ACE-4860AP 600W PS/2 Type ATX Power Supply

Feature

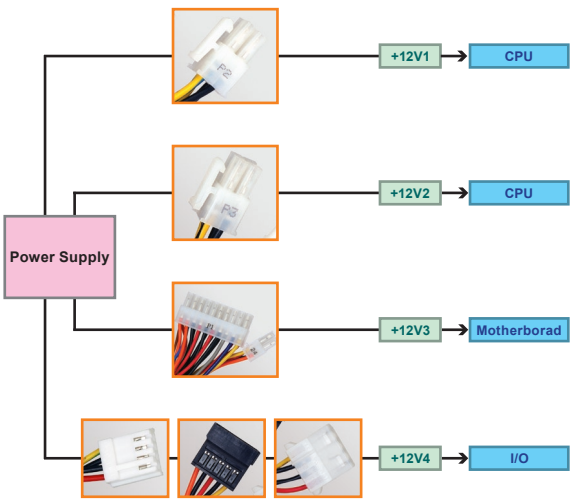
1. 600W for high power consumption RAID / Multi-core system
2. High efficiency
3. ATX 2.0 standard w/ new 20+4 ATX power and SATA connector design
4. Full functional over voltage / current protection
5. 100% Hi-pot tested
6. Multiple safety / EMC certificated
7. Total +12V output up to 40A

Safety

Specification

Input	Voltage	90 ~ 264VAC Full Range		
	Frequency	47 ~ 63Hz		
	Input Current	12A(RMS)@115VAC 6A(RMS)@230VAC		
	Inrush Current	60A Max for 115VAC 150A Max for 230VAC		
Output	**Voltage**	**Min. load**	**Max. load**	**Ripple & Noise**
	+5V	0A	30A	50mV P-P
	+12V1	1A	12A	120mV P-P
	+12V2	1A	12A	120mV P-P
	+12V3	0.5A	18A	120mV P-P
	+12V4	0A	18A	120mV P-P
	-12V	0A	1A	120mV P-P
	+3.3V	0A	24A	50mV P-P
	+5Vsb	0A	2A	50mV P-P
	*The +5V and + 3.3V total output shall not exceed 160W *Total current of +12V1~ +12V4 power not exceed 40A			
	Over-voltage protection	+12V : 14.6V ±10% +5V : 6.2V ±10% +3.3V : 4V ±10%		
	Short Circuit protection	+3.3V, +5V, +12V Shut down and latch off		
General Specification	Watt	600W		
	PFC	Active		
	Hold-up time	16 ms Min.		
	Efficiency	70%		
	MTBF	100,000 hours		
	Temperature	Operating : 0 ~ 50°C (40 ~ 50°C derating curve) Storage : -40 ~ 70°C		
	Dimension	140X 150 X 86 (mm) 5.51 X 5.91 X 3.39 (inch)		
	Output Conntector	20+4PIN ATX x1, 4PIN 12V CPU x1, HDD/CDROM x9, FDD x1, SATA x2		

Power Connector +12V



Quad 12V Separate Lines:

As processors become faster and more highly integrated, more current is required. To reduce power distribution loss, board manufactures are moving from 5V to 12V power distribution. System components that use 12V are continuing to increase in power.

Version 2.0 of Intel's ATX12V Power Supply Design Guide began recommending dual 12V lines for PSUs that can deliver more than 18A at 12V. Why? To abide by safety requirements of UL and EM 60950, which stipulates not more than 240VA on any wires or exposed traces. Intel's PSU Guide calls for a current limiter that keeps current to under 20A on each of the 12V rails: 12V x 20A = 240VA.

What is the safety reason for this 240VA maximum? It's the maximum recommended for an electronic device that a consumer will have reasonable likelihood of access.

The +12V1 & +12V2 (1st. & 2nd +12V rails) supply the AUX12V (2x12V) 4-pin plug, which feeds only the CPUs.

The +12V3 (3rd +12V rail) supplies the 24-pin ATX main power connector, which feeds for the Mother Board.

The +12V4 (4th. +12V rail) supplies 4-pin Peripheral Power connector, which feeds for the I/O devices.

The quad 12V rails provide more flexible application, such as:
RAID System – dedicated +12V rail for IO devices (HDDs)
Server (multiple Processors) – Multiple dedicated +12 rails for Processors

Ordering Information

Part No.	Description
ACE-4860AP-RS	600W AC-DC PS/2 ATX Power Supply, with PFC