

ACE-R20 SERIES AC/DC Input Redundant Power Supply Module



ACE-R20T/C

ACE-R20A



Rear View



Specifications

Input Table :

| Model | Input Range | Input Current |
|----------|-------------------------|--------------------------|
| ACE-R20A | 85 ~ 265V AC, 47 ~ 63Hz | 4A@115V AC or 2A@230V AC |
| ACE-R20T | -36 ~ -72V DC | 8A@-48V DC |
| ACE-R20C | +19 ~ +30V DC | 16A@+24V DC |

Output Table : (at 40°C)

| Model | Output Range | | | | Peak Output | | | |
|----------|--------------|------|------|------|-------------|------|------|-----|
| | +5V | +12V | -12V | -5V | +5V | +12V | -12V | -5V |
| ACE-R20A | 20A | 4A | 0.5A | 0.5A | 25A | 6A | 1A | 1A |
| ACE-R20T | 20A | 4A | 0.5A | 0.5A | 25A | 6A | 1A | 1A |
| ACE-R20C | 20A | 4A | 0.5A | 0.5A | 25A | 6A | 1A | 1A |

- Ripple and Noise : Less than 140mV@+12V and 1%@Others
- Line Regulation : Less than $\pm 2\%$ @+12V, $\pm 1\%$ @Others
- Load Regulation :

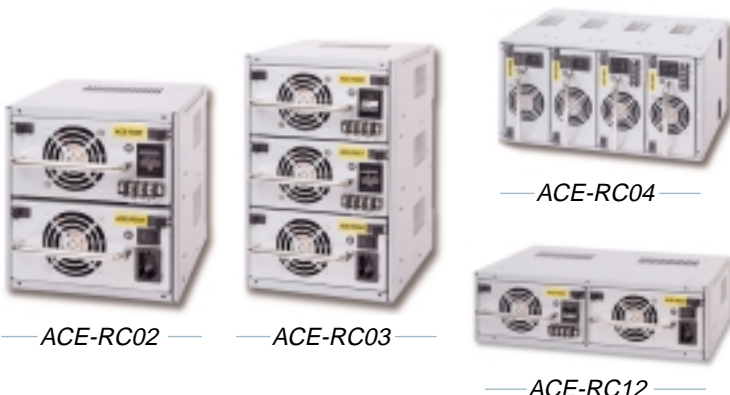
| Model | +5V | +12V | -12V | -5V |
|----------|-------------|-------------|-------------|-------------|
| ACE-R20A | < $\pm 3\%$ | < $\pm 5\%$ | < $\pm 2\%$ | < $\pm 2\%$ |
| ACE-R20T | < $\pm 3\%$ | < $\pm 5\%$ | < $\pm 2\%$ | < $\pm 2\%$ |
| ACE-R20C | < $\pm 3\%$ | < $\pm 5\%$ | < $\pm 2\%$ | < $\pm 2\%$ |

- Efficiency : Higher than 65%
- Hold-up Time (ACE-R20A): 14ms (typical)@115V AC
- Altitude : 0 ~ 10,000ft
- Protection :
 - Over voltage protection : The trip point is around 5.7V ~ 7.0V output
 - Short circuit protection
 - Thermal protection with built-in 110 \pm 5°C thermal switch in HS1
- Power Fail Signal : The power fail signal will go low at least 0.5ms before any of the output voltages fall below the regulation limits
- Power Fail Alarm : It will turn the red LED and beeper when power fail
- Power Sharing & Redundancy :
 - These power have power sharing and redundancy capability. When doing that the power share line (Pin 32) must connect with each other
- 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
- Built-in ball bearing cooling fan
- MTBF :
 - ACE-R20A : 131,547 Hours
 - ACE-R20T : 141,323 Hours
 - ACE-R20C : 146,383 Hours
- Safety : Meets UL 1950; CSA 22.2 No. 234, VDE EN 60 950
- EMI : Meets FCC docket 20780 curve "B", EN55022 class "B"
- EMS Standard (Design to meet the following limits) :
 - IEC 801-2 8KV (Air Discharge) criteria B
 - IEC 801-3, 10V/M criteria A
 - IEC 801-4, 2KV criteria B
 - IEC 801-5, 2KV criteria B (ACE-R20A)
- Operating Temperature : -20° ~ 70°C (Derating curve will occur 45° ~ 70°C)
- Storage Temperature : -40° ~ 75°C

Ordering Information:

- ACE-R20A**
AC input redundant power supply module
- ACE-R20T**
-48V DC input redundant power supply module
- ACE-R20C**
+24V DC input redundant power supply module

