ACE-840A/AP ▶ 400W PS/2 Type ATX Power Supply
ACE-830APU1 ▶ 300W Power Supply

For P4 System

PFC NEW

ACE-840AP

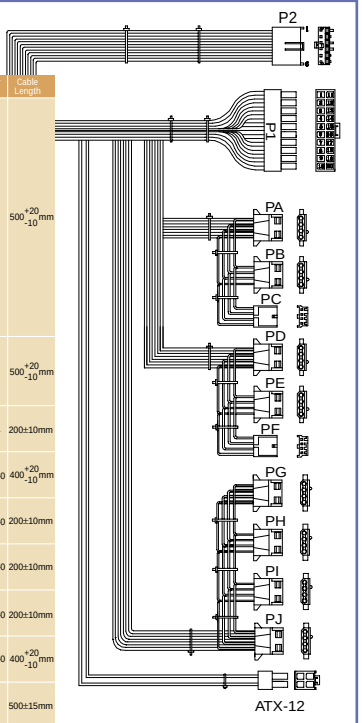
NEW

ACE-840A

PFC Design For 1U Server NEW

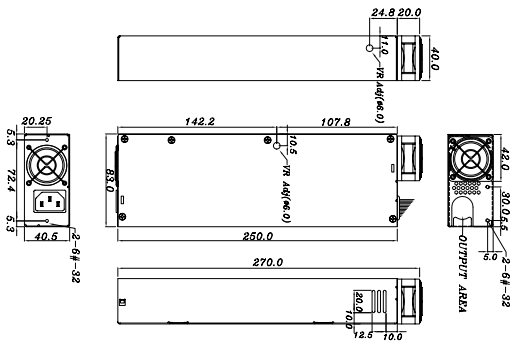
ACE-830APU1

Power Connectors (ACE-840A/AP)



REF. ID.	Pin No.	Signal	Wire Color	Gauge	Connector Type	Cable Length
P1	1	+3.3VDC	Orange	16	MOLEX 39–01–2200 or EQUIV.	500 +20 -10 mm
	2	+3.3VDC	Orange	16		
	3	COM	Black	16		
	4	+5VDC	Red	16		
	5	COM	Black	16		
	6	+5VDC	Red	16		
	7	COM	Black	16		
	8	PW-OK	Gray	22		
	9	+5Vsb	Purple	16		
	10	+12VDC	Yellow	16		
	11	+3.3VDC +3.3V sense	Orange Brown	18 22		
	12	-12VDC	Blue	16		
	13	COM	Black	16		
	14	PS–ON	Green	16		
	15	COM	Black	16		
	16	COM	Black	16		
	17	COM	Black	16		
	18	-5VDC	White	16		
	19	+5VDC	Red	16		
	20	+5VDC	Red	16		
P2	1	COM	Black	18	MOLEX 90331 or EQIV.	500 +20 -10 mm
	2	COM	Black	18		
	3	COM	Black	18		
	4	+3.3VDC	orange	18		
	5	+3.3VDC	Orange	18		
	6	+5VDC	Red	18		
PC PF	1	+12V	Yellow	22	AMP 171822–4 or EQIV	200±10mm
	2	COM	Black	22		
	3	COM	Black	22		
	4	+5V	Red	22		
PA PD	1	+12V	uellow	18	AMP 1–480424–0 or EQIV	400 +20 -10 mm
	2	COM	Black	18		
	3	COM	Black	18		
	4	+5V	Red	18		
PB PE	1	+12V	Yellow	18	AMP 1–480424–0 or EQIV	200±10mm
	2	COM	Black	18		
	3	COM	Black	18		
	4	+5V	Red	18		
PG PH	1	+12V	Yellow	18	AMP 1–480424–0 or EQIV	200±10mm
	2	COM	Black	18		
	3	COM	Black	18		
	4	+5V	Red	18		
PI	1	+12V	Yellow	18	AMP 1–480424–0 or EQIV	200±10mm
	2	COM	Black	18		
	3	COM	Black	18		
	4	+5V	Red	18		
PJ	1	+12V	Yellow	18	AMP 1–480424–0 or EQIV	400 +20 -10 mm
	2	COM	Black	18		
	3	COM	Black	18		
	4	+5V	Red	18		
ATX-12	1	COM	Black	18	MOLEX 39–01–2040 or EQUIV.	500±15mm
	2	COM	Black	18		
	3	+12V	Yellow	18		
	4	+12V	Yellow	18		

