



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



SPI600ACAG

(80PLUS Gold, RoHS Compliant)

**600 Watts ATX12V 2.3 Switching Power Supply
Meet 2010 ErP**

Features

- Complied with ATX12V 2.3 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 6A @ 115Vac, 3A @ 230Vac

Inrush Current: No damage.

Output Characteristics

| | MINIMUM LOAD | NORMAL LOAD | MAXIMUM LOAD | LOAD REG. | LINE REG. | RIPPLE & NOISE |
|-------|--------------|-------------|--------------|-----------|-----------|----------------|
| +3.3V | 0.1A | 10A | 24/6A | ±5% | ±1% | 50mV P-P |
| +5V | 0.2A | 10A | 12.1/24A | ±5% | ±1% | 50mV P-P |
| +12V1 | 0.1A | 8A | 18A | ±5% | ±1% | 120mV P-P |
| +12V2 | 0A | 8A | 18A | ±5% | ±1% | 120mV P-P |
| +12V3 | 0A | 8A | 18A | ±5% | ±1% | 120mV P-P |
| +12V4 | 0A | 8A | 18A | ±5% | ±1% | 120mV P-P |
| -12V | 0A | 0.25A | 0.5A | ±10% | ±2% | 200mV P-P |
| +5Vsb | 0A | 1.5A | 3.5A | ±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
- **Dielectric Withstand:** Primary to frame ground 1800V_{AC} for 1 second
- **Efficiency:** 87% minimum, typical up to 90%
- **Rise time:** Less than 20ms
- **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

*+12V1,2,3,4 Peak current is 20A (less than 10mS)

*+5V_{sb} peak current is 4A (less than 0.5S)

*+3.3V & +5V total output does not exceed 140W

when +5V is loaded to 24A, then +3.3V maximum load is 6A
when +3.3V is loaded to 24A, then +5V maximum load is 12.1A

*+12V1 & +12V2 & +12V3 & +12V4 total output does not exceed 540W(45A)

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

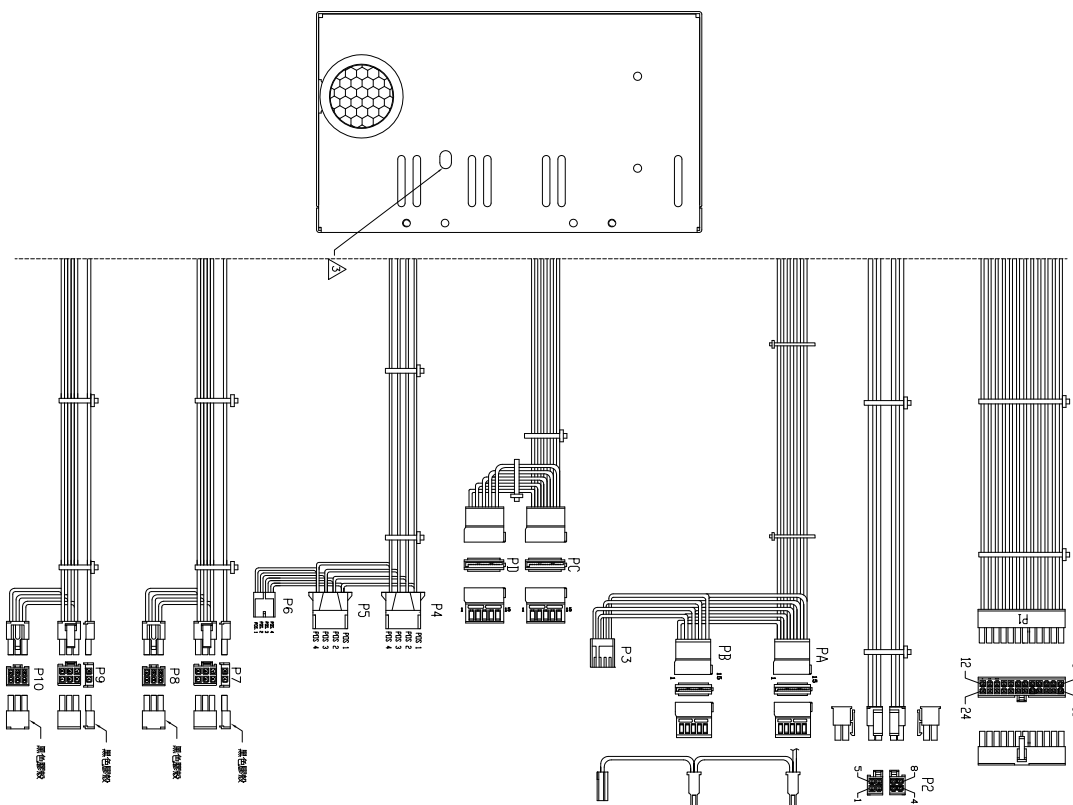
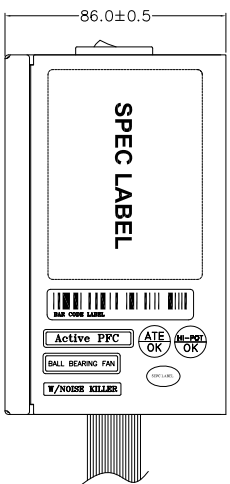
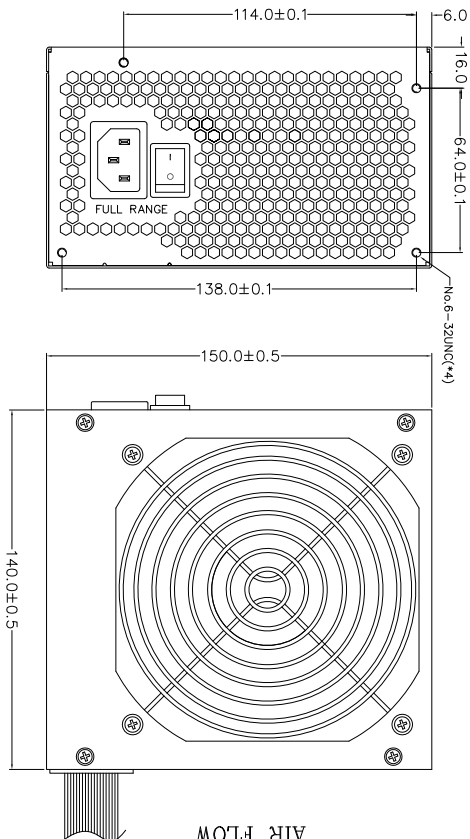
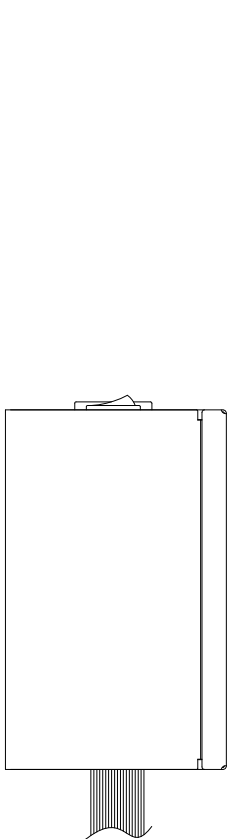
Sparkle Power Inc.

