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DPS50-M

60 Watts

Medical

 Total Power:
 30 - 60 Watts

 Input Voltage:
 90 - 264 Vac

 127 - 300 Vdc

 # of Outputs:
 Single



- Medical safety approvals
- CE Mark EMC & LVD (except DPS52-M)
- Universal AC input
- Fully regulated output
- Overload and short circuit protection
- Internal remote sense to the output pluq
- Constant voltage
- Level V efficiency (except DPS52-M)
- High MTBF
- IEC320 AC receptacle, 3 pin (type C14)
- Built in EMI filter (CISPR 22 Class B)
- LED power good indicator
- Input power <74 watts
- Complies with EN61000-3-2
- Meets Energy Star

Safety

UL UL 60601-1

CSA CSA-C22.2 no.601.1-M90
VDE 07501/EN60601-1 (IEC601)
CE EMC & LVD (except

DPS52-M)





Electrical Specifications

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Input range 90 - 264 Vac (wide range)

127 - 300 Vdc

Frequency 47 - 440 Hz

Inrush current <60 A @ 230 Vac, cold start @ 25 °C Input current <2.0 A rms @ 115 Vac; <1A @ 230 Vac Efficiency 80% @ full load typical, @115 Vac

EMI/RFI FCC Part 15, Subpart B Class B & EN55022 (CISPR 22) Class B

Safety ground 275 μA max. @ 50/60 Hz, 264 Vac input

leakage current

Output

Maximum Power (Po) 60 W (DPS52, 30 W)

Hold-up time 10ms. typical at full load @ 115 Vac

Overvoltage protection 20% - 45% above nominal output maximum

Latching type, recycle AC to reset.

Overload protection Output short circuit protection auto recover

Overload protected @ 120 - 150% above maximum rating

Cable/connector DC cable with 2.5 mm center plug

DC plug center +v DC plug outer -v

Environmental Specifications

Operating temperature: 0° to +40 °C ambient. Derate each output as 2.5% per degree from

40°C to 60 °C. -20°C start up

Storage temperature: -40 °C to +85 °C

Electromagnetic

Designed to meet EN61000-4, -2, -3, -4, -5, -6, -8, -11, level 3

susceptibility:

Humidity: Operating; non-condensing 10% to 90% RH

Vibration: Three orthogonal axes, 3 sweeps per axe at 1 oct/min. 2G peak 8Hz

to 500 Hz, operational

MTBF demonstrated: > 550,000 hours at full load and 25 °C ambient conditions





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Model Number Maximum Power Output Voltage Maximum Load Peak Load¹ Regulation² Ripple P/P (PARD)³ DPS52-M* 30 W 5 V 6 A 6.5 A ± 2% 50 mV DPS53-M 60 W 12 V 5 A 5.4 A ± 2% 120 mV DPS54-M 60 W 15 V 4 A 4.3 A ± 2% 150 mV DPS55-M 60 W 24 V 2.5 A 2.7 A ± 2% 240 mV DPS58-M 60 W 48 V 1.35 A 1.35 A ± 3% 48 P mV	Ordering Information										
DPS53-M 60 W 12 V 5 A 5.4 A ± 2% 120 mV DPS54-M 60 W 15 V 4A 4.3 A ± 2% 150 mV DPS55-M 60 W 24 V 2.5 A 2.7 A ± 2% 240 mV			•		Peak Load¹	Regulation ²					
DPS54-M 60 W 15 V 4A 4.3 A ± 2% 150 mV DPS55-M 60 W 24 V 2.5 A 2.7 A ± 2% 240 mV	DPS52-M*	30 W	5 V	6 A	6.5 A	± 2%	50 mV				
DPS55-M 60 W 24 V 2.5 A 2.7 A ± 2% 240 mV	DPS53-M	60 W	12 V	5 A	5.4 A	± 2%	120 mV				
	DPS54-M	60 W	15 V	4A	4.3 A	± 2%	150 mV				
DDS58 M 60 W 48 V 1.25 A 1.25 A + 29 480 mV	DPS55-M	60 W	24 V	2.5 A	2.7 A	± 2%	240 mV				
1.23 A ± 2% 480 IIIV	DPS58-M	60 W	48 V	1.25 A	1.35 A	± 2%	480 mV				

- 1. Peak current lasting <15 seconds with a maximum 10% duty cycle.
- 2. At 25 °C including initial tolerance, line voltage, load currents and output voltages adjusted to factory settings.
- 3. Peak-to-peak with 20 MHz bandwidth and $10~\mu F$ (tantalum capacitor) in parallel with a 0.1 μF capacitor at rated line voltage and load ranges.
- * No CE approval under new EUP directive

Mechanical Drawing | Section | Sect

Notes:

- 1. Specifications subject to change without notice.
- 2. All dimensions in inches (mm), tolerance is \pm 0.02" (\pm 0.5 mm)
- 3. Warranty: 2 year
- 4. Weight: 1.06 lb./ .48 kg
- 5. AC input power cord sold separately.
- 6. Specifications are for convection rating at factory settings at 115 Vac input, 25 °C unless otherwise stated

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