



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-12A	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 (Typical)	<150 μ A @ 132VAC @ 60Hz <250 μ A @ 264VAC @ 60Hz
Patient Leakage Current	<50 μ A @ 132VAC @ 60Hz <80 μ A @ 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; 10 μ F tantalum capacitor in parallel with a 0.1 μ F 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/in ³

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

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
	CB per IEC60601-1 3rd edition
	CE marked to LVD

Input Configuration

Standard Input Cable	Not Provided
Connection on Power Supply Body	IEC 320 C14 Receptacle

Output Configuration (12V Model Only)

Standard Output Cable	4 ft.
Cord Size	4x18awg
Connector (PSU side)	Switchcraft DIN-8, P/N 15BL8M (male pins)
Mating Connector	Switchcraft 62GB8FX (8 pin) or equivalent

Output Configuration (15V, 18V, 24V, 48V)

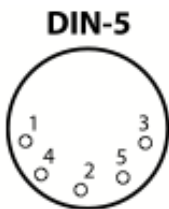
Standard Output Cable	6 ft.
Cord Size	4x18awg
Connector (PSU side)	Switchcraft DIN-5, P/N 05GM5MX for 15V, 18V, 24V & 48V
Mating Connector	Switchcraft 57GB5FX (5 pin) or equivalent

Output Pin Assignments



Pin 1	+V1
Pin 2	+V1
Pin 3	Return
Pin 4	+V1
Pin 5	Return
Pin 6	+V1
Pin 7	Return
Pin 8	Return

Output Pin Assignments



Pin 1	Return
Pin 2	Return
Pin 3	+V1
Pin 4	Return
Pin 5	+V1

