



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



FSP500-50UDB
(Meet 80plus Gold, RoHs Compliant)
500 Watts 1U Switching Power Supply

Features

- Complied with 1U 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 2nd , EMC. cUL/UL TUV, FCC, CE

Input Characteristics

Input Range: 90 ~ 264Vac (RMS), Full Range Input
Frequency: 47 ~ 63Hz
Input Current: Max 7A (RMS) @ 115Vac, 3.5A (RMS) @ 230Vac
Inrush Current: No damage.

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

*+3.3V and +5V total output not exceed 90W. *-5V option
* Total output for this subject power supply is 500W

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):**190x100x40.5mm
7.49x3.94x1.60inch

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