



ELPAC MWA150 SERIES CLASS I

150 Watt
Medical Desktop Power Supply

- Medical Approval - EN60601-1 Class I 3rd Edition
- High Efficiency: Level V
- High Power Density 5.4W/in³
- Lifetime Expectation >5 years
- Hold-up Time >25ms at full load
- Floating Output
- 5-Year Limited Warranty



INPUT

Input Voltage	85 – 264VAC 100 – 240VAC Nominal
Input Frequency	47 – 63Hz
Input Current	<2A rms
Inrush Current	<37A at 230VAC cold start
Power Factor	>0.97
Zero Load Power Consumption	<0.5W
Earth Leakage Current (Typical)	<200µA @ 132VAC @ 60Hz
	<300µA @ 264VAC @ 60Hz
Touch Leakage Current	<50µA @ 132VAC @ 60Hz
	<75µA @ 264VAC @ 60Hz

OUTPUT

Output Voltage	See Table
Total Regulation	+/-5%
Minimum Load	No minimum load required
Start-Up Delay	<1.5s
Hold-Up Time	>25ms 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.

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Model Number	Output Voltage	Output Current	Peak Current ¹	Total Regulation ²	Typical Efficiency ³
MWA150012A-12A	12.0V	12.5A	15.0A	±5%	89%
MWA150015A-12A	15.0V	10.0A	12.0A	±5%	90%
MWA150018A-12A	18.0V	8.3A	10.0A	±5%	90%
MWA150024A-12A	24.0V	6.3A	7.5A	±5%	91%
MWA150028A-11A	28.0V	5.3A	6.4A	±5%	91%
MWA150048A-11A	48.0V	3.2A	3.75A	±5%	92%

Notes

1) Maximum peak load (180W) 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).

General		Environmental		EMC & Safety	
Efficiency	Avg. Efficiency 90.8% @ 115VAC; 92.8% @ 230VAC	Operating Temperature	0 – 60°C (Full load to 40°C, derate linearly to 50% load at 60°C)	Emissions	FCC class B, CISPR11 class B EN61000-3-2, -3
MTBF	min. 200,000 hours demonstrated	Storage Temperature	-40°C to +85°C	Immunity	EN61000-4-2, -3, -4, -5, -6, -8, -11
Size	7.56" (192mm) x 2.45" (62.2mm) x 1.52" (38.7mm)	Relative Humidity	5-95%, non-condensing	Certified by TUV to the following:	cTUVus
Weight	1.55 lbs (0.70 Kg)	Cooling	Natural Convection		UL 60601-1
Power Density	5.4W/in ³	Vibration	All units production tested to 19.6m/s ²		CAN/CSA-22.2 No.601.1-M90
					CB per IEC60601-1
					CE marked to LVD

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

Output Configuration	
Standard Output Cable	4ft for 12V & 15V 6ft for 18V, 24V, 28V & 48V
Cord Size	4x16awg (12V& 18V); 4x18awg (24V & 48V*)
Connector (PSU side)	Switchcraft DIN-8 P/N 15BL8M (male pins)
Mating Connector	Switchcraft 62GB8F (8 pin) or equivalent (12V, 15V, 18V, 24V) Switchcraft 62GB8F (5 pin) or equivalent (30V, 48V)

*with EMI bead

Output Pin Assignments		
Pin 1	+V1	<p>DIN-8</p>
Pin 2	+V1	
Pin 3	Return	<p>DIN-5</p>
Pin 4	+V1	
Pin 5	Return	
Pin 6	+V1	
Pin 7	Return	
Pin 8	Return	

