

## DPS50-M

60 Watts

Medical

**Total Power:** 30 - 60 Watts  
**Input Voltage:** 90 - 264 VAC  
127 - 300 VDC  
**# of Outputs:** Single



### Special Features

- Medical safety approvals
- CE Mark EMC & LVD
- Universal AC input
- Fully regulated output
- Overload and short circuit protection
- Internal remote sense to the output plug
- Constant voltage
- High efficiency
- 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

### Electrical Specifications

#### Input

|                               |                                                                            |
|-------------------------------|----------------------------------------------------------------------------|
| Input range                   | 90-264 VAC (wide range)<br>127 - 300 VDC                                   |
| Frequency                     | 47-440 Hz                                                                  |
| Inrush current                | <60A @ 230 VAC, cold start @ 25C                                           |
| Input current                 | <2.0A rms @ 115 VAC; <1A @ 230 VAC                                         |
| Efficiency                    | 80% @ full load typical, @115VAC                                           |
| EMI/RFI                       | FCC Part 15, Subpart B Class B & EN55022 (CISPR 22) Class B<br>EN60601-1-2 |
| Safety ground leakage current | 275µA max. @ 50/60 Hz, 264 VAC input                                       |

#### Output

|                        |                                                                                                      |
|------------------------|------------------------------------------------------------------------------------------------------|
| Maximum Power (Po)     | 60W (DPS52, 30W)                                                                                     |
| Hold-up time           | 10ms. typical at full load @ 115VAC                                                                  |
| Overvoltage protection | 20% - 45% above nominal output maximum<br>Latching type, recycle AC to reset.                        |
| Overload protection    | Output short circuit protection auto recover<br>Overload protected @ 120 - 150% above maximum rating |
| Cable/connector        | DC cable with 2.5mm center plug<br>DC plug center +v<br>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 susceptibility: | Designed to meet EN61000-4, -2, -3, -4, -5, -6, -8, -11, level 3                             |
| Humidity:                       | Operating; non-condensing 10% to 90% RH                                                      |
| Vibration:                      | Three orthogonal axes, 3 sweeps per axe at 1 oct/min. 2G peak 8Hz to 500Hz, operational      |
| MTBF demonstrated:              | >550,000 hours at full load and 25°C ambient conditions                                      |



### Safety

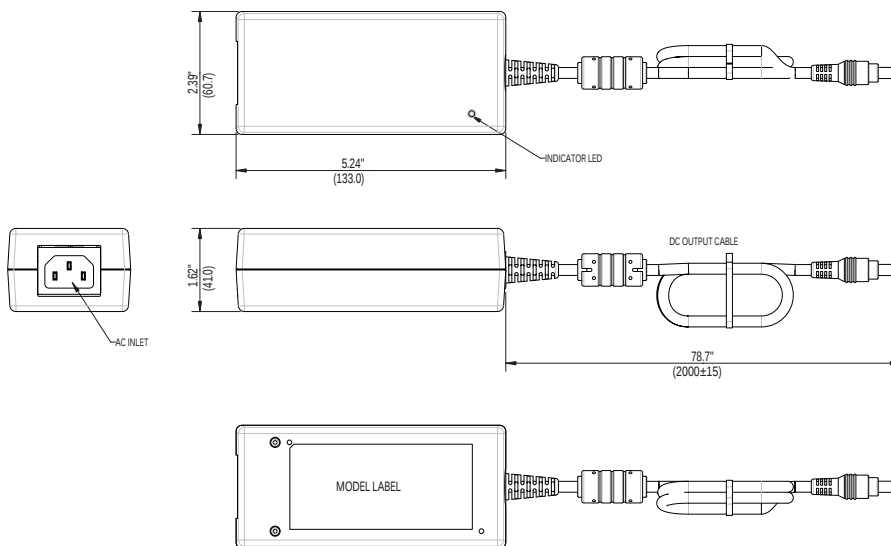
|     |                          |
|-----|--------------------------|
| UL  | UL 60601-1               |
| CSA | CSA-C22.2 no.601.1-M90   |
| VDE | 07501/EN60601-1 (IEC601) |
| CE  | EMC & LVD                |

## Ordering Information

| Model Number | Maximum Power | Output Voltage | Maximum Load | Peak Load <sup>1</sup> | Regulation <sup>2</sup> | Ripple P/P (PARD) <sup>3</sup> |
|--------------|---------------|----------------|--------------|------------------------|-------------------------|--------------------------------|
| DPS52-M      | 30W           | 5V             | 6A           | 6.5A                   | ±2%                     | 50mV                           |
| DPS53-M      | 60W           | 12V            | 5A           | 5.4A                   | ±2%                     | 120mV                          |
| DPS54-M      | 60W           | 15V            | 4A           | 4.3A                   | ±2%                     | 150mV                          |
| DPS55-M      | 60W           | 24V            | 2.5A         | 2.7A                   | ±2%                     | 240mV                          |
| DPS58-M      | 60W           | 48V            | 1.25A        | 1.35A                  | ±2%                     | 480mV                          |

1. Peak-to-peak with 20MHz bandwidth and 10 $\mu$ F tantalum capacitor in parallel with a 0.1  $\mu$ F capacitor.
2. At 25°C including initial tolerance, line voltage, load currents and output voltages adjusted to factory settings.
3. Peak-to-peak with 20MHz bandwidth and 10 $\mu$ F (tantalum capacitor) in parallel with a 0.1 $\mu$ F capacitor at rated line voltage and load ranges.

## Mechanical Drawing



### Notes:

1. Specifications subject to change without notice.
2. All dimensions in inches (mm), tolerance is ± 0.02" (±0.5mm)
3. Warranty: 1 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 115VAC input, 25°C unless otherwise stated

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