



# Sparkle Power Inc.

A Leading Power Supply manufacturer  
Web site: [www.sparklepower.com](http://www.sparklepower.com)



## FSP250-50PLB

### 220/250 Watts Flex ATX12V, 1U High Switching Power Supply

#### Features

- Complied with Flex ATX and ATX12V standard
- Active Power Factor Correction Meeting with EN61000-3-2
- High efficiency and reliability
- Remote On/Off function
- Internal 12V DC fan included
- Noise Killer (Thermal fan speed control function)
- Low noise and ripple
- Complies with FCC part 15 subpart J Class B and CISPR 22 Class B
- Output over voltage, short circuit, and over current protection
- 100% Hi-pot, ATE, and burn-in tested
- Re-settable power shut down
- Approved by UL 60950, CSA C22.2 No.234 Level 3, TUV EN60950, NEMKO (CB Report), CE

#### Input Characteristics

**Input Range:** 90~265V AC, Full Range Input

**Frequency:** 47~63Hz

**Input Current:** 5A (RMS) @115V AC, 3A (RMS) @230V AC

**Inrush Current:** 50A Max for 115V AC, 80A Max for 230V AC Cold start

#### Output Characteristics

Output Voltage	Minimum Load	Maximum Load		Peak Load		Load Reg.	Line Reg.	Ripple & Noise
		250W (25°C)	220W (50°C)	250W (25°C)	220W (50°C)			
+3.3V	0.3A	18.0A	14.0A			± 5%	± 1%	50mV P-P
+5V	0.3A	20.0A	18.0A			± 5%	± 1%	50mV P-P
+12V	1.0A	16.0A	14.0A	18.0A	16.0A	± 5%	± 1%	120mV P-P
-12V	0.0A	0.5A	0.5A			± 5%	± 1%	120mV P-P
+5Vsb	0.0A	2.0 A	2A	2.5A	2.5A	± 5%	± 1%	50mV P-P

**250W (25°C):** +5V and +3.3V total output not exceed 115W.

+3.3V, +5V, and +12V total output cannot exceed 236.4W.

**220W (50°C):** +5V and +3.3V total output not exceed 110W.

+3.3V, +5V, and +12V total output cannot exceed 206.4W.

#### Specification

- **Temperature Range:** Operating 0° C ~ +25° C on 250W output load or 0° C ~ +50° C on 220W output load ; storage & shipping -20° C ~ +80° C
- **Humidity:** 95% on operating and 95% on storage
- **Dielectric Withstand:** Input to frame ground 1800V AC for 1 second
- **Efficiency:** 68% at minimum measured at nominal AC main voltage and frequency with maximum load on all output
- **Rise Time:** Less than 20ms
- **Hold-up Time:** 17ms minimum at nominal input voltage
- **Power Good Signal:** Power on delay time 100 ms to 500 ms, off delay 1ms minimum (TTL and CMOS compatible)
- **Leakage Current:** Not exceed 1mA at 240VAC, 50Hz
- **MTBF:** 100,000 hours on maximum load at +25° C degree
- **Dimension (WxHxL):** 81.5x40.5x190mm/3.2"x1.6"x7.5" inches

#### 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

#### Sparkle Power Inc.

##### Colorado Office

1316 Indian Paintbrush Lane  
Longmont, CO 80503  
TEL: 303-776-3281  
FAX: 303-776-7645