ACE-RC02/03/04/12 Redundant Power Supply Case for ACE-R20 Series



ACE-RC02

ACE-RC03

ACE-RC04

ACE-RC12



Ordering Information:

- ACE-RC02**
Vertical dual redundant power supply case
- ACE-RC03**
Vertical triple redundant power supply case
- ACE-RC04**
Vertical quad redundant power supply case
- ACE-RC12**
Horizontal dual redundant power supply case

ACE-R30A/R30AP230V

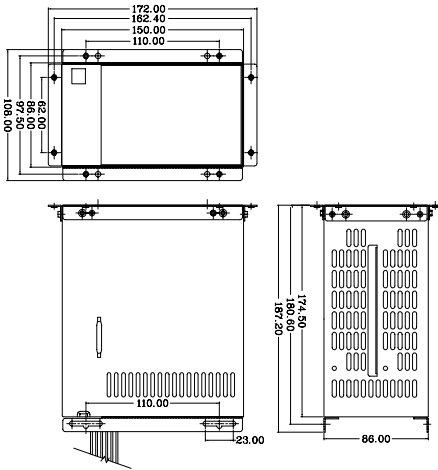
300W ATX Redundant Power Supply

PFC Version available



ACE-R30A

ACE-R30A-1



SPECIFICATIONS

■ **Input :** 90-132V or 180-264VAC switch select (ACE-R30A)
180-264VAC (ACE-R30AP230V)

■ **Output Rating :**

| Output | Nominal | Regulation | Ripple/Noise | Min. | Max. |
|--------|---------|------------|--------------|------|------|
| 1 | +3.3V | +/-5% | 100mV | 0.5A | 15A |
| 2 | +5V | +/-5% | 100mV | 2.5A | 35A |
| 3 | +12V | +/-5% | 200mV | 0.5A | 15A |
| 4 | -5V | +/-5% | 200mV | 0A | 0.5A |
| 5 | -12V | +/-10% | 240mV | 0A | 0.8A |
| 6 | +5VSB | +/-5% | 100mV | 0A | 1.5A |

Total Output of +3.3V and +5V shall not exceed 175W, the power supply's max. output power is 300W.

■ **Hold-up time :** 16ms min.

■ **Efficiency :** 70% typ.

■ **Protection :** Over Voltage/Temp. 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.

■ **Built-in ball bearing fan**

■ **MTBF :** min. 50,000hrs

■ **Safety :** Meets UL 1950, CSA 22.2 Level 3, TUV, CE

■ **EMI :** Meets FCC class "B", EN55022 class "B", CE

■ **Operating Temp. :** 0-50°C

ORDERING INFORMATION

- **ACE-R30A** 300W ATX Redundant Power Supply
Includes two ACE-R30A
- **ACE-R30A-1** 300W ATX Redundant Power Module
- **ACE-R30AP230V** 300W/230VAC input ATX Redundant Power with PFC function Includes two ACE-R30AP230V-1
- **ACE-R30AP230V-1** 300W/230VAC input ATX Redundant Power Module with PFC function

ACE-C232 PS/2 Size 230W Redundant Power Supply



■ **Ripple and Noise:** The peak to peak ripple and noise for +5V output is less than 50mV, for +/-12V and -5V output is less than 100mV.

■ **Line Regulation:** The line regulation for each output is less +/-1% while measuring at rated load and +/-10% or 115VAC or 230VAC input voltage changing.

■ **Load Regulation:** The output voltage load regulation is less than the following value by changing each output and +/-40% from 60% rated load, and keep all other outputs at 60% rated load.
+5V:+/-4% +12V:+/-5% -12V:+/-2% -5V:+/-2%

■ **Hold Up Time:** >16ms

■ **Power Good Signal:** Go high 100ms to 500ms after all output DC Voltages are within regulation limits.

■ **Efficiency:** 70% typical

■ **Output protection:** Over Voltage Protection and Short Protection

■ **Operating Temperature :** 0°C ~ 50°C (derating about 20% from 30°C to 50°C)

■ **Storage Temperature :** -40° ~ 85°C

■ **Cooling:** Cooling with a 42CFM forced air

■ **MTBF:** 176,530Hrs

■ **Safety Standards:** UL 1950; CSA22.2 No. 234; EN 60950

■ **EMI Standard:** ECC docket 20780 curve "B" ; EN55022 class "B"

■ **Connectors:** DIN 41612 C96

■ **Pin Assignment:**

| Pin 1 | AC L | Pin 11, 12, 13 | +12V |
|-------|------|----------------|------------|
| 4 | AC N | 11-25 | GND |
| 9 | -5V | 26-31 | +5V |
| 10 | -12V | 32 | Power Good |

SPECIFICATIONS

Power Fault Warning:

In case one power module failed, the buzzer and LED will act. After pushing reset button, the buzzer stops and the LED still light until the failed power module is fixed.

