



## MWA020 Class I

### 20 Watt Medical Desktop Power Supply

- High Efficiency
- Fully Regulated DC Output
- 5-Year Limited Warranty
- Hold-up Time >18ms at full load
- Safety Approval-EN60601-1 Class I 3rd edition
- Level V, EuP Directive Compliant
- LED Indicator

Elpac Part Number	Output Voltage	Output Current	Peak Current <sup>1</sup>	Total Regulation <sup>2</sup>	Typical Efficiency <sup>3</sup>
MWA020005A-10A	5.0V	4.0A	4.2A	+/-5%	80%
MWA020009A-10A	9.0V	2.22A	2.3A	+/-5%	83%
MWA020012A-10A	12.0V	1.67A	1.75A	+/-5%	84%
MWA020024A-10A	24.0V	0.84A	0.87A	+/-5%	86%

#### Notes

1 maximum peak load (21W) 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	<0.5A rms
Inrush Current	<50A @ 230VAC cold start
Zero Load Power Consumption	<0.3W
Earth Leakage Current (Typical)	<100µA @ 132VAC @ 60Hz (typical) <150µA @ 264VAC @ 60Hz (typical)

## Output

Output Voltage	See Model Overview Table
Total Regulation	+/-5%
Minimum Load	No minimum load required
Start-Up Delay	<1.5s
Hold-Up Time	>18ms at any input voltage
Ripple & Noise	<1% pk-pk**
Over Voltage Protection	112-135%
Over Temperature Protection	Active - Recoverable; plus Passive - Non Recoverable
Over Current Protection	108% - 180%
Short Circuit Protection	Shutdown, auto-restart (hiccup mode)


## General

Efficiency	Avg Efficiency 83.4% at 115VAC; 82.8% @ 230VAC
MTBF	min. 200,000 hours demonstrated
Size	3.45" x 2.04" x 1.30"   87.7mm x 51.8mm x 33.0mm
Weight	5V 0.4lbs (0.2Kg); 24V 0.3 lbs (0.16Kg)
Power Density	3.0 W/in <sup>3</sup>

## 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 <sup>2</sup>

## 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
	UL 60601-1
	CAN/CSA-22.2 No.601
	CB per IEC60601-1 2nd and 3rd Edition
	CE marked to LVD Directive

## Input Configuration

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

## Output Configuration

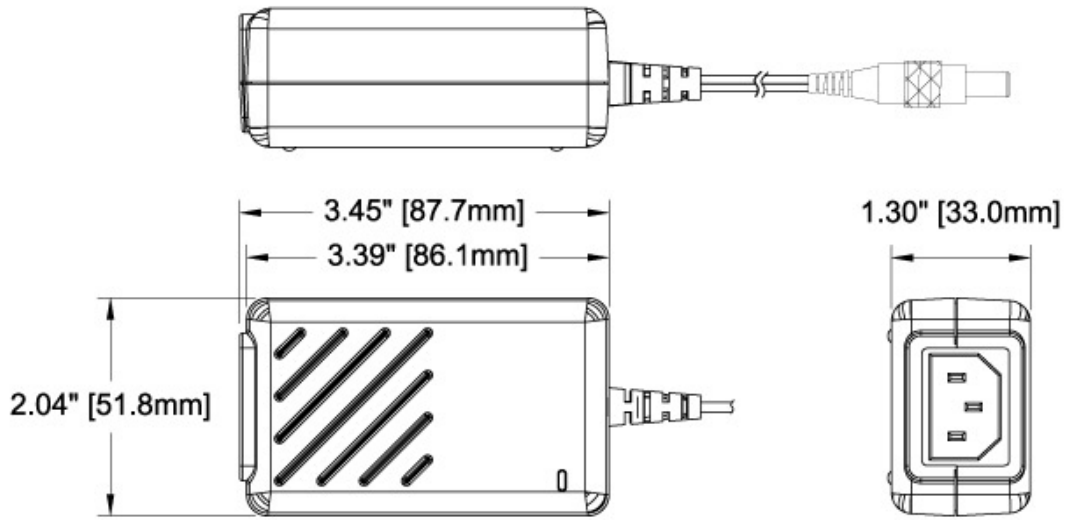
Standard Output Cable	6 ft.
Cord Size	16AWG zip (5V, 9V) 18AWG zip (12V) 20AWG zip (24V)
Connector (PSU side)	Switchcraft 760 or equivalent
Mating Connector	Switchcraft 712A or equivalent

## Output Pin Assignments



Center	+v1
Outside	Return

5V and 9V Model



12V and 24V Model

