

# **Sparkle Power Inc.**

A Leading Power Supply Manufacturer Web site: www.sparklepower.com





# **FSP500-50WDB**

# (Meet 80plus Gold, RoHs Compliant) 500 Watts 2U Switching Power Supply

#### **Features**

- Complied with 2U ATX and ATX12V standard
- Active Power Factor Correction (PFC) meet EN61000-3-2
- High efficiency and reliability
- Restriction on Hazardous Substances. Compatible with European Union Directive 2011/65/EU & (EU)2015/863, WEEE directive 2012/19/EU.
- Remote ON/OFF function
- Internal 12V DC fan included
- Low noise and ripple
- Output over voltage, short circuit, and over power protection
- 100% Hi-pot, ATE, and burn-in tested
- Re-settable power shut down
- Complies with FCC part 15 subpart J, class 'B' 115Vac operation, and CISPR 22 class 'B' at 230Vac operation
- Approved by CB 62368 & 60950-1 2<sup>nd</sup>, EMC. cUL/UL TUV, FCC, CE

## **Input Characteristics**

Input Range: 90 ~ 264Vac (RMS), Full Range Input

**Frequency:**  $47 \sim 63$ Hz

**Input Current:** Max 7A (RMS) @ 115Vac, 3.5A (RMS) @ 230Vac

**Inrush Current:** No damage.

## **Specification**

Temperature Range: Operating: -10°C ~ +50°C;
storage: -40°C ~ +80°C

• **Humidity**: 85% RH, Non-condensing on operating, 95%RH, Non-condensing on storage.

 Dielectric Withstand: Primary frame ground 1800V AC for 2 second

• **Efficiency:** Typical > 90%.

• Standby Power Consumption (5Vsb):

Efficiency> 45%@5Vsb/45mA &230Vac input (2013 Lot 6)

Efficiency> 55% @ 5Vsb/550mA &230Vac input

Efficiency> 70% @ 5Vsb/1A &230Vac input

Efficiency > 70% @ 5Vsb/2.5A &230Vac input

 Altitude: The power supply is applied for tropical climates and use at altitudes not exceeding 5000m above Sea level

• **Rise time:** Less than 20ms

• **Hold-up Time:** 115V:≥13ms, 230V:≥17ms.

 Power Good Signal: Power on delay time 100 ~ 500ms, off delay 1ms minimum (TTL and CMOS compatible)

• Leakage Current: Less than 3.5mA at 264Vac, 50Hz

• MTBF: A minimum predicted MTBF (MIL-HDBK-217) of 100,000 hours of continuous operation at +25°C.

• Dimensions (LxWxH):200x100x70mm

7.88x3.94x2.76inch

## **Output Characteristics**

Output Voltage	Minimum Load	Maximum Load	Load Reg.	Ripple & Noise
+3.3V	0A	14.0A	± 5%	50mV P-P
+5V	0A	16.0A	± 5%	50mV P-P
+12V	0.05A	41.0A	± 5%	120mV P-P
-12V	0A	0.3A	± 10%	120mV P-P
+5Vsb	0A	3A	± 5%	50mV P-P
-5V (option)	0A	0.1A	± 10%	100mV P-P

<sup>\*+3.3</sup>V and +5V total output not exceed 90W. \*-5V option

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<sup>\*</sup> Total output for this subject power supply is 500W