

Medical Desk Top Power Supplies



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PSEM100 Series

70 to 100 Watts Switch Mode

Universal AC Input with Power Factor Correction

The PSEM100 series are a range of medically approved power supplies with output power up to 100 Watts. All supplies are UL94V-1 compliant and include an IEC320-C14 3 pin inlet connector. They are ideally suited for use in hospital instrumentation and many other applications where medical safety approvals are required. All models are approved to UL, cUL2601-1 and TUV (EN60601-1). EMC conforms to FCC Part-18 Class B and CISPR-11 EN55011 class B.



Features

- Single, dual or triple output versions
- Optional output connectors
- 100% Burn-in
- Wide input voltage range 90 to 264 VAC
- Input surge current protection
- Overvoltage protection
- Overcurrent protection
- Power Factor Correction
- On/Off Switch

Electrical Specification

INPUT

Input voltage	90-264 VAC
Input frequency	47-63 Hz
Input current	1.2A 115 VAC, 0.5A (rms) 230 VAC
Earth leakage current	0.1mA Max

OUTPUT

Output voltage	See table
Output current	See table
Output power range	See table
Ripple & noise	2% max pk-pk
Overvoltage protection	112-132% nominal output
Overcurrent protection	110-150% nominal current
Temperature coefficient	All outputs $\pm 0.04\%$ / °C maximum
Transient response	4mS 50-100% load change

ENVIRONMENTAL

Operating temperature	0°C to +70°C, derate linearly from 100% at 50°C to 50% at 70°C
Storage temperature	-40°C to +85°C
Relative humidity	5% to 95%

GENERAL

Efficiency	75-88% depending on model
Hold-up time	16mS at 100VAC input and full load
Line regulation	$\pm 0.5\%$ typical, 1% max
Load regulation	3% typical, 5% max
EMC	Conform to EN550022'B', Fcc Part 15'B' and CISPR 22 class 'B'
Safety	UL/cUL2601-1, TUV (EN60601-1)

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Output Voltage/Current Rating Chart - PSEM100 Series

MODEL	OUTPUT	TOTAL REGULATION	MAX POWER
PSEM100-05	5V 14A	5%	70 Watts
PSEM100-09	9V 10A	4%	90 Watts
PSEM100-12	12V 8.33A	3%	100 Watts
PSEM100-16	16V 6.25A	3%	100 Watts
PSEM100-24	24V 4.17A	2%	100 Watts

Standard models fitted with a 1.2 metre output lead fitted with a 180 degree DIN plug.

Options: Alternative output connectors available, consult sales office with your requirements. Any output voltage available within the range of 5V to 40V DC. Some of these may be subject to minimum order quantities.

