



MWA220 Series

220 W Medical Desktop Power Supply

- High Efficiency
- High Power Density 5.9W/in³
- 5-Year Limited Warranty
- LED Status Indicator
- IPX1 Rated
- Hold-up Time > 25ms at full load
- Medical Approval - EN60601-1 Class I 3rd Edition
- Level V; EISA, EuP Directive Compliant
- CEC Compliant

Elpac Part Number	Output Voltage	Output Current	Peak Current	Total Regulation	Typical Efficiency
MWA220012A-13A	12.0V	18.3A	19.0A	±5%	89%
MWA220015A-13A	15.0V	14.6A	15.2A	±5%	89%
MWA220018A-13A	18.0V	12.2A	12.7A	±5%	90%
MWA220024A-12A	24.0V	9.2A	9.5A	±5%	90%
MWA220028A-12A	28.0V	7.8A	8.0A	±5%	90%
MWA220032A-12A	32.0V	6.8A	7.0A	±5%	91%
MWA220048A-11A	48.0V	4.6A	4.7A	±5%	91%

Input

Input Voltage	85 - 264VAC; 100 – 240VAC Nominal
Input Frequency	47 - 63Hz
Input Current	<3A rms
Inrush Current	<37A at 230VAC cold start
Power Factor	>0.97
Zero Load Power Consumption	<0.5 Watt
Earth Leakage Current (Typical)	<200µA @ 132VAC @ 60Hz <300µA @ 264VAC @ 60Hz
Patient Leakage Current	<100µA @ 132VAC @ 60Hz <100µA @ 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	105 - 110%
Short Circuit Protection	shutdown, auto-restart (hiccup mode)

General

Efficiency	Avg Efficiency 90.5% @ 115VAC; 92.5% @ 230VAC
MTBF	min. 200,000 hours demonstrated
Size	8.2" (208mm) x 2.9 (73mm) x1.6 (39mm)
Weight	2.1 lbs (0.95 kg)
Power Density	5.9W/in³

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	15-95%, non-condensing
Cooling	Natural Convection
Vibration	All units production tested to 19.6m/s2

EMC & Safety

Emissions	EN55011 and FCC Part 15, Class B Conducted and Radiated
Immunity	EN61000-3-2,-3; EN61000-4-2, -3, -4, -5, -6, -8, -11
Certified by TUV to the following:	cTUVus
	UL 60601-1
	CAN/CSA-22.2 No.601.1-M90
	IEC60601-1, 2nd and 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 - 18V)

Standard Output Cable	4 ft.
Cord Size	4x16awg
Connector (PSU side)	Molex 6 pin P/N 39-01-2065
Mating Connector	Molex 39-01-2061 or 26-01-3116

Output Configuration (24V - 32V)

Standard Output Cable	6 ft.
Cord Size	4x18awg
Connector (PSU side)	Switchcraft DIN-8, P/N 15BL8MX (male pins)
Mating Connector	Switchcraft 62GB8FX (8 pin) or equivalent

Output Configuration (48V)

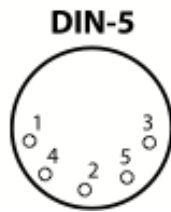
Standard Output Cable	6 ft.
Cord Size	2x16awg
Connector (PSU side)	Switchcraft DIN-5, P/N 05GM5MX (male pins)
Mating Connector	Switchcraft 57GB5FX (5 pin) or equivalent

Output Pin Assignments



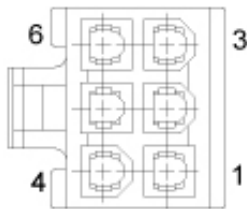
Pin 1	+V1
Pin 2	+V1
Pin 3	Return
Pin 4	+V1
Pin 5	Return
Pin 6	+V1
Pin 7	Return
Pin 8	Return

Output Pin Assignments



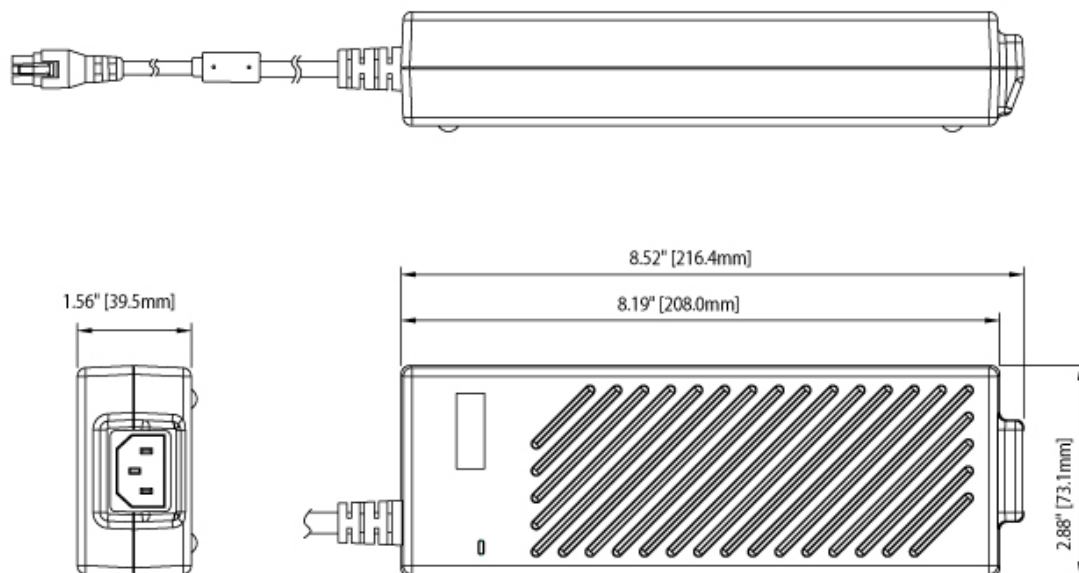
Pin 1	Return
Pin 2	Return
Pin 3	+V1
Pin 4	Return
Pin 5	+V1

Output Pin Assignments (12V-18V) (viewed from the open/user end)



Pin 1	Return
Pin 2	Return
Pin 3	Shield
Pin 4	+V1
Pin 5	+V1
Pin 6	Not Used

12V Model



24V-48V Models