Dimensions (ACE-830APU1)



SPECIFICATIONS

- **Input :** 95~264VAC Full range (ACE-840AP)
  95V~132VAC, 180~264VAC Switch (ACE-840A)
  90V ~ 264VAC Full range (ACE-830APU1)
- **Output Rating**

ACE-840AP/ACE-840A

Nominal	Regulation	Ripple/ Noise	Min.	Max.
+3.3V	+/-5%	50mV	0.3A	28A
+5V	+/-5%	50mV	0.1A	40A
+12V	+/-5%	120mV	0A	15A
-5V	+/-5%	100mV	0A	0.3A
-12V	+/-5%	100mV	0A	0.8A
+5Vsb	+/-5%	50mV	0A	2A

Total Output of +3.3V and +5V shall not exceed 235W. +3.3V , +5V , and +12V total output power max. is 380W .

ACE-830APU1

Nominal	Regulation	Ripple/ Noise	Min. Load	Max. Load	Peak Load
+3.3V	+/-5%	50mV	0	20A	25A
+5V	+5/-4%	50mV	0.5A	28A	40A
+12V	+/-5%	120mV	0.5A	16A	20A
-5V	+/-5%	50mV	0	0.5A	
-12V	+8/-5%	120mV	0	1A	
+5Vsb	+/-5%	50mV	0	2A	

The output of +3.3V and +5V shall not exceed 140W. Total output maximum 300W.

- **Hold-up time :** 17ms min. (ACE-840A/AP) / 20ms min. (ACE-830APU1)
- **Efficiency :** 65% typ. (ACE-840A/AP) / 70% typ. (ACE-830APU1)
- **Protection :** Over Voltage/Load Protection and short circuit protection .
- **TTL signal compatible power good signal .**
- **Vibration :** 10-55Hz at 2G 3min. period , 30min. along X ,Y and Z axis .
- **Shock :** 10G for 11ms once on each X,Y and Z axis.
- **Built-in ball bearing fan .**
- **M.T.B.F. :** Minimum 100000 hours at 25°C (ACE-840A/AP)
  Minimum 120000 hours at 25°C (ACE-830APU1)
- **Safety :**
  Meets UL 1950 , CSA 22.2 level 3 , VDE EN 60950, NEMKO , CE . (ACE-840A/AP)
  Meets UL 60950 3rd , CSA C22.2 level 3, TUV EN 60950, IEC 60950, EMKO-TSE (74-SEC) 207/94 (ACE-830APU1)
- **EMI :**
  Meets FCC class "B" , EN55022 class "B" Meets Harmonic EN 61000-3-2 (ACE-840AP)
  Meet FCC Class B , EN 55022 Class B, EN 61000-3-2 Class D, CNS 13438 CLASS B (ACE-830APU1)
- **EMS :**
  IEC 801-2-8KV (Air Discharge) , IEC 801-3-3V/M criteria A , IEC 801-4,2KV criteria B , IEC 801-5,2KV criteria B (ACE-840A/AP)
  Meet EN 50082-1 immunity standard, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-8, EN 61000-4-11(ACE-830APU1)
- **Operating temp :** 0~50°C (ACE-840A/AP) / 0~70°C (ACE-830AUP1)

ORDERING INFORMATION

- **ACE-840A** 400W ATX Power supply
- **ACE-840AP** 400W ATX Power Supply with PFC function
- **ACE-830APU1** 300W ATX Power Supply with PFC function

Note: ACE-830APU1 design for EC-1010 series, contact us for other 1U chassis