



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

## **SPI500ACH8**

**(80PLUS, RoHS Compliant)**

**500 Watts ATX+12V Switching Power Supply**

### Features

- Complied with ATX12V standard
- Active Power Factor Correction (PFC) meet EN61000-3-2
- High efficiency and reliability
- Compatible with European Union Directive 2002/95/EC (Restriction on Hazardous Substances).
- Remote ON/OFF function
- Internal 12V DC fan included
- Noise Killer (thermal fan speed control function)
- Low noise and ripple
- Output over voltage, short circuit, and over current 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 CUL/UL60950-1, CSA, TUV EN60950-1, CB report (60950-1),NEMKO,FCC,EMC

### Input Characteristics

**Input Range:** 90 ~ 265Vac (RMS), Full Range Input

**Frequency:** 47 ~ 63Hz

**Input Current:** Max 6.0A (RMS) @ 115Vac, 3.0A (RMS) @ 230Vac

**Inrush Current:** No damage

### Output Characteristics

Output Voltage	Minimum Load	Normal Load	Maximum Load	Load Reg.	Line Reg.	Ripple & Noise
+3.3V	0.1A	12A	24A	± 5%	± 1%	50mV P-P
+5V	0.2A	12A	24A	± 5%	± 1%	50mV P-P
+12V1	0.1A	9A	18A	± 5%	± 1%	120mV P-P
+12V2	0.5A	9A	18A	± 5%	± 1%	120mV P-P
-12V	0.0A	0.25A	0.5A	± 10%	± 1%	120mV P-P
+5Vsb	0.0A	1.25A	2.5A	± 5%	± 1%	50mV P-P

\* +3.3V and +5V total output not exceed 123W

\* Maximum combined current for the +12V outputs shall be 36A

\* +12V2 Peak current is 19A (less than 10m Sec.), minimum voltage during peak is >11.0Vdc.

\* +5Vsb Peak current is 3.5A (less than 500m Sec.). minimum voltage during peak is >4.5Vdc.

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### Specification

- **Temperature Range:** Operating: +10°C ~ +50°C ; storage & shipping: -20°C ~ +80°C
- **Humidity:** 5-95% RH on operating, 5-95%RH on storage
- **Dielectric Withstand:** Primary frame ground 1800V AC for 1 second
- **Efficiency:** 80% minimum, typical up to 82%
- **Rise time:** Less than 20ms
- **Hold-up Time:** 17ms 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):** 140x150x86mm / 5.5x5.9x3.4inch

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