



**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.



### **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

**Sparkle Power Inc.**

**Main Office**

1000 Rock Avenue

San Jose, CA 95131

TEL: 408-519-8888

FAX: 408-519-9999

E-MAIL: [info@sparklepower.com](mailto:info@sparklepower.com)

**Sparkle Power Inc.**

**Los Angeles Office**

17071 Green Drive

City of Industry, CA 91745

TEL: 626-839-7180

FAX: 626-839-3395