



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

## MAGNA 900(R-SPI900GCM)

**(RoHS Compliant)**

**900 Watts ATX12V & EPS12V Switching Power Supply**

### Features

- Complied with ATX12V and 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 part 15 subpart J class B 115Vac operation, and CISPR 22 class B at 230Vac operation
- Approved by UL/CUL 60950-1, CSA, NEMKO EN60950-1 (CB Report) CE, VDE, EMC, FCC

### Input Characteristics

**Input Range:** 99 ~ 265Vac (RMS), Full Range Input

**Frequency:** 47 ~ 53Hz

**Input Current:** Max 11A (RMS) @ 115Vac, 5.5A (RMS) @ 230Vac

**Inrush Current:** No damage

### Output Characteristics

Output Voltage	Minimum Load	Normal Load	Maximum Load	Load Reg.	Ripple & Noise
+3.3V	0.8A	15A	30A	± 5%	75mV P-P
+5V	0.5A	15A	30A	± 5%	75mV P-P
+12V1~+12V4	0.5A	10A	20A	± 5%	140mV P-P
-12V	0.0A	0.5A	1A	± 10%	140mV P-P
+5Vsb	0.1A	1.5A	3.0A	± 5%	75mV P-P

\*+3.3V and +5V total output not exceed 175W.

\*+3.3V and +5V & +12V outputs power should not exceed 875W.

\*Maximum combined current for the 12V outputs shall be 70A..

\* Total output for this subject power supply is 900W

### **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



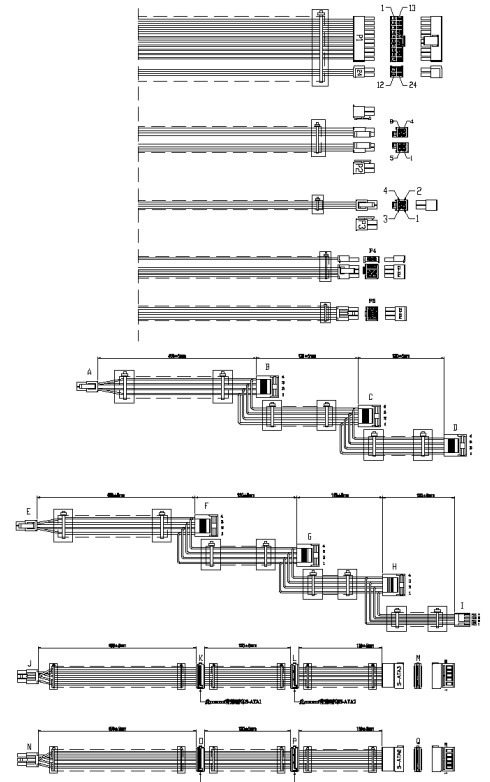
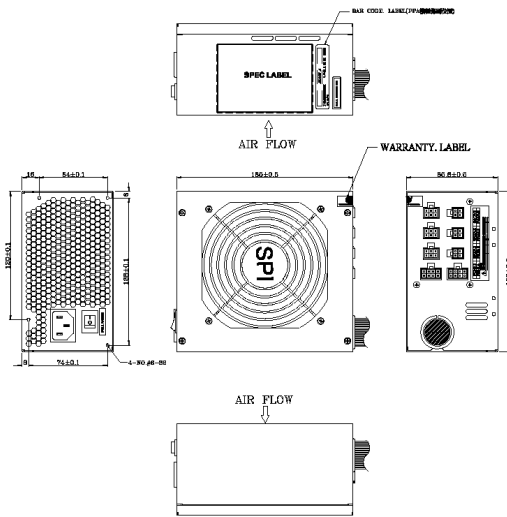
### Specification

- **Temperature Range:** Operating: 10°C ~ 50°C; De-rate 6W/ °C from 25°C to 50°C .  
Storage & Shipping: -20°C ~ +80°C
- **Humidity:** 5%~95% on operating, 5%~ 95% on storage
- **Dielectric Withstand:** Primary frame ground 1800V AC for 1 second
- **Efficiency:** typical > 80%
- **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 3.5mA.
- **MTBF:** 100,000 hours on maximum load at +25°C
- **Dimensions (LxWxH):** 165x150x85.8mm/6.5x5.9x3.4inch

