



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



## **FSP850-50FGPH3**

**Meet 80 PLUS Platinum, RoHS Compliant  
850 Watts FLEX Switching Power Supply**

### Features

- PM Bus Revision 1.2.
- 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
- 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), Auto Range Input

**Frequency:** 47 ~ 63Hz

**Inrush Current:** No damage at cold start

### Output Characteristics

Output Voltage	Minimum Load	Maximum Load	Load Reg.	Ripple & Noise
+3.3V	0A	20A	± 5%	50mV P-P
+5V	0A	20A	± 5%	50mV P-P
+12V	0A	70.8A	± 5%	120mV P-P
-12V	0A	0.5A	± 10%	120mV P-P
+5Vsb	0.A	3.0A	± 5%	50mV P-P

\* +3.3V and +5V total output not exceed 100W

\* Total output for this subject power supply is 850W

### Specification

- **Temperature Range:** Operating: 0°C ~ +50°C on full load; storage & shipping: -20°C ~ +80°C
- **Humidity:** 5~90%RH,Non-condensing on operating.  
5~90%RH,Non-condensing on storage
- **Dielectric Withstand:** Primary frame ground 1800V AC for 2 second
- **Efficiency: Typical > 92%**
- **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:** 17 ms minimum at nominal input voltage for 75% maximum 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):** 220x81.5x40.5mm / 8.67x3.2x1.6inch

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