



**Sparkle Power Inc.**  
 A Leading Power Supply Manufacturer  
 Web site: [www.sparklepower.com](http://www.sparklepower.com)



**FSP500-80MRA(S)**  
**(80PLUS Gold, PM\_Bus, RoHS Compliant)**  
**500Watts 1+1 Mini Redundant**  
**Switching Power Supply**

**Features**

- Hot Swapping. Redundant, Power Management Bus (PM Bus REV1.2)
- Complied with latest Intel/AMD platform.
- Active Power Factor Correction (PFC) meet EN61000-3-2
- High efficiency 80 Plus Gold
- Extremely high overall reliability with redundancy for 24 by 7
- Compatible with European Union Directive 2002/95/EC (Restriction on Hazardous Substances).
- Internal 12V DC fan included
- Audible Alarm, TTL Alarm Signal .and Power LED indicator SMB Alert for Fan fail, OVP, OCP, SCP.
- 100% Hi-pot, ATE, and burn-in tested
- Complies with FCC part 15 subpart J class B 115Vac operation, and CISPR 22 class B at 230Vac operation
- Approved by : UL/CUL60950-1,TUV EN60950-1, FCC, EMC,CE

**Specification**

- **Temperature Range:** Operating: 0°C ~ +50°C on full load; storage : -40°C ~ +70°C
  - **Altitude :** Operating: up to 2K Meter; Non- Operating: 0~15KM.
  - **Humidity:** 90% on operating, 95% on storage
  - **Dielectric Withstand:** Primary frame ground 1800V AC for 2 second
  - **Efficiency: Typical > 90%**
  - **Rise time:** 5~70ms
  - **Hold-up Time:** 16 ms minimum at nominal input voltage
  - **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:** 100,000 hours on maximum load at +25°C
- Dimensions (LxWxH):** 190x150x84mm / 7.48x5.9x3.3 inch

**Input Range:** 90 ~ 264Vac, Full Range Input  
**Frequency:** 47 ~ 63Hz  
**Input Current:** 10A~5A at 100~240VAC  
**Inrush Current:** No Damage

**Output Characteristics**

Output Voltage	Minimum Load	Maximum Load	Load Reg.	Ripple & Noise
+3.3V	0A	20A	± 5%	50mV P-P
+5V	0A	20A	± 5%	50mV P-P
+12V1	0.5A	16A	± 5%	120mV P-P
+12V2	0.5A	16A	± 5%	120mV P-P
+12V3	0.5A	16A	± 5%	120mV P-P
-5V	0A	0.3A	± 10%	200mV P-P
-12V	0A	0.5A	± 10%	200mV P-P
+5Vsb	0A	3A	± 5%	50mV P-P

\*-5V is Option  
 \*+3.3V and +5V total output not exceed 130W  
 \* Total output for this subject power supply is 500W

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