ACE-R23A 230W Redundant Power Module

- **Input :** 90V to 130V AC or 180V to 260V AC selectable,
- **Output (Max. Output Power 230W at 30°C)**

| Output | Min. Load | Rated Load | Max. Load | Voltage Accessory |
|--------|-----------|------------|-----------|--------------------|
| +5V | 4.0A | 20A | 25A | 4.80V to 5.20V |
| +12V | 1.0A | 10A | 12A | 11.4V to 12.9V |
| -12V | 0.1A | 0.5A | 1A | -11.30V to -12.60V |
| -5V | 0.1A | 0.5A | 1A | -4.65V to -5.25V |



ORDERING INFORMATION

- **ACE-C232** PS/2 Size 230W Redundant Power Supply, includes two ACE-R23A
- **ACE-R23A** 230W Redundant Power Module

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.
- Built-in ball bearing fan
- 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 _b | +5V | +12V | -12V | -5V | +3.3V | +5Vs _b |
| 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 _b |
|----------|------|------|------|------|-------|-------------------|
| 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
 - Built-in ball bearing cooling fan
 - 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-828/830

Industrial ATX Power Supply



- **Output Power** : Total combined output power on the +3.3V and +5V rails is 150W
- **Efficiency** : Higher than 65%
- **Hold-up Time (ACE-828A/830AP)** : 20ms (typical)@115V AC
- **Altitude** : 0 ~ 10,000ft
- **Protection** :
 - Over voltage protection : The trip point is around 5.7V ~ 7.0V output
 - Short circuit 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
- **Built-in ball bearing cooling fan**
- **MTBF** :
 - ACE-828A : 101,379 Hours
 - ACE-828C : 121,233 Hours
 - ACE-828T : 112,112 Hours
- **Safety** : Meets UL 1950; CSA 22.2 No. 234, VDE EN 60 950
- **EMI** :
 - Meets FCC class "B", EN55022 class "B"
 - Harmonic EN 61000-3-2 for ACE-830AP
- **EMS Standard (Design to meet the following limits)** :
 - 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 Temperature** : -20° ~ 70°C (Derating curve will occur 40°~ 70°C)
- **Storage Temperature** : -40° ~ 75°C

Specifications

● Input Table :

| Model | Input Range | Input Current |
|----------------|--|---------------|
| ACE-828A/830AP | 90 ~ 130V AC or 180 ~ 260V AC, 47 ~ 63Hz (Auto-Switch) | |
| ACE-828C | +18 ~ +32V DC | 5A@24V DC |
| ACE-828T | -40 ~ -72V DC | 10A@-48V DC |

● Output Table : (at 40°C)

| Model | Rated Load | | | | | | Max Output | | | | | |
|-----------|------------|------|------|------|-------|-------------------|------------|------|------|-----|-------|-------------------|
| | +5V | +12V | -12V | -5V | +3.3V | +5Vs _b | +5V | +12V | -12V | -5V | +3.3V | +5Vs _b |
| ACE-830AP | 30A | 6A | 0.5A | 0.5A | 10A | 1A | 35A | 10A | 1A | 1A | 20A | 1.5A |
| ACE-828A | 25A | 10A | 0.5A | 0.5A | 8A | 0.72A | 30A | 15A | 2A | 1A | 15A | 1.2A |
| ACE-828C | 25A | 7A | 1A | 0.5A | 8A | 0.72A | 30A | 15A | 2A | 1A | 15A | 1.2A |
| ACE-828T | 25A | 7A | 1A | 0.5A | 8A | 0.72A | 30A | 15A | 2A | 1A | 15A | 1.2A |

- **Ripple and Noise** : Less than 50mV@+5V and +3.3V; 100mV@Others
- **Line Regulation** : The line regulation for each outputs are less than ±1%
- **Load Regulation** :

| Model | +5V | +12V | -12V | -5V | +3.3V | +5Vs _b |
|-----------|------|------|------|------|-------|-------------------|
| ACE-830AP | <±1% | <±1% | <±1% | <±1% | <±1% | <±1% |
| ACE-828A | <±3% | <±5% | <±2% | <±2% | <±2% | <±3% |
| ACE-828C | <±3% | <±5% | <±2% | <±2% | <±2