

MWB100 Series

100 Watts Medical Switch Mode Power Supply

>Elpac Power Systems

TECHNICAL SUPPORT

WORLDWIDE 1-888-357-2280 saleselpac@iccus.com www.iccus.com

EUROPE +44.1383.432920 saleseurope@iccus.com



5-YEAR LIMITED WARRANTY*

- High Efficiency
- High Power Density 4.8W/in³
- Lifetime Expectation >5 years
- Hold-Up Time >24ms at full load
- EISA Compliant
- CEC Compliant
- Floating Output
- Medical Approval EN60601-1 Class II

Input	
Input Voltage	85 – 264VAC 100 – 240VAC Nominal
Input Frequency	47 – 63Hz
Input Current	<2.3A rms
Inrush Current	<37A at 230VAC cold start
Zero Load Power Consumption	<0.5W
	<150μA @ 132VAC @ 60Hz
Earth Leakage Current	<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	>24ms 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)

^{*}visit www.iccus.com for complete details **Ripple and noise measured with 20MHz bandwidth; 10μF tantalum capacitor in parallel with a 0.1μF ceramic capacitor.











MWB100 Series

100 Watts Medical Switch Mode Power Supply

Model Number	Output Voltage	Output Current	Peak Current ¹	Total Regulation ²	Typical Efficiency ³
MWB100012A-12A	12.0V	8.3A	10.0A	±5%	88%
MWB100015A-12A	15.0V	6.7A	8.0A	±5%	89%
MWB100018A-12A	18.0V	5.6A	6.7A	±5%	89%
MWB100024A-12A	24.0V	4.2A	5.0A	±5%	89%

- 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).

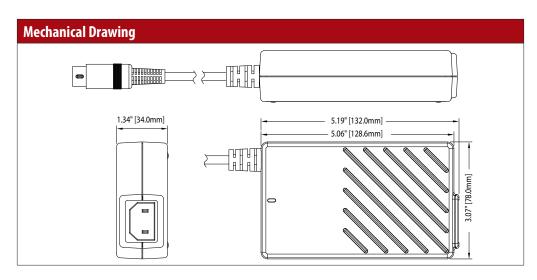
General	
Energy Star Efficiency	Avg Efficiency 88.9% @ 115VAC; 90.6% @ 230VAC
MTBF	min. 200,000 hours demonstrated
Size	5.19" (132mm) x 3.07" (78mm) x 1.34" (34mm)
Weight	1.1 lbs (0.50 kg)
Power Density	4.8W/in ³

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
	cTUVus
Certified by TUV to the	UL 60601-1
following:	CAN/CSA-22.2 No.601.1-M90
	CB per IEC60601-1
C America US	CE marked to LVD

Input Configuration		
Standard Input Cable	Not provided	
Connection on Power Supply Body	IEC 320 C18 Receptacle	

Output Configuration		
Standard	4 ft for 12V	
Output Cable	6 ft for 15V, 18V, and 24V	
Connector	Switchcraft DIN-8,	
(PSU side)	P/N 15BL8M (male pins)	
Mating	Switchcraft 62GB8F	
Connector	or equivalent	



Output Pin A	ssignment	ts
Pin 1	+V1	
Pin 2	+V1	DIN-8
Pin 3	Return	
Pin 4	+V1	$\binom{6}{1} \binom{6}{8} \binom{7}{0} \binom{3}{1}$
Pin 5	Return	$\begin{pmatrix} 1 & 0 & 3 \\ 0 & & 0 \\ 4 & & 5 \end{pmatrix}$
Pin 6	+V1	$\begin{pmatrix} 4 & 5 \\ 0 & 2 & 0 \end{pmatrix}$
Pin 7	Return	
Pin 8	Return	

Ordering Options Available
White Case
Grounded Output
Ferrite Cores
Custom Imprinting
Special Packaging
Special Labeling
Output Cord Lengths
Overmolding