Los Angeles Office

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

| REF. NO. | WIRE COLOR | WIRE GAUGE | CONDUCTOR TYPE | CABLE LENGTH |
|----------|------------|----------------|----------------|--------------|
| P1 | 1 | +3.5VDC ORANGE | 18 AWG | 500 ± 38 mm |
| | 2 | +3.5VDC ORANGE | 18 AWG | |
| | 3 | RED | 18 AWG | |
| | 4 | +5VDC RED | 18 AWG | |
| P2 | 1 | +3.5VDC ORANGE | 18 AWG | 500 ± 38 mm |
| | 2 | RED | 18 AWG | |
| | 3 | +5VDC RED | 18 AWG | |
| | 4 | BLACK | 18 AWG | |
| P3 | 1 | +3.5VDC ORANGE | 18 AWG | 500 ± 38 mm |
| | 2 | RED | 18 AWG | |
| | 3 | +5VDC RED | 18 AWG | |
| | 4 | BLACK | 18 AWG | |
| P4 | 1 | +3.5VDC ORANGE | 18 AWG | 500 ± 38 mm |
| | 2 | RED | 18 AWG | |
| | 3 | +5VDC RED | 18 AWG | |
| | 4 | BLACK | 18 AWG | |
| P5 | 1 | +3.5VDC ORANGE | 18 AWG | 500 ± 38 mm |
| | 2 | RED | 18 AWG | |
| | 3 | +5VDC RED | 18 AWG | |
| | 4 | BLACK | 18 AWG | |
| P6 | 1 | +3.5VDC ORANGE | 18 AWG | 500 ± 38 mm |
| | 2 | RED | 18 AWG | |
| | 3 | +5VDC RED | 18 AWG | |
| | 4 | BLACK | 18 AWG | |
| P7 | 1 | +3.5VDC ORANGE | 18 AWG | 500 ± 38 mm |
| | 2 | RED | 18 AWG | |
| | 3 | +5VDC RED | 18 AWG | |
| | 4 | BLACK | 18 AWG | |
| P8 | 1 | +3.5VDC ORANGE | 18 AWG | 500 ± 38 mm |
| | 2 | RED | 18 AWG | |
| | 3 | +5VDC RED | 18 AWG | |
| | 4 | BLACK | 18 AWG | |
| P9 | 1 | +3.5VDC ORANGE | 18 AWG | 500 ± 38 mm |
| | 2 | RED | 18 AWG | |
| | 3 | +5VDC RED | 18 AWG | |
| | 4 | BLACK | 18 AWG | |
| P10 | 1 | +3.5VDC ORANGE | 18 AWG | 500 ± 38 mm |
| | 2 | RED | 18 AWG | |
| | 3 | +5VDC RED | 18 AWG | |
| | 4 | BLACK | 18 AWG | |

UNIT:mm



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

SPI P/N.: SPI600ACAG

| | | | |
|------------------------|-------------|---------------|-------------|
| MODEL NO. : SPI600ACAG | TITLE: ASSY | SHEET: 1 OF 1 | REV:03 |
| R&D(1) | PE | DRAWN | DATE |
| | | | NDV.10.2010 |

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