



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



## **FSP850-50ADB**

**Meet 80 PLUS Gold, RoHS Compliant**  
**850 Watts ATX Switching Power Supply**



### Features

- Full modular cable management.
- Active Power Factor Correction (PFC) meet EN61000-3-2
- High efficiency and reliability
- Compatible with European Union Directive 2011/65/EU & (EU)2015/863 (Restriction on Hazardous Substances).
- Remote ON/OFF function
- Internal 12V DC fan included
- With AC input I/O switch.
- 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 CB 62368 & 60950-1 2<sup>nd</sup>, EMC. UL TUV, FCC.

### Input Characteristics

**Input Range:** 90 ~ 264Vac (RMS), Full Range Input  
**Frequency:** 47 ~ 63Hz  
**Input Current:** Max 17A(RMS) @ 115Vac, 8.5A(RMS) @ 230Vac  
**Inrush Current:** No damage at cold start

### Output Characteristics

Output Voltage	Minimum Load	Maximum Load	Load Reg.	Ripple & Noise
+3.3V	0A	25A	± 5%	50mV P-P
+5V	0.1A	25A	± 5%	50mV P-P
+12V	0.2A	70A	± 5%	120mV P-P
-12V	0A	0.5A	± 10%	120mV P-P
+5Vsb	0.A	3.5A	± 5%	50mV P-P

\* +3.3V and +5V total output not exceed 125W  
\* Total output for this subject power supply is 850W

**Sparkle Power Inc.**  
**Main Office**  
48502 Kato Road.  
Fremont CA 94538  
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

### Specification

- **Temperature Range:** Operating: 0°C ~ +50°C  
Storage & shipping: -20°C ~ +80°C
- **Humidity:** operating: 10~90% RH, Non-condensing,  
Storage: 95% RH, Non-condensing,
- **Dielectric Withstand:** Primary frame ground 1800V AC for 2 second
- **Efficiency: Typical > 90%**
- **Altitude:** Operation Altitude : 5000 meters above sea level.
- **Standby Power consumption (5Vsb):**

Load	Efficient
45mA	>=50%
100 mA	>=55%
250 mA	>=65%
>=1A	>=75%

- **Rise time:** Less than 20ms
- **Hold-up Time:** 17 ms minimum at 80% full load.
- **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, 63Hz
- **MTBF:**A minimum predicted MTBF (MIL-HDBK-217) of 100,000 hours of continuous operation at +25°C.
- **Dimensions (LxWxH):** 190x150x86mm / 7.49x5.91x3.4inch