



# Sparkle Power Inc.

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



## FSP180-60SAV (For Pentium 4) 180 Watts TFX12V Switching Power Supply

### Features

- Complied with TFX12V standard
- 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 1950, CSA C22.2 Level 3, TUV EN60950, NEMKO (CB Report)

### Input Characteristics

**Input Range:** 95~132/190~264V AC, Manual selection

**Frequency:** 47~63Hz

**Input Current:** 7A (RMS) @115V AC, 4A (RMS) @230V AC

**Inrush Current:** 50A Max for 132V AC Cold start

### Specification

- **Temperature Range:** Operating 0° C ~ +50° C on full load; storage & shipping -20° C ~ +65° C
- **Humidity:** 90% on operating and 95% on storage
- **Dielectric Withstand:** Input to frame ground 1800V AC for 1 second
- **Efficiency:** 60% at minimum measured at nominal AC main voltage and frequency with maximum load on all output
- **Rise Time:** Less than 20ms on all output
- **Hold-up Time:** 16.6ms 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:** Less than 3.5mA
- **MTBF:** 100,000 hours on maximum load at +25° C degree
- **Dimension (WxHxL):** 86x65.5x174.9mm/3.4"x2.5"x6.7" inches

### Output Characteristics

| Output Voltage | Minimum Load | Maximum Load | Load Reg. | Line Reg. | Ripple & Noise |
|----------------|--------------|--------------|-----------|-----------|----------------|
| +3.3V          | 0.5A         | 11.5/16.7A   | ± 5%      | ± 1%      | 50mV P-P       |
| +5V            | 1.0A         | 16/12.6A     | ± 5%      | ± 1%      | 50mV P-P       |
| +12V           | 2.0A         | 10A          | ± 5%      | ± 1%      | 120mV P-P      |
| -5V            | 0.0A         | 0.2A         | ± 10%     | ± 2%      | 120mV P-P      |
| -12V           | 0.0A         | 0.3A         | ± 10%     | ± 2%      | 120mV P-P      |
| +5Vsb          | 0.0A         | 2.0 A        | ± 5%      | ± 1%      | 50mV P-P       |

\*+5V and +3.3V total output not exceed 118W

\*+3.3V, +5V, and +12V total output cannot exceed 165W

\*When +3.3V is load on 16.7A, the +5V maximum load is 12.6A

\*When +3.3V is load on 11.5A, the +5V maximum load is 16A

**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