

# ACE-832A/832AP 300W ATX Power Supply

# ACE-828M/925M Medical Power Supply



ACE-832A



ACE-832AP-S



## Specifications

- Input : 90V-264VAC (ACE-832AP)  
95V-132VAC, 180-264VAC auto-range (ACE-832A)
- ACE-832A/832AP Output Rating

Output	Nominal	Regulation	Ripple/Noise	Min.	Max.
1	+3.3V	+/-5%	50mV	0.3A	28A
2	+5V	+/-5%	50mV	0.1A	30A
3	+12V	+/-5%	120mV	0.1A	15A
4	-5V	+/-5%	100mV	0A	0.3A
5	-12V	+/-5%	120mV	0A	0.8A
6	+5VSB	+/-5%	100mV	0A	2.0A

Total Output of +3.3V and +5V shall not exceed 150W. +3.3V, +5V, and +12V total output power max. is 280W.

- Hold-up time : 17ms min.
- Efficiency : 65% typ.
- Protection : Over Voltage/Load Protection and Short Circuit Protection
- TTL signal compatible power good signal
- Vibration : 10-55Hz at 2G 3min. period, 30 min. along X, Y and Z axis.
- Shock : 10G for 11ms once on each X, Y and Z axis.
- MTBF : min. 50,000hrs at 25°C
- Safety : Meets UL 1950, CSA 22.2 Level 3, TUV or VDE, NEMKO, CE
- EMI : Meets FCC class "B", EN55022 class "B"  
Meets Harmonic EN61000-3-2 (ACE-832AP)
- EMS Standard : meet
  - 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
- Operating Temp. : 0-50°C

## Ordering Information:

ACE-832A 300W ATX Power Supply  
ACE-832AP 300W ATX Power Supply with PFC function  
ACE-832AP-S 300W ATX Power Supply with PFC function & on/off switch



ACE-828M



ACE-925M



## Specifications

- Input Voltage :  
ACE-828M : 90~130VAC or 180~260VAC(Auto Switch)  
ACE-925M : 90~264VAC (Full-Range)
- Output Table : (at 40°C)

Model	Rated Load						Max Output					
	+5V	+12V	-12V	-5V	+3.3V	+5Vs <sub>b</sub>	+5V	+12V	-12V	-5V	+3.3V	+5Vs <sub>b</sub>
ACE-828M	25A	10A	0.5A	0.5A	8A	0.72A	30A	15A	1A	1A	15A	1.2A
ACE-925M	22A	7A	0.5A	0.5A			28A	10A	1A	1A		

- Leakage Current : Primary to safety ground less 500uA at 253V AC input, secondary ground to safety ground less than 100uA at 235AV AC input
- Ripple and Noise :
  - ACE-828M : Less than 50mV@+5V and +3.3V; 100mV@Others
  - ACE-925M : The line regulation for each outputs are less than ±1%
- Line Regulation :
  - ACE-925M : Less than ±1 for each output
  - ACE-828M : Less than ±2%@+12V, ±1%@Others
- Load Regulation :
 

Model	+5V	+12V	-12V	-5V	+3.3V	+5Vs <sub>b</sub>
ACE-828M	<±3%	<±5%	<±2%	<±2%	<±2%	<±3%
ACE-925M	<±3%	<±5%	<±5%	<±5%		
- Output Power : Total combined output power on the +3.3V and +5V rails is 150W for ACE-828M
- Efficiency : Higher than 65%
- Altitude : 0 ~ 10,000ft
- Over voltage protection
- Vibration :
  - 10 ~ 55Hz at 2G 3min. period, 30 min. along X, Y and Z axis
- Impact : 10G for 20ms once on each X, Y and Z axis
- MTBF : - ACE-828M : 177,287 Hours  
- ACE-925M : 132,648 Hours
- Safety : Meets UL 544, UL 2601, CSA 22.2 No.601, TUV (DIN : VDE 075T.1/12.91/EN 60 601-1:1990)
- EMI : Meets EN55011 class "B"
- EMS Standard (Design to meet the following limits) :
  - IEC 801-2 4KV contact, 8KV Air Discharge
  - IEC 801-3, 3V/M, 26MHz to 1GHz
  - IEC 801-4, 2KV power mains
  - IEC 801-5, 2KV criteria B
- Operating Temperature :
  - ACE-828M : -20° ~ 70°C(Derating curve will occur 40° ~ 70°C)
  - ACE-925M : 0° ~ 70°C(Derating curve will occur 40° ~ 70°C)
- Storage Temperature : -40° ~ 75°C

