

1.0 INPUT 输入

1.1 VOLTAGE 电压

	MINIMUM 最低	NORMAL 常规	MAXIMUM 最高	UNITS 单位
Low Range	90	100~127	137	VAC
High Range	180	200-240	264	VAC

1.2 FREQUENCY 频率

The input frequency range will be 50±3Hz/60±3Hz

1.3 CURRENT 电流

3A(max.) at 230 V 最大 3A(输入 230V)

6A(max.) at 115 V 最大 6A(输入 115V)

1.4 INRUSH CURRENT 浪涌电流

230V/60A(max.) at 25°C cold start

“最大 60A(输入 230V , 常温下冷启动.)”

1.5 POWER EFFICIENCY 电源效率

1.5.1 The power supply shall not draw more than 1 watt, when output is 0.5watts or less. The Efficiency shall be a minimum of 70% when the output 100%load. Measurements are performed at nominal AC input, as specified in section 1.1 and load as follows.

loading	+12V	+5V	+3.3V	-12V	+5Vsb
full	10A	8A	9A	0.2A	2A
typical	5A	5A	5.0A	0.1A	1A

1.6 Input line voltage select

Power supply is designed using active PFC. (电源采用有源 PFC)

1.7 Harmonic current(IEC 1000-3-2 harmonic)

The harmonics of the power line and neutral currents shall not exceed the limits of the table below when measured from 75W (input) to full load (output) in the low voltage range.

2.0 OUTPUT 输出

VOLTAGE 电压	+12V	+5V	+3.3V	-12V	-5VSB
Max. load 重载 ①	15A	12A	15A	0.3A	2A
Min. load 轻载	1A	0.3A	0.3A	0A	0.005A
Peak load 峰值 ②	19A				2.5A
Regulation 稳压范围 ④	+5/-5%	+5/-5%	+5/-5%	+5/-5%	+5/-5%
Ripple & Noise	120mV	50mV	50mV	120mV	50mV

NOTE:

AT 25°C and 50°C

1. The continuous max. DC output power shall not exceed 200W, ”

2. +3.3V and +5V combined continuous output power 90W max, output”

3. +3.3V、+5V、 and +12V combined continuous output power 190W max.

4. A 0.1uF and 10uF tantalum capacitors should be put across output terminals during ripple & Noise test. The oscilloscope bandwidth is set at 20 MHz and co-axial probe will be used to measure it. 在测试纹波和杂讯的期间, 用一个 0.1uF 和一个 10uF 的钽电容并接在输出端上, 采用 20MHZ 或以上波段的示波器, 使用同轴探头去测量纹波和杂讯。

5. The cross-load regulation is defined in the matrix below. (UNIT: A)

交叉负载情况如下表 : (单位 : A)

Range	+5V	+12V	+3.3V	-12V	+5Vsb
1	0.5A	3A	2A	0A	1A
2	4.0A	1A	6A	0A	0A
3	1A	15A	0.3A	0.2A	2A
4	12A	10A	4A	0.2A	2A
5	4A	10A	15A	0A	1A
6	5A	13A	9A	0.2A	1A
7	4A	7A	5A	0.1A	1A

when the 12V output is at minimum load, the +5v will not exceed 4A

when the 12V output is at maximum load, the +5v can be as low as 1A

when the 5V&12V output is at minimum load, the +3.3v should not exceed 6A

Residual Voltage (残余电压)

All output levels (except the 5V AUX) may not exceed 70 mv when AC voltage is applied to the power supply and the unit is in the DC Off condition. All outputs should be at no load. This requirement shall be met when the 5V AUX is at either minimum or maximum load

3.0 PROTECTION : 保护功能

If the power supply is latch into shutdown stage (when OCP, OVP or short protection is working), the power supply shall return to normal operation only after the fault has been removed and remote signal must reset for a minimum of 1 second (or the AC removed for 10 second). Then, it will turn on again. 电源因过流、过压、短路时保护动作, 电源锁定在关断状态, 只有当这些原因解除, 远程开关至少复位 1 秒 (或关供电 10 秒), 之后电源才可以重新启动。

3.1 OVER CURRENT PROTECTION 过电流保护

3.1.1 Original condition: AC input 115V~230V, Output Min. load or light load.

初始条件: 输入 115V/230V, 输出轻载。

3.1.2 Increase the output current at the +5V rail gradually to 20A~40A, the main output should shutdown and latch off.

逐渐增加+5V 端电流, 到达 20A~40A 时主输出应关断。

3.1.3 Increase the output current at the +12V rail gradually to 20A~22A, the main output should shutdown and latch off.

逐渐增加+12V 端电流, 到达 20A~22A 时主输出应关断。

3.1.4 Increase the output current at the +3.3V rail gradually to 20A~40A, the main output should shutdown and latch off.

逐渐增加+3.3V 端电流, 到达 20A~40A 时主输出应关断。

3.1.5 When the continuous DC output power reach 260~350W, the main output should shutdown and latch off.

当电源总输出功率达到 260W~350W 时主输出应关断。

3.2 OVER VOLTAGE PROTECTION 过电压保护

SENSE LEVEL 测试项	OVER VOLTAGE 过压值
+3.3V	4.5 Vmax .
+5V	7.0 Vmax .
+12V	14.5 Vmax .

3.3 SHORT CIRCUIT PROTECTION 短路保护

All output to GND .
每个输出端到地

4.0 TIME SEQUENCE 时间序列

4.1 Turn On Time (500msec. max .)

最大启动时间: 500 毫秒

4.2 Power Good Delay Time (150msec. <T<450msec.)

P.G. 延迟时间 : 150 毫秒至 450 毫秒

4.3 Power Fail Delay Time>1ms

P.F. 延迟时间: 大于 1 毫秒

4.4 Hold -up time (17mS. Min. at 60% Loading and 100Vac Input.)

最小保持时间 : 17 毫秒 (在 60%负载和 100V 输入电压时)

4.5 +5V Rise time:2ms~17ms

+5V 上升沿时间: 2s~17ms

5.0 REMOTE ON/OFF CONTROL 远程开关控制

The power supply is turn on/off by TTL signal .
TTL 控制电源供给器的开与关

ACTIVE LOW 低电平	0~0.4V	POWER SUPPLY TURN ON	供给器开
ACTIVE HIGH 高电平	2.4~5V	POWER SUPPLY TURN OFF	供给器关

6.0 AUXILIARY +5Vsb +5Vsb 辅助电路

This power supply is specifically equipped with an independent stand-by +5V output current , 2.0A max . This output will always provide +5v except when the AC line is cut-off .

电源供给器输出一个最大电流值为 2.0 安培的+5V 辅助电压, 其输出电压只受交流输入电压有无的控制。

7.0 HI-POT 耐压

7.1 INPUT TO GND : VOLTAGE 1800VAC TIME 2.0~3.0 SEC., CUT OFF CURRENT 10mAMAX

输入端到地: 交流 1800V 持续 2.0~3.0 秒, 最大漏电流 10mA。

8.0 EARTH CONTINUITY TEST : 100mΩ MAX at 25.0A .

地连接测试: 25A 电流测试下, 其阻值在 100mΩ 以下。

9.0 LEAKAGE CURRENT EACH LINE TO GND. 对地漏电流

0.75mA MAX. AT 240V 50Hz 最大 0.75mA (输入 240V 50Hz)

0.45mA MAX. AT 120V 60Hz 最大 0.45mA (输入 120V 60Hz)

