



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



## **FSP600-80PSA(SK)**

**Meet 80 PLUS Bronze, RoHS Compliant**  
**600 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 2011/65/EU & (EU)2015/863 (Restriction on Hazardous Substances).
- Remote ON/OFF function
- Internal 12V DC fan included
- Noise Killer
- AC input I/O switch is option.
- 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. CUL/UL TUV, FCC,

### Input Characteristics

**Input Range:** 90 ~ 264Vac (RMS), Full Range Input  
**Frequency:** 47 ~ 63Hz  
**Input Current:** Max 8A(RMS) @ 115Vac, 4A(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	0A	25A	± 5%	50mV P-P
+12V1	0A	16A	± 5%	120mV P-P
+12V2	0A	16A	± 5%	120mV P-P
+12V3	0A	16A	± 5%	120mV P-P
+12V4	0A	16A	± 5%	120mV P-P
-12V	0A	0.5A	± 10%	120mV P-P
+5Vsb	0.A	4.0A	± 5%	50mV P-P

- \* +3.3V and +5V total output not exceed 150W
- \* Maximum combined current for the 12V outputs shall be 48A,
- \* Total output for this subject power supply is 600W

**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 on full load; storage & shipping: -20°C ~ +80°C
- **Humidity:** 10~90%RH,Non-condensing on operating. 95%RH,Non-condensing on storage
- **Dielectric Withstand:** Primary frame ground 1800V AC for 2 second
- **Efficiency:** Typical > 85%
- **Altitude:** Applied for tropical Climates and use at altitudes not exceeding 5000M above sea level.
- **Meet Energy Star 5.0 & ErP :** The 5Vsb Standby efficiency is measured with the main outputs off (PS\_ON# high state). Standby efficiency should be as shown in below table.

Load	Efficient
45mA	≥45%
100 mA	≥55%
250 mA	≥65%
≥1A	≥75%

- **Rise time:** Less than 20ms
- **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, 63Hz
- **MTBF:**A minimum predicted MTBF (MIL-HDBK-217) of 100,000 hours of continuous operation at +25°C.
- **Dimensions (LxWxH):** 140x150x86mm / 5.5x5.9x3.4inch