	11.0%	1.1.0%	11.0%	11.0%
	SETUP, RISE TIME	500ms. 30ms/230VAC SOOms. 30ms/115VAC at full load					
	HOLD UP TIME (Typ.)	70ms/230VAC 12ms/115VAC at full load					
INPUT	VOLTAGE RANGE	88 – 264VAC auto switch 120 – 370VDC					
	FREQUENCY RANGE	47 – 63Hz					
	EFFICIENCY (Typ.)	72%   75% 178% 177%   78% 178%					
	AC CURRENT (Typ.)	0.8A/115VAC 0.5A/230VAC					
	INRUSH CURRENT (Typ.)	COLD START 30N/230VAC					
	LEAKAGE CURRENT	Earth leakage current < 2000/264VAC					
	OVERLOAD	Above 105% rated output power					
		Protection type: Hiccup mode. recovers automatically after the fault condition is removed					

PROTECTION	OVERVOLTAGE	5.5 -6.75V 1 132 – 18.2V 1 16.5 -2025V 1 26.4 -32.4V 1 29.7 – 36.45V 1 52.8 – 64.8V
		Protect= type : Hiccup mode. recovers automatically after the fault condition is removed
	OVER TEMPERATURE	Shut down of voltage. re-power on to recover
EIMRONNE NT	WORKING TEMP.	-10 – •60 C (Refer to 'berating Curve')
	WORKING HUMIDITY	20- 90% RH non-condensing
	STORAGE TEMP. HUMIDITY	-20- •85 C.10 – 95% RH
	TEMP. COEFFICIENT	±0.03%1C (0 – 50t)
	VIBRATION	10- 500Hz. 2G 10mindlcycle. period for 60min. each along X. Y.Z axes
SAFETY & EMC (Note 4)	SAFETY STANDARDS	ANSI/MMI E560601-1. TUV EN60601-1.1E080601-1 approved
	ISOLATION LEVEL	Primary-Secondary: 2xMOPP. Primary-Earth:1 xMOPP
	WITHSTAND VOLTAGE	VP-0/P:IKVAC IIP-FG2KVAC OiP-FG:SHORT
	ISOLATION RESISTANCE	1/P-011s, I/P-FG:100M Ohms / 500VDC / 25C/ 70% RH
	EMC EMISSION	Compliance to EN55011 (CISPR11) Class B. EN61000-3.2.-3
	EMC IMMUNITY	Compliance to EN61000-4-22.4.5.6.8.11.EN55024.EN60601.1-2. medical level. criteria A
OTHERS	MTBF	547Khrs min. ML-HDBK-217F(2512)
	DIMENSION	101.6'65.8'23.5mm (12WIH)
	PACKING	0.16Kg: 90pcs/15.8Kg11.06CUFT
NOTE	<p>1. All parameters NOT specially mentioned are measured at 230VAC Mal rated load and 26-c or ambient temperature.</p> <p>2 Ripple &amp; noise are measured at 2014Hz of bandwidth by using a twisted pair terminated with a 0.1uF 47uF parallel capacitor.</p> <p>3. Tolerance: includes set up tolerance, line regulation, and load regulation.</p> <p>4. The power supply is considered a component that will be installed into the 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 satisfies EMC directives. For guidance on how to perform these EMC tests. please refer to 'EMI testing of component power supplies: (as eyelet: see on <a href="https://www.menwell.com">https://www.menwell.com</a></p> <p>5. When the input voltage is less than 40VAC. the SPS may exhibit degradation of performance. The final product manufacturers must re-confirm this deviation that does not affect basic safety or essential performance. -'. Product Liability Disclaimer For detailed information. please refer to <a href="https://www.menwell.com/serviceDisclaimer.aspx">https://www.menwell.com/serviceDisclaimer.aspx</a></p>	

