



1 INPUT

1.1 VOLTAGE、FREQUENCY

PARAMETER	MINIMUM	NOMINAL	MAXIMUM	UNITS
Vin(115/230VAC)	100/200	115/230	130/260	VACrms
Vin Frequency	47	50	53	Hz

1.2 CURRENT

max AC input current: 6 A (input AC 230V 50HZ) 。

1.3 INRUSH CURRENT

max input inrush current 50 A (input AC 260V, Under normal temperature cold start)

1.4 POWER EFFICIENCY

1.4.1 minimum 72 % (INPUT AC230V 50Hz, Full load power rating)。

1.4.2 minimum 74 % (INPUT AC230V 50Hz, 50% load)。

1.4.3 minimum 72 % (INPUT AC230V 50Hz, 20% load)

1.4.4 Standby Power:3.8 W (PS/OFF, +5VSB/0.1A) 。

1.5 Catastrophic Failure Protection (by intel design standard)

2 OUTPUT

VOLTAGE	+12V	+5V	-12V	+3.3V	+5VSB
FULL Load①	9A	8A	0.5A	5A	2.0A
Min. Load	0.5A	0.6A	0.0A	0.2A	0.1A
Regulation	±5%	±5%	±15%	±5%	±5%
Ripple max	150mV	120mV	180mV	80mV	80mV
Noise max②	180mV	150mV	200mV	120mV	100mV

NOTE:

① Power supply work continuously, the DC output total power with no more than 200 W (full load) .

+ 3.3 V and + 5 V output power of sum maximum 60 W

② in the test ripple and noise, with a 0.1 uF and a 10 uF tantalum capacitors connect in the output End; take 20 MHz (or more) oscilloscope probe to measure, use coaxial probe test ripple and noise

3 PROTECTION:

Power due to power, over-voltage, short circuit protection movement, the power

locked in shut off condition, only when these reasons

Remove, remote control switch at least 1 second reduction (or at least reset shut the power supply after 10 seconds), power supply can restart.

3.1 OVER POWER PROTECTION

3.1.1 initial condition: input AC 230 V, The Road with load in full.

3.1.2 Gradually increases by + 12 V, + 5 V, + 3.3 V end current, to 198 W and 230 W should be shut off the main output. The current rate of climb number must be: +5V/0.5A/mS、+12V/0.2A/mS、+3.3V/0.3A./mS

3.2 OVER VOLTAGE PROTECTION

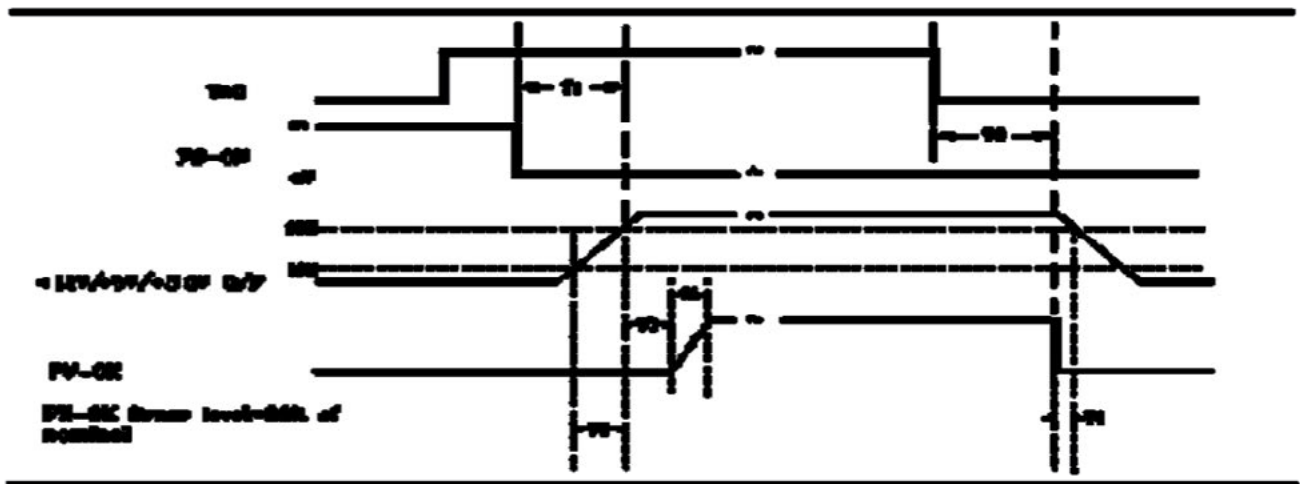
3.2.1 Initial conditions: input 115V/230V, Every road with load in light .

