



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



## FSP700-50ERN

**(80PLUS Silver, RoHS Compliant)**

**700 Watts ATX12V 2.3 Switching Power Supply**

Meet 2013 ErP

Support C6/C7 idle states for Haswell CPU

### Features

- Complied with ATX12V 2.3 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 CUL/UL60950-1, TUV EN60950-1, CB 60950-1 report, FCC, EMC, CE

### Input Characteristics

**Input Range:** 90 ~ 264Vac, Full Range Input

**Frequency:** 47 ~ 63Hz

**Input Current:** Max 10A @ 115Vac, 5A @ 230Vac

**Inrush Current:** No damage.

### Output Characteristics

	MINIMUM LOAD	NORMAL LOAD	MAXIMUM LOAD	LOAD REG.	LINE REG.	RIPPLE & NOISE
<b>+3.3V</b>	<b>0.2A</b>	<b>10A</b>	<b>25/10.6A</b>	<b>±5%</b>	<b>±1%</b>	<b>50mV P-P</b>
<b>+5V</b>	<b>1A</b>	<b>10A</b>	<b>15.5/25A</b>	<b>±5%</b>	<b>±1%</b>	<b>50mV P-P</b>
<b>+12V</b>	<b>0.05A</b>	<b>24A</b>	<b>56A</b>	<b>±5%</b>	<b>±1%</b>	<b>120mV P-P</b>
<b>-12V</b>	<b>0A</b>	<b>0.25A</b>	<b>0.3A</b>	<b>±10%</b>	<b>±2%</b>	<b>200mV P-P</b>
<b>+5Vsb</b>	<b>0A</b>	<b>1A</b>	<b>3A</b>	<b>±5%</b>	<b>±1%</b>	<b>50mV P-P</b>

+5Vsb peak current is 4A (less than 0.5S).

Supports C6/C7 idle states for Haswell CPU (+12V min. load 0.05A)

**Sparkle Power Inc.**

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### Specification

- **Temperature Range:** Operating: +0°C ~ +40°C on full load  
 Storage & Shipping: -40°C ~ +70°C
- **Humidity:** 5-85% on operating, 5-95% on storage
- **Dielectric Withstand:** Primary to frame ground 1800V<sub>AC</sub> for 1 second
- **Efficiency:** **85%** minimum, typical up to **88%**
- **Rise time:** Less than 20ms
- **Hold-up Time:** 17ms minimum: at 115V/60Hz (80% 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, 50Hz
- **MTBF:** 100,000 hours on maximum load at +25°C
- **Dimensions (LxWxH):** 140x150x86mm / 5.5x5.9x3.4inch

\*+3.3V & +5V total output not exceed 160W.

When +5V is loaded to 25A, then +3.3V maximum load is 10.6A

When +3.3V is loaded to 25A, then +5V maximum load is 15.5A

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**Los Angeles Office**

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