Mechanical Specification

Unit:mm



AC Input Connector (CN1) : Molex 41791-5 or equivalent

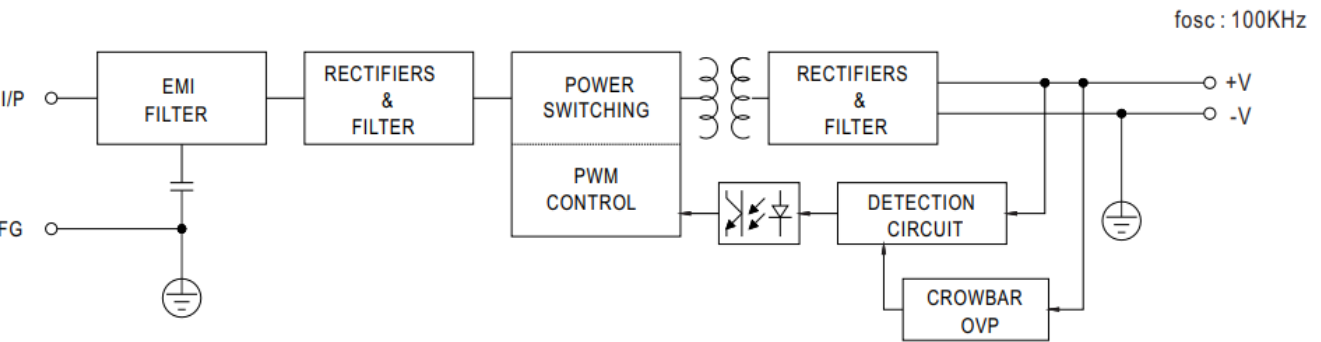
Pin No.	Assignment	Mating Housing	Terminal
1	FG $\perp$	Molex 2139 or equivalent	Molex 2478 or equivalent
2,4	No Pin		
3	AC/N		
5	AC/L		

$\perp$  : Grounding Required  
CN1:Pin 1 is safety ground

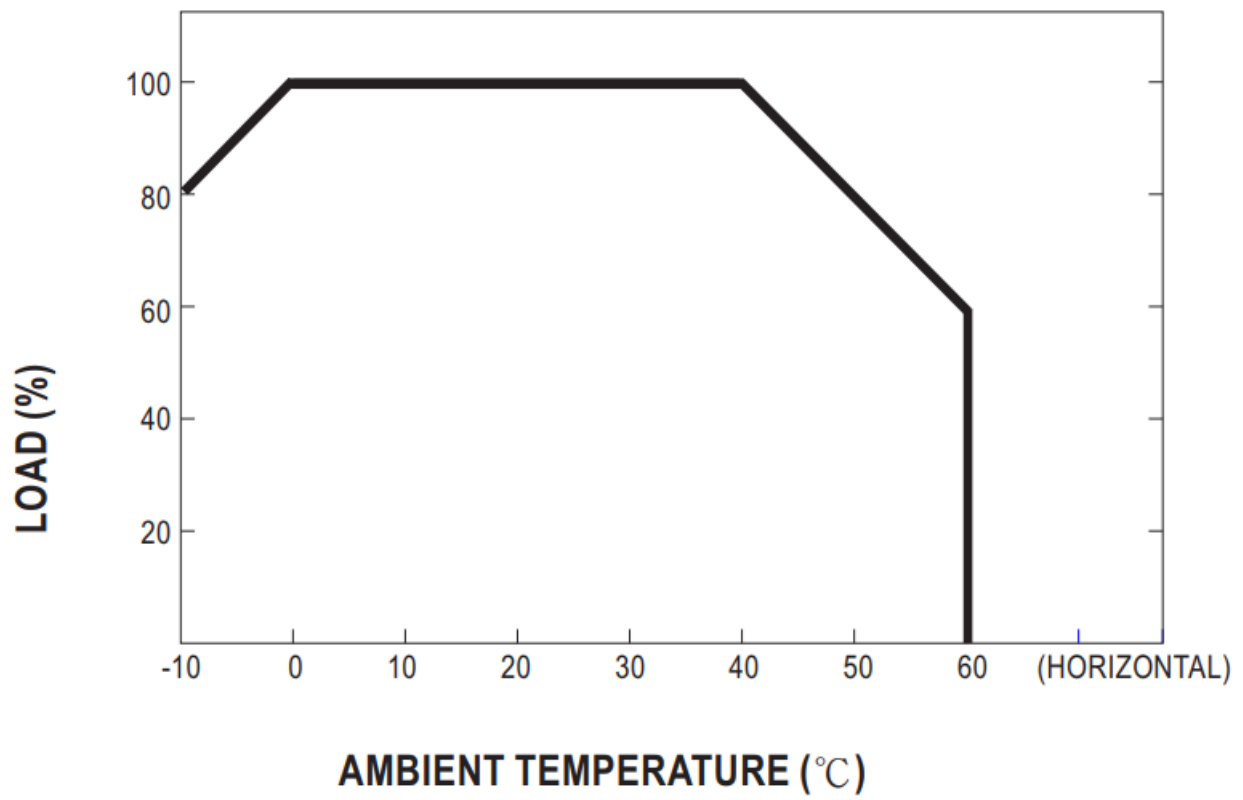
DC Output Connector (CN2) : Molex 41791-4 or equivalent