SENSE LEVEL	OVER VOLTAGE
+3.3V DC	3.76Vmin~4.3V max.
+5V DC	5.74Vmin~7.0V max.
+12V DC	13.4Vmin~15.6V max.

3.3 SHORT CIRCUIT PROTECTION

Each output terminal (+ 12 V, + 5 V, + 3.3 V, -12 V) to earth, impedance less than 100mΩ, , the power supply will automatic protection and close the output. + 5 VSB short circuit, products all output close, when an exception after the termination products + 5 will be self-recovery, other VSB each output must be in 3.0 the requirements will return to normal output)

4 TIME SEQ TEST : (The following test are 100% load)



4.1 Start time: $T1 < 500ms$ (maximum) .

4.2 +5V, +3.3V, +12V Output voltage up time: $0.1ms \leq T2 \leq 20ms$.

4.3 P.G. Delay time: $100ms < T3 < 500ms$.

4.4 P.G. Rise time: $T5 \leq 10ms$.

4.5 AC dump keep time: $T6 \geq 16ms$.

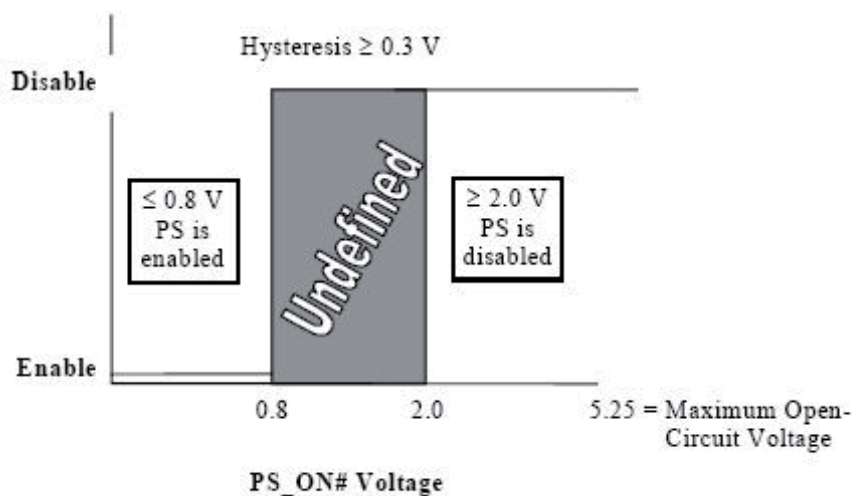
4.6 P.F. delay time: $T4 \geq 1ms$.

5 REMOTE ON/OFF CONTROL

TTL Signal control of power supply on and off.

Must ensure that boot and shutdown level with the appended drawings level required $\geq 0.3V$ hysteresis characteristics

Input Low Voltage 0~0.8V	Power supply turn ON
Input High Voltage 2~5.25V	Power supply turn OFF



6 AUXILIARY +5VSB +5VSB

Power supply output a maximum current value for 1.5 A+ 5 V boost voltage, the output voltage only control by the input voltage

7 HI-POT TEST

Input to to earth: AC 1 KV keep 60 seconds, the biggest leakage current 10 mA

8 EARTH CONTINUITY TEST:

Under test conditions, Resistance $\leq 100\text{m}\Omega$.

9 LEAKAGE CURRENT EACH LINE TO GND

In AC input 50 Hz AC 250 V conditions, ≤ 33.5 mA leakage current

10 OVER SHOOT TEST

10.1 Power in any conditions, the output voltage should not be more than the group voltage $\pm 10\%$.

11 ENVIRONMENT:

11.1 Use environment temperature: $+5^{\circ}\text{C} - +50^{\circ}\text{C}$

11.2 Use environment relative humidity: 20% - 85%

11.3 Storage environment temperature: $-40^{\circ}\text{C} - +55^{\circ}\text{C}$

11.4 The storage conditions relative humidity: 10% - 95%

11.5 From 0 to 10000 feet in height should be work in normal.

12 RELIABILITY:

12.1 25°C in normal temperature 25°C , 230 VAC input, 100% load, MTBF should be more than 20 K hours.

13 QUIET DESIGN: In normal cooling, effective reduce fan noise.

14 CABLE SPEC.:

DC output wire total length: 400mm

Configuration: 20+4PIN

P4

big 4P*2+small 4P*1

SATA*2