MODEL	OUTPUT 1				OUTPUT 2				OUTPUT 3				MAXIMUM OUTPUT POWER
	VNOM	IMIN	IMAX	REGMAX.	VNOM	IMIN	IMAX	REGMAX.	VNOM	IMIN	IMAX	REGMAX.	
PSEM100-3312	+3.3V	1.0A	10A	7%	+12V	0.3A	3A	5%	-	-	-	-	69W
PSEM100-512	+5V	1.0A	10A	5%	+12V	0.3A	3A	5%	-	-	-	-	80W
PSEM100-515	+5V	1.0A	10A	5%	+15V	0.3A	3A	5%	-	-	-	-	80W
PSEM100-524	+5V	1.0A	10A	5%	+24V	0.2A	2A	5%	-	-	-	-	80W
PSEM100-335	+3.3V	1.0A	10A	7%	+5V	0.5A	5A	5%	-	-	-	-	55W
PSEM100-1212	+12V	0.7A	7A	5%					-12V	0A	1A	5%	80W
PSEM100-1515	+15V	0.6A	6A	5%					-15V	0A	1A	5%	80W
PSEM100-2424	+24V	0.3A	3A	5%					-24V	0A	1A	5%	80W
PSEM100-524N	+5V	1.0A	10A	7%					-24V	0A	1A	5%	74W
PSEM100-331212	+3.3V	1.0A	10A	7%	+12V	0.3A	3A	5%	-12V	0A	1A	5%	74W
PSEM100-3312D	+3.3V	1.0A	10A	5%	+12V	0.3A	3A	5%	+12V	0A	1A	5%	74W
PSEM100-5125	+5V	1.0A	10A	5%	+12V	0.3A	3A	5%	-5V	0A	1A	5%	80W
PSEM100-5125P	+5V	1.0A	10A	5%	+12V	0.3A	3A	5%	+5V	0A	1A	5%	80W
PSEM100-51212	+5V	1.0A	10A	5%	+12V	0.3A	3A	5%	-12V	0A	1A	5%	80W
PSEM100-512D	+5V	1.0A	10A	5%	+12V	0.3A	3A	5%	+12V	0A	1A	5%	80W
PSEM100-51515	+5V	1.0A	10A	5%	+15V	0.3A	3A	6%	-15V	0A	1A	5%	80W
PSEM100-515D	+5V	1.0A	10A	5%	+15V	0.3A	3A	6%	+15V	0A	1A	5%	80W
PSEM100-52424	+5V	1.0A	10A	5%	+24V	0.3A	3A	5%	-24V	0A	1A	5%	80W
PSEM100-524D	+5V	1.0A	10A	5%	+24V	0.3A	3A	5%	+24V	0A	1A	5%	80W
PSEM100-52412	+5V	1.0A	10A	5%	+24V	0.3A	3A	5%	-12V	0A	1A	5%	80W
PSEM100-52412P	+5V	1.0A	10A	5%	+24V	0.3A	3A	5%	+12V	0A	1A	5%	80W
PSEM100-33125	+3.3V	1.0A	10A	7%	+12V	0.3A	3A	5%	-5V	0A	1A	5%	74W
PSEM100-33125P	+3.3V	1.0A	10A	7%	+12V	0.3A	3A	5%	+5V	0A	1A	5%	74W
PSEM100-33512	+3.3V	1.0A	10A	7%	+5V	0.3A	3A	5%	-12V	0A	1A	5%	60W
PSEM100-33512P	+3.3V	1.0A	10A	7%	+5V	0.3A	3A	5%	+12V	0A	1A	5%	60W

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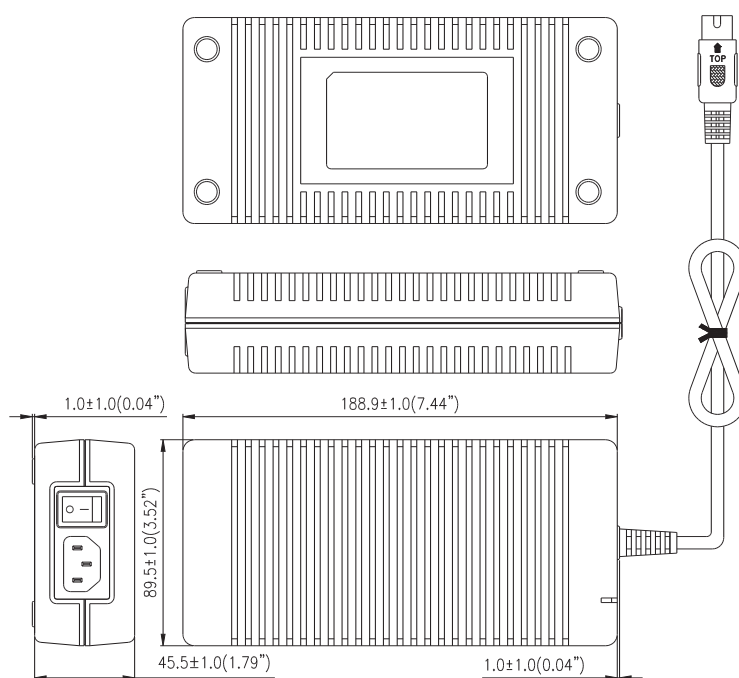
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Mechanical Specification



Note:

1. Dimensions are shown in inches or mm
2. Weight: 778-800gs approx.
3. Optional output connector