Pin No.	Assignment	Mating Housing	Terminal
1,2	-V	Molex 2139 or equivalent	Molex 2478 or equivalent
3,4	+V		

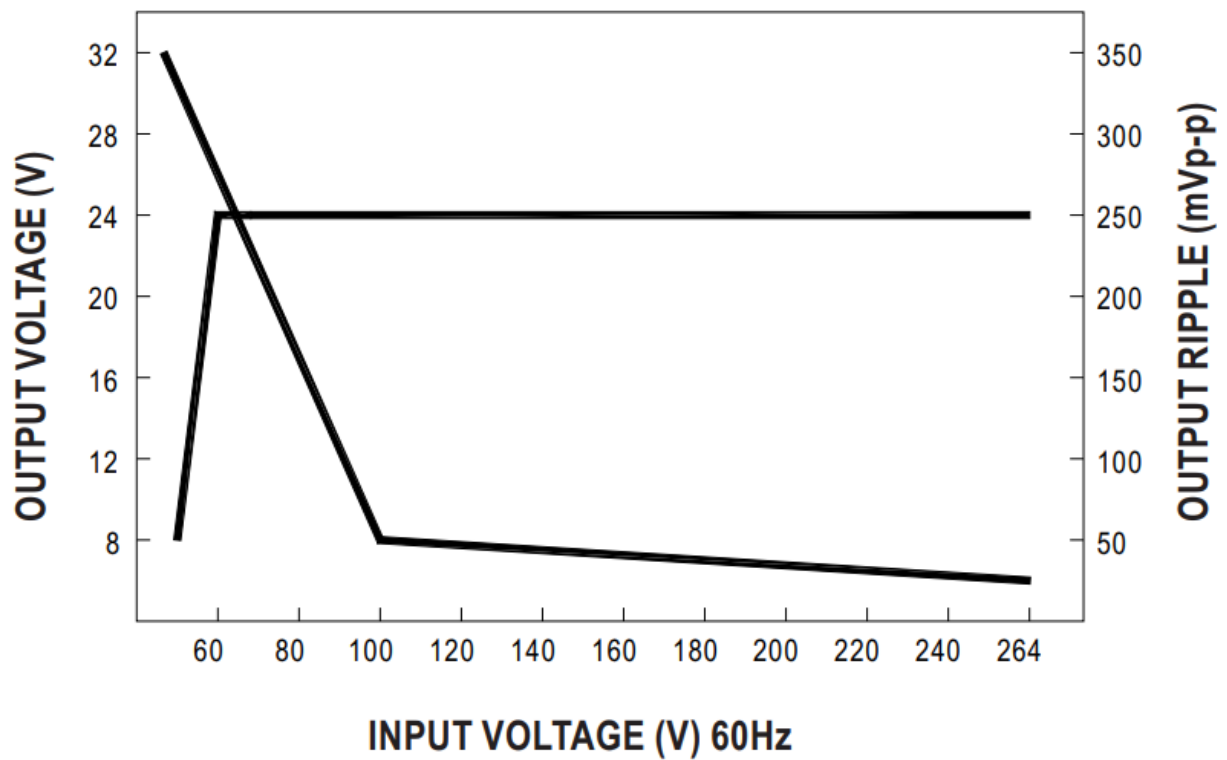
Block Diagram



Derating Curve




### Static Characteristics





[https://www.meanwell.com/Upload/PDF/Medical\\_EN.pdf](https://www.meanwell.com/Upload/PDF/Medical_EN.pdf)

## Documents / Resources

	<p><a href="#">MEAN WELL MPS-30 Series 30W Single Output for Medical Type</a> [pdf] Instruction Manual MPS-30 Series 30W Single Output for Medical Type, MPS-30 Series, 30W Single Output for Medical Type, Medical Type</p>
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## References

- [MEAN WELL Switching Power Supply Manufacturer](#)
- [Product Liability Disclaimer-MEAN WELL Switching Power Supply Manufacturer](#)