



Sparkle Power Inc.
A Leading Power Supply
Manufacturer
www.sparklepower.com



FSP400-60ETN

(80PLUS Platinum, RoHS Compliant)

**400 Watts ATX12V V2.3 EPS12V V2.92 Switching
Power Supply (Meet 2013 ErP)**

Features

- Complied with ATX12V V2.3 EPS12V V2.92 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.

Input Characteristics

Input Range: 90 ~ 264Vac, Full Range Input

Frequency: 47 ~ 63Hz

Input Current: Max 6.3A at 100-127Vrms@60Hz,
Min 3A at 200-240Vrms@50Hz.

Inrush Current: No damage.

Output Characteristics

	MINIMUM LOAD	NORMAL LOAD	MAXIMUM LOAD	LOAD REG.	LINE REG.	RIPPLE & NOISE
+3.3V	0.1A	12A	16/1.5A	±5%	±1%	50mV P-P
+5V	0.2A	12A	6.5/16A	±5%	±1%	50mV P-P
+12V1	0.1A	8A	18A	±5%	±1%	120mV P-P
+12V2	0A	8A	18A	±5%	±1%	120mV P-P
-12V	0A	0.15A	0.3A	±10%	±2%	200mV P-P
+5Vsb	0A	1.5A	3A	±5%	±1%	50mV P-P



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
- **Efficiency:** **89%** minimum, typical up to **92%**
- **Rise time:** 15ms maximum
- **Hold-up Time:** 17ms minimum at nominal input voltage
- **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):** 140x150x85.8mm / 5.5x5.9x3.4inch

- (1) +3.3V & +5V total output not exceed 85W.
When +5V is load to 16A, the +3.3V maximum load is 1.5A.
When +3.3V is load to 16A, the +5V maximum load is 6.5A.
- (2) +12V1 & +12V2 total output not exceed 372W(31A).
- (3) All outputs shall be safety-isolated from the AC mains and share a common return. This common return must be connected to supply chassis.
- (4) Voltages and ripple are measured at the load side of mating connectors with a 0.1uF monolithic ceramic capacitor paralleled by a 10uF electrolytic capacitor across the measuring terminals.

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

Sparkle Power Inc.

Los Angeles Office

17071 Green Drive
City of Industry, CA 91745
Tel: 626-839-7180
Fax: 626-839-3395