



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

## FSP400-70MP

**(Medical Grade, RoHS Compliant)**

**400 Watts ATX12V, EPS12V Switching Power Supply**

### Features

- Complied with ATX12V, EPS12V 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 CFR 47 part 18 subpart C, 120Vac operation & EN60601-1-2, EN55011, 230VAC operation
- Approved by UL60601-1, CSA C22.2 NO. 601-1-M90, VDE EN60601-1, (CB Report), CE

### Input Characteristics

**Input Range:** 90 ~ 265Vac (RMS), Full Range Input

**Frequency:** 47 ~ 63Hz

**Input Current:** Max 8A (RMS) @ 115Vac, 4A (RMS) @ 230Vac

**Inrush Current:** 60A @ 115Vac, 100A @ 230Vac at cold start

### Output Characteristics



### Specification

- **Temperature Range:** Operating: 0°C ~ +50°C on full load; storage & shipping: -20°C ~ +80°C
- **Humidity:** 5 ~ 90% on operating, 5 ~ 95% on storage
- **Dielectric Withstand:** Primary frame ground 1800V AC for 1 second
- **Efficiency:** 68% minimum at 115Vac and 230Vac on Full load.
- **Rise time:** Less than 20ms
- **Hold-up Time:** 20ms 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 0.3mA at 264Vac, 63Hz
- **MTBF:** 100,000 hours on maximum load at +25°C
- **Dimensions (LxWxH):** 140x150x86mm / 5.5x5.9x3.4inch

Output Voltage	Minimum Load	Maximum Load	Load Reg.	Line Reg.	Ripple & Noise
+3.3V	0.5A	30A	± 5%	± 1%	50mV P-P
+5V	0.3A	30A	± 5%	± 1%	50mV P-P
+12V1	1.0A	17A	± 5%	± 1%	120mV P-P
+12V2	1.0A	17A	± 5%	± 1%	120mV P-P
-5V	0.0A	0.3A	± 10%	± 1%	100mV P-P
-12V	0.0A	0.8A	± 10%	± 1%	120mV P-P
+5Vsb	0.0A	2.0A	± 5%	± 1%	50mV P-P

\*+3.3V and +5V total output shall not exceed 180W

\*+3.3V, +5V and +12V total output shall not exceed 380W

\* Total output for this subject power supply is 400W

#### **Sparkle Power Inc.**

##### **Main Office**

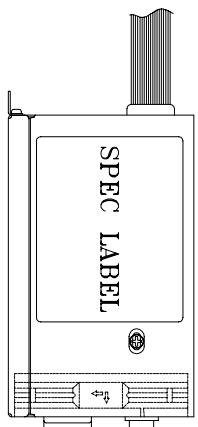
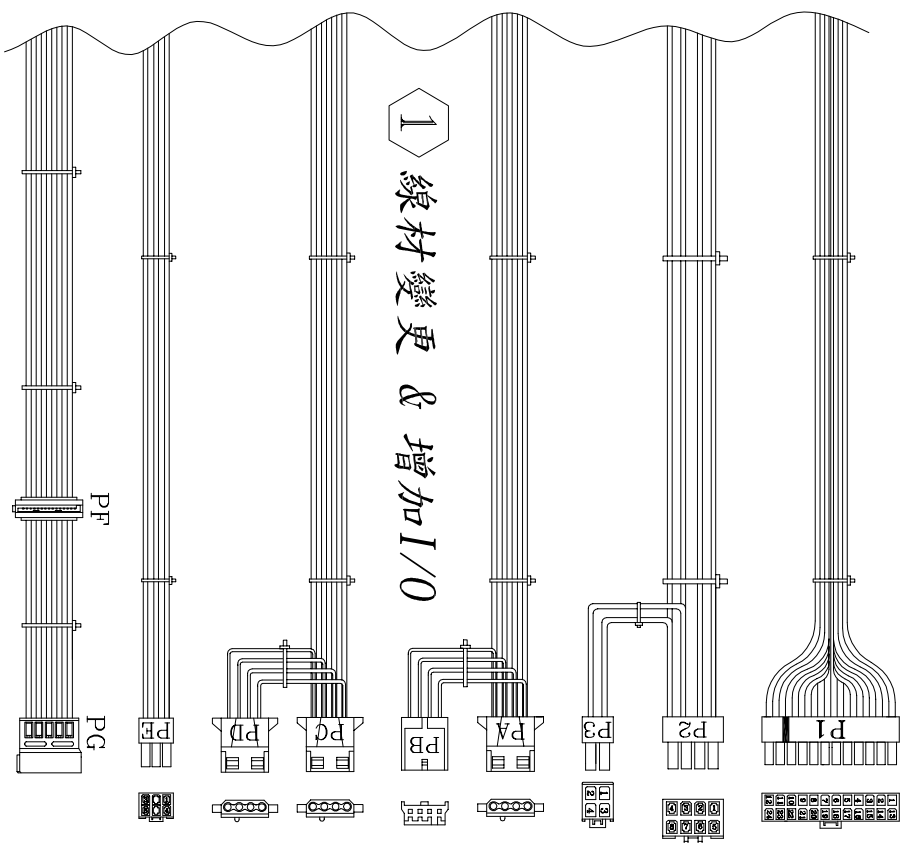
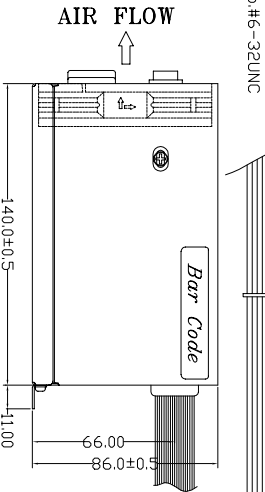
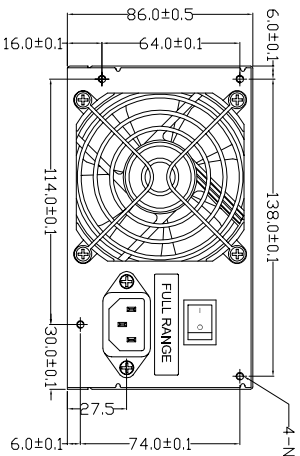
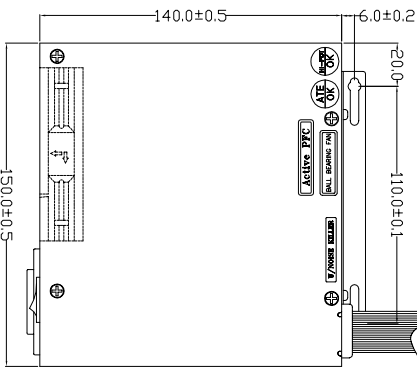
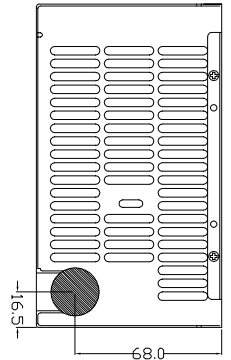
1000 Rock Avenue  
 San Jose, CA 95131  
 TEL: 408-519-8888  
 FAX: 408-519-9999  
 E-MAIL: [info@sparklepower.com](mailto:info@sparklepower.com)