## Ordering Information:

ACE-828M Medical ATX 280W power supply  
ACE-925M Medical PS/2 type 250W power supply

# ACE-932T/925T/925P/925C/916V DC Input Industrial PS/2 Type Power Supply



- Efficiency : Higher than 65%
- Altitude : 0 ~ 15,000ft
- Protection :
  - Over voltage protection. The trip point is around 5.7V ~ 7.0V output
  - Short circuit and overload
  - Thermal Protection : Built-in 110±5°C thermal switch in HS1
- Vibration : 10 ~ 55Hz at 2G 3min. period, 30 min. along X, Y and Z axis
- Impact : 10G for 20ms once on each X, Y and Z axis
- MTBF :
  - ACE-932T : 141,000 Hours
  - ACE-925T : 198,500 Hours
  - ACE-925C : 206,000 Hours
  - ACE-916V : 202,500 Hours
- Safety : Meets UL 1950; CSA 22.2 No. 234, VDE EN 60 950
- EMI : Meets FCC docket 20780 curve "B", EN555022 class "B"
- Built-in cooling fan
- Operating Temperature : -20° ~ 70°C (Derating curve will occur 50° ~ 70°C)
- Storage Temperature : -40° ~ 75°C

## Specifications

### ● Input Table :

Model	Input Range	Input Current
ACE-932T	-40 ~ -70V DC	9A@-48V DC
ACE-925P	100 ~ 120V DC	4A@110V DC
ACE-925T	-40 ~ -65V DC	8A@-48V DC
ACE-925C	+19 ~ +30V DC	16@+24V DC
ACE-916V	+8.5 ~ +16V DC	25A@+12V

### ● Output Table : (at 50°C)

Model	Rated Load				Peak Output	
	+5V	+12V	-12V	-5V	+5V	+12V
ACE-932T	35A	10A	3A	0.5A	40A	12A
ACE-925P	25A	10A	1A	1A	30A	12A
ACE-925T	25A	8A	2A	1A	30A	12A
ACE-925C	25A	6A	2A	1A	30A	12A
ACE-916V	20A	4A	0.5A	0.5A	25A	7A

### ● Inrush Current

- ACE-932T : Less than 5A@-48V DC
- ACE-925T : Less than 5A@+48V DC
- ACE-925C : Less than 5A@+24V DC
- ACE-916V : Less than 10A@+12V DC

### ● Ripple and Noise : Less than 1% of each output at rated load

### ● Line Regulation : The line regulation for each outputs are less than ±1%

### ● Load Regulation :

Model	+5V	+12V	-12V	-5V
ACE-932T	<±3%	<±5%	<±1%	<±1%
ACE-925P	<±3%	<±5%	<±3%	<±3%
ACE-925T	<±4%	<±5%	<±1%	<±1%
ACE-925C	<±4%	<±5%	<±3%	<±3%
ACE-916V	<±3%	<±5%	<±1%	<±1%

## Features:

- Built-in cooling fan
- Extra P10 (+5V) connector for most high-power requirement (ACE-932T)

