



MWC100 Series 100 Watt Medical Desktop Power Supply

- 5-Year Limited Warranty
- High Efficiency: Level V
- Power Factor Correction
- High Power Density 4.8W/in³
- Lifetime Expectation >5 years
- Hold-up Time >48ms at full load
- EISA, CEC Compliant
- Floating output
- Medical Approval - EN60601-1 Class I

Elpac Part Number	Output Voltage	Output Current	Peak Current ¹	Total Regulation ²	Typical Efficiency ³
MWC100012A-12A	12.0V	8.3A	10.0A	±5%	86%
MWC100015A-11A	15.0V	6.6A	8.0A	±5%	87%
MWC100018A-11A	18.0V	5.5A	6.7A	±5%	87%
MWC100024A-11A	24.0V	4.1A	5.0A	±5%	89%

Notes

1 Maximum peak load (120W) lasting 500ms with a maximum 10% duty cycle.

2 Includes initial setting, line regulation, load regulation, and thermal drift.

3 Typical at 115VAC (including output cable).

Input	
Input Voltage	85 - 264VAC; 100 - 240VAC Nominal
Input Frequency	47 - 63Hz
Input Current	<1.5A rms
Inrush Current	<37A at 230VAC cold start
Power Factor	>0.97
Zero Load Power Consumption	<0.5W
Earth Leakage Current	<150µA @ 132VAC @ 60Hz

	<250µA @ 264VAC @ 60Hz
Patient Leakage Current	<50µA @ 132VAC @ 60Hz
	<80µA @ 264VAC @ 60Hz

Output	
Output Voltage	See Table
Total Regulation	+/-5%
Minimum Load	No minimum load required
Start-Up Delay	<1s
Hold-Up Time	>48ms at any input voltage
Ripple & Noise	<1% pk-pk *
Over Voltage Protection	110-135%
Over Temperature Protection	Active - Recoverable; plus Passive - Non Recoverable
Over Current Protection	120 - 180%
Short Circuit Protection	shutdown, auto-restart (hiccup mode)

Notes

* Ripple and noise measured with 20MHz bandwidth; 10µF tantalum capacitor in parallel with a 0.1µF ceramic capacitor.

General	
Efficiency	Avg Efficiency 87.4% @ 115VAC; 87.9% @ 230VAC
MTBF	min. 200,000 hours demonstrated
Size	7.09" (180.2mm) x 2.27" (57.5mm) x 1.52" (38.6mm)
Weight	1.52 lbs (0.69 kg)
Power Density	4.2W/in3

EMC & Safety	
Emissions	FCC class B, CISPR11 class B EN61000-3-2, -3
Immunity	EN61000-4-2, -3, -4, -5, -6, -8, -11
Certified by TUV to the following: 	cTUVus, cULus UL 60601-1 CAN/CSA-22.2 No.601.1-M90

Environmental	
Operating Temperature	0 – 60°C (Full load to 40°C, derate linearly to 50% load at 60°C)
Storage Temperature	-40°C to +85°C
Relative Humidity	5-95%, non-condensing
Cooling	Natural Convection
Vibration	All units production tested to 19.6m/s ²

CB per IEC60601-1

CE marked to LVD