



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



**FSP450-60GHS(85)**  
**(80Plus Bronze, RoHS Compliant)**  
**450 Watts SFX Power Supply**

**Features**

- Complied with SFX12V standard
- 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, TUV EN60950-1, CB 60950-1 report, FCC, EMC.

**Input Characteristics**

**Input Range:** 115Vac and 230Vac,  
**Frequency:** 47 ~ 63Hz  
**Input Current:** Max 4A @ 115Vac, 2A @ 230Vac  
**Inrush Current:** No damage.

**Output Characteristics**

Output	MINIMUM LOAD	NORMAL LOAD	MAXIMUM LOAD	PEAK LOAD	LOAD REG	LINE REG	RIPPLE & NOISE
+3.3V	0.1A	10.5A	21A		±5%	±1%	70mV P-P
+5V	0.2A	11A	22A		±5%	±1%	70mV P-P
+12V1	0.1A	9A	18A		±5%	±1%	140mV P-P
+12V2	0.5A	9A	18A	19A	±5%	±1%	140mV P-P
-12V	0A	0.25A	0.5A		±10%	±1%	140mV P-P
+5VSB	0A	1.25A	2.5A	3A	±5%	±1%	70mV P-P

**Specification**

- **Temperature Range:** Operating: +10°C ~ +50°C on full load  
Storage & Shipping: -20°C ~ +80°C
- **Humidity:** 5-95% RH (non-condensing) on operating & on storage
- **Dielectric Withstand:** Primary to frame ground 1800V<sub>AC</sub> for 1 second
- **Rise time:** Less than 20ms
- **Hold-up Time:** 17 m sec. minimum
- **Power Good Signal:** Power on delay time 100 ~ 500ms, off delay 1ms minimum (TTL and CMOS compatible)
- **Leakage Current:** Less than 3.5mA
- **MTBF:** 100,000 hours on maximum load at +25°C
- **Dimensions (LxWxH):** 100x125x63.5mm / 3.94x4.92x2.5inch

\* +3.3V & +5V total output does not exceed 120W  
\* Total output continuous shall not exceed 450W  
\* +12V2 peak current is 19A (less than 10m sec)  
minimum voltage during peak is >10.8V<sub>DC</sub>  
\* 5V<sub>SB</sub> peak current is 3A (less than 500m sec)  
Minimum voltage during peak is >4.5 V<sub>DC</sub>

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