#### **Sparkle Power Inc.**

##### **Los Angeles Office**

17071 Green Drive  
 City of Industry, CA 91745  
 TEL: 626-839-7180  
 FAX: 626-839-3395

REF ID	PN	SIGNAL	WIRE COLOR	GAUGE	CONNECTOR TYPE	CABLE LENGTH
P1	2	+3.3VDC	ORANGE	18	JMT	500±15mm
	3	COM	BLACK	18	JP2416V2-	
	4	+5VDC	RED	18	Z05	
	5	COM	BLACK	18	JP2416V2-	
	6	+5VDC	RED	18	4S	
	7	COM	BLACK	18		
	8	+5VDC	RED	18		
	9	+5VSB	PURPLE	18		
	10	+12V1	YELLOW	18		
	11	+12V1	YELLOW	18		
	12	+3.3VDC	ORANGE	18		
	13	+3.3VDC	ORANGE	18		
	14	SYSTEM	BROWN	22		
15	12V1	BLUE	18			
16	PS-ON	GREEN	18			
17	COM	BLACK	18			
18	COM	BLACK	18			
19	COM	BLACK	18			
20	-5VDC	WHITE	18			
21	+5VDC	RED	18			
22	+5VDC	RED	18			
23	+5VDC	RED	18			
24	COM	BLACK	18			
P2	1	COM	BLACK	18		
	2	COM	BLACK	18		
	3	COM	BLACK	18		
	4	COM	BLACK	18		
P3	1	COM	BLACK	18		
	2	COM	BLACK	18		
	3	COM	BLACK	18		
	4	COM	BLACK	18		
PA	1	+18V1	YELLOW	18		
	2	COM	BLACK	18		
	3	COM	BLACK	18		
	4	+18V2	Yel/Black	18		
PC	1	+18V1	YELLOW	18		
	2	COM	BLACK	18		
	3	COM	BLACK	18		
	4	+5V	RED	18		
PD	1	+18V1	YELLOW	18		
	2	COM	BLACK	18		
	3	COM	BLACK	18		
	4	-5V	RED	18		
PB	1	+18V1	YELLOW	22		
	2	COM	BLACK	22		
	3	COM	BLACK	22		
	4	+5V	RED	22		
PE	1	+18V1	YELLOW	18		
	2	+18V1	YELLOW	18		
	3	COM	BLACK	18		
	4	COM	BLACK	18		
PF	1	+18V1	YELLOW	18		
	2	COM	BLACK	18		
	3	+9V	RED	18		
	4	COM	BLACK	18		
PG	1	+18V1	YELLOW	18		
	2	COM	BLACK	18		
	3	+9V	RED	18		
	4	+9V	RED	18		
	5	+3.3VDC	ORANGE	18		



AIR FLOW

AIR FLOW

PF

PG



FSP P/N.:9PA4002512  
SPI P/N.:FSP400MP-B204

NOTE:

1. ALL THE LENGTH OF OUTPUT WIRES EXCLUDE HOUSING.
2. 產地標籤依業務指示加貼.

UNIT:mm

MODEL NO. : FSP400-70MP(S03002)	TITLE: ASSY	SHEET: 1 OF 1	REV:01
R&D	PE	DRAWN	DATE
INTERIOR COUNTERSIGN:			Jul.17.2006
			樂家龍