



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

**FSP400-60EPN(80)**  
**(80PLUS Bronze, 2013 ErP, RoHS Compliant)**  
**400 Watts, ATX 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 UL/CUL 60950-1, TUV EN60950-1, IEC60950-1 (CB Report), CE, FCC, EMC report

**Input Characteristics**

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

**Output Characteristics**

	MINIMUM LOAD	NORMAL LOAD	MAXIMUM LOAD	LOAD REG.	LINE REG.	RIPPLE & NOISE
+3.3V	0.5A	15.82A	24A	±5%	±1%	50mV P-P
+5V	0.3A	9.89A	15A	±5%	±1%	50mV P-P
+12V1	0.5A	11.86A	17A	±5%	±1%	120mV P-P
+12V2	0.5A	11.86A	17A	±5%	±1%	120mV P-P
-12V	0A	0.25A	0.3A	±10%	±2%	200mV P-P
+5Vsb	0A	2.12A	2.5A	±5%	±1%	50mV P-P



**Specification**

- **Temperature Range:** Operating: 0°C ~ +25°C; storage & shipping: -40°C ~ +70°C
- **Humidity:** 85% on operating, 95% on storage
- **Dielectric Withstand:** Primary frame ground 1800V AC for 1 second
- **Efficiency:** 82% minimum.
- **Rise time:** Less than 20ms
- **Hold-up Time:** 16ms 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 / 5.5x5.9x3.4 inch

- (1) +3.3V & +5V total output not exceed 120W.  
 When +5V is load to 15A, the +3.3V maximum load is 13.6A.  
 When +3.3V is load to 24A, the +5V maximum load is 8A.
- (2) +12V1 & +12V2 total output not exceed 336W

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