



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

**FSP400-60FGGBA**  
**(80PLUS Gold, RoHS Compliant)**  
**400 Watts Flex ATX Switching Power Supply**



**Features**

- Complied with Flex ATX standard
- Active Power Factor Correction (PFC) meet EN61000-3-2
- High efficiency and reliability
- Compatible with European Union Directive 2011/65/EU (Restriction on Hazardous Substances).
- Remote ON/OFF function
- Internal 12V DC fan included
- 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 : UL/CUL60950-1 2<sup>nd</sup> TUV EN60950-1 2<sup>nd</sup>, CB 60950-1 2<sup>nd</sup> , FCC, EMC

**Input Characteristics**

**Input Range:** 90 ~ 264Vac, Full Range Input  
**Frequency:** 47 ~ 63Hz  
**Input Current:** Max 6.0A @ 115Vac, 3.0A @ 230Vac  
**Inrush Current:** No Damage

**Output Characteristics**

Output Voltage	Minimum Load	Maximum Load	Load Reg.	Ripple & Noise
+3.3V	0.1A	14A	± 5%	50mV P-P
+5V	0.1A	16A	± 5%	50mV P-P
+12V1	0.1A	18A	± 5%	120mV P-P
+12V2	0.2A	18A	± 5%	120mV P-P
-12V	0A	0.5A	± 10%	120mV P-P
+5Vsb	0A	3.0A	± 5%	50mV P-P

\*The +3.3V and +5V total output shall not exceed 90watts.  
 \* Total output for this subject power supply is 400W.

**Specification**

- **Temperature Range:** Operating: 0°C ~ +50°C on full load  
Storage : -20°C ~ +80°C
- **Humidity:** Operating : 85% RH, Non-condensing,  
Storage : 95% RH, Non-condensing
- **Dielectric Withstand:** Primary frame ground 1800V AC for 2 second
- **Efficiency:** Typical > 90%
- **Altitude:** operating up to 5K Meter.
- **Meet ErP:** 5Vsb power is less than 0.5W input at power off mode (PS\_ON input at high state) which is comply with EuP Lot 6 , year 2013 requirement.
- **Rise time:** Less than 20ms
- **Hold-up Time:** 17 ms minimum at 230Vac input.
- **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):** 150x81.5x40.5mm / 5.9x3.2x1.6 inch

**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