## Ordering Information:

### ACE-932T

300W -48V DC input PS/2 type power supply

### ACE-925P

250W 110V DC input PS/2 type power supply

### ACE-925T

250W -48V DC input PS/2 type power supply

### ACE-925C

250W +24V DC input PS/2 type power supply

### ACE-916V

160W +12V DC input PS/2 type power supply

# ACE-940AP ▶ 390W PS/2 SPS Type NEW

## ACE-935A/932A/930AP/925A/920A

### AC Input Industrial PS/2 Type Power Supply

#### SPECIFICATIONS

##### Input Table :

Model	Input Range
ACE-940AP	95~264V AC, 47~63Hz (Full-Range)
ACE-935A	85~140V AC or 170~270V AC, 47~63Hz
ACE-932A	85~130V AC or 180~265V AC, 47~63Hz (Auto-Switch)
ACE-925A/925AP	85~265V AC, 47~63Hz (Full-Range)
ACE-920A/920AP	85~265V AC, 47~63Hz (Full-Range)

##### Output Table : (at 40%)

Model	Rated Load				Peak Output	
	+5V	+12V	-12V	-5V	+5V	+12V
ACE-940AP	42A	15A	0.8A	0.3A	44A	18A
ACE-935A	40A	8A	0.7A	0.3A	44A	10A
ACE-932A	33A	8A	3A	0.5A	35A	10A
ACE-930AP(230V)	30A	12A	0.5A	0.5A	32A	15A
ACE-925A/925AP	22A	7A	0.7A	0.5A	25A	10A
ACE-920A/920AP	20A	4A	0.5A	0.5A	22A	7A

##### Inrush Current

- ACE- 940AP: 80A(Peak) @115VAC or 120A(peak) @230VAC
- ACE- 935A/932A: Not exceed 15A@115V AC or 30A@230V AC
- ACE- 925A/925AP/920A/920AP: Not exceed 30A@115V AC or 60A@230V AC

##### Ripple and Noise :

- ACE- 940AP: Less than 120mV @+12V and 3% of each output at rated load
- ACE- 935A/932A: Less than 1% of each output at rated load
- ACE- 925A/925AP/920A/920AP: Less than 140mV@+12V, and 1% of each other outputs at rated load

##### Line Regulation :

- ACE- 940AP: The line regulation for each outputs are less than -5%
- ACE- 935A/932A: The line regulation for each outputs are less than -1%
- ACE- 925A/925AP/920A/920AP/930AP: Less than -2%@+12V and -1%@Others

##### Efficiency : Higher than 65%

- ACE-940AP: 17ms (typical) @115V AC
- ACE-935A/932A: 20ms (typical) @115V AC
- ACE-925A/925AP/920A/920AP: 14ms (typical) @115V AC

##### Altitude : 0 ~ 10,000ft

- Protection : —Over voltage protection. The trip point is around 5.7V ~ 7.0V output
- Short circuit and overload

##### Vibration : 10 ~ 55Hz at 2G 3min. period, 30 min. along X, Y and Z axis

##### Impact : 10G for 20ms once on each X, Y and Z axis

- MTBF : —ACE-935A : 200,050 Hours —ACE-932A : 124,100 Hours
- ACE-925A : 204,100 Hours —ACE-920A : 216,700 Hours
- ACE-940AP: 100000 Hours

##### Safety : Meets UL 1950; CSA 22.2 No. 234, VDE EN 60 950

- EMI : —Meets FCC docket 20780 curve "B", EN555022 class "B"
- Harmonic EN 61000-3-2 for ACE-940AP/ACE-932AP/925AP/920AP, 930AP at 230VAC

##### EMS Standard (Design to meet the following limits) : EN 50082-2

- Operating Temperature : -20j~70jC/0j~40jC(ACE-930A)/0j~50jC (940AP)
- (Derating curve will occur 50j~70jC)

- Storage Temperature : -40j~75jC

#### ORDERING INFORMATION

- ACE-940AP 390W AC input PS/2 type PFC power supply
- ACE-935A 350W AC input PS/2 type power supply
- ACE-930AP(230V) 300W AC input PS/2 type PFC power supply(230V only)
- ACE-932A 300W AC input PS/2 type power supply
- ACE-925AP 250W AC input PS/2 type PFC power supply
- ACE-925A 250W AC input PS/2 type power supply
- ACE-920AP 200W AC input PS/2 type PFC power supply
- ACE-920A 200W AC input PS/2 type power supply

PFC



ACE-940AP

PFC



ACE-93X Series

