ACE-4860AP

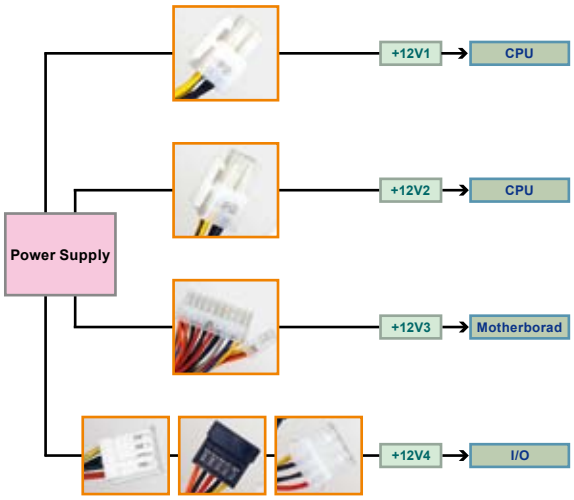
600 W PS/2 Type ATX Power Supply

PFC

Features

1. 600 W for high power consumption RAID / multi-core system
2. High efficiency
3. ATX 2.0 standard with new 20+4 ATX power and SATA connector design
4. Overvoltage and overcurrent protection
5. 100% Hi-pot tested
6. Multiple safety and EMC certifications
7. Total +12 V output up to 40 A

Power Connector +12 V



Quad 12 V 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

Specifications

Input	**Voltage**	90 ~ 264 VAC Full Range		
	Frequency	47 ~ 63 Hz		
	Input current	12 A(RMS)@115 VAC 6 A(RMS)@230VAC		
	Inrush current	60 A max for 115 VAC 150 A max for 230 VAC		
Output	**Voltage**	**Min. load**	**Max. load**	**Ripple & Noise**
	+5 V	0 A	30 A	50 mV P-P
	+12 V1	1 A	12 A	120 mV P-P
	+12 V2	1 A	12 A	120 mV P-P
	+12 V3	0.5 A	18 A	120 mV P-P
	+12 V4	0 A	18 A	120 mV P-P
	-12 V	0 A	1 A	120 mV P-P
	+3.3 V	0 A	24 A	50 mV P-P
	+5 Vsb	0 A	3 A	50 mV P-P
	*The +5 V and + 3.3 V total output shall not exceed 160 W *Total current of +12 V1~ +12 V4 power not exceed 40 A			
	Over voltage protection	+12 V : 14.6 V ±10% +5 V : 6.2 V ±10% +3.3 V : 4 V ±10%		
	Short circuit protection	+3.3 V, +5 V, +12 V shut down and latch off		
General specifications	**Watt**	600 W		
	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		
	Dimensions	140X 150 X 86 (mm) 5.51 X 5.91 X 3.39 (inch)		
	Output conntector	20+4-pin ATX x1, 4-pin 12 V CPU x1, HDD/CDROM x9, FDD x1, SATA x2		

Ordering Information

Part No.	Description
ACE-4860AP-R11-RS	600 W AC-DC PS/2 ATX power supply, with PFC