REF ID	CON NO.	WIRING	WIRE COLOR	GAUGE	DESCRIPTION	TYPE	CABLE LENGTH
P1 /24	1	+5V	ORANGE	18	5V	POWER SUPPLY	500 1/2 mm
	2	+5.3V	ORANGE	18	5.3V	POWER SUPPLY	500 1/2 mm
	3	COM	BLACK	18	COMMON	GROUND	500 1/2 mm
	4	+5V	RED	18	5V	POWER SUPPLY	500 1/2 mm
	5	COM	BLACK	18	COMMON	GROUND	500 1/2 mm
	6	+5V	RED	18	5V	POWER SUPPLY	500 1/2 mm
	7	COM	BLACK	18	COMMON	GROUND	500 1/2 mm
	8	PWR_ON	GRAY	24	POWER ON	CONTROL	500 1/2 mm
	9	+5VSB	PURPLE	20	5VSB	POWER SUPPLY	500 1/2 mm
	10	+12V5	YELLOW	18	12V5	POWER SUPPLY	500 1/2 mm
	11	+12V3	YELLOW	18	12V3	POWER SUPPLY	500 1/2 mm
	12	+5.3V	ORANGE	18	5.3V	POWER SUPPLY	500 1/2 mm
	13	+5.3V	ORANGE	18	5.3V	POWER SUPPLY	500 1/2 mm
	14	+5V	BROWN	24	5V	POWER SUPPLY	500 1/2 mm
	15	+5V	BLUE	24	5V	POWER SUPPLY	500 1/2 mm
	16	COM	BLACK	18	COMMON	GROUND	500 1/2 mm
	17	PR_ON	GREEN	24	POWER ON	CONTROL	500 1/2 mm
	18	COM	BLACK	18	COMMON	GROUND	500 1/2 mm
	19	COM	BLACK	18	COMMON	GROUND	500 1/2 mm
20	COM	BLACK	18	COMMON	GROUND	500 1/2 mm	
P2	21	+5V	RED	18	5V	POWER SUPPLY	500 1/2 mm
	22	+5V	RED	18	5V	POWER SUPPLY	500 1/2 mm
	23	COM	BLACK	18	COMMON	GROUND	500 1/2 mm
	24	COM	BLACK	18	COMMON	GROUND	500 1/2 mm
P3	1	COM	BLACK	18	COMMON	GROUND	500 1/2 mm
	2	COM	BLACK	18	COMMON	GROUND	500 1/2 mm
	3	COM	BLACK	18	COMMON	GROUND	500 1/2 mm
	4	COM	BLACK	18	COMMON	GROUND	500 1/2 mm
PCI-E1	5	+12V1	RED/BLACK	18	12V1	POWER SUPPLY	500 1/2 mm
	6	+12V1	RED/BLACK	18	12V1	POWER SUPPLY	500 1/2 mm
	7	+12V1	RED/BLACK	18	12V1	POWER SUPPLY	500 1/2 mm
	8	+12V1	RED/BLACK	18	12V1	POWER SUPPLY	500 1/2 mm
PCI-E2	1	COM	BLACK	18	COMMON	GROUND	500 1/2 mm
	2	COM	BLACK	18	COMMON	GROUND	500 1/2 mm
	3	COM	BLACK	18	COMMON	GROUND	500 1/2 mm
	4	COM	BLACK	18	COMMON	GROUND	500 1/2 mm
PCI-E3	1	+12V2	RED/BLACK	18	12V2	POWER SUPPLY	500 1/2 mm
	2	+12V2	RED/BLACK	18	12V2	POWER SUPPLY	500 1/2 mm
	3	+12V2	RED/BLACK	18	12V2	POWER SUPPLY	500 1/2 mm
	4	COM	BLACK	18	COMMON	GROUND	500 1/2 mm

• 12V Output Distribution List

12V1	P2,P3
12V2	P4,P5
12V3	P1, A-U
12V4	V-Y



SPI P/N.:SPI900GCM P/N.:PPA9000300

MODEL NO. : SPI900GCM(S03001)		TITLE: ASSY		SHEET: 1 OF 1		REV:01	
R&D 8		PE		DRAWN		DATE	
				高湘琳		APR.25.2008	

- NOTE:
- ALL THE LENGTH OF OUTPUT WIRES EXCLUDE HOUSING.
  - 線長標註係指線長不加殼。
  - CASE顏色: BLACK C 2X加亮光漆
  - 膠殼: A、B為白色; V、X為紫色; 其餘為黑色
  - 線頭貼紙顏色: PCI-E1、E2為紫色; PCI-E3、E4為亮紅色; 其餘為黑色

UNIT:mm

Mechanical Drawing(外觀/機構圖) 表單編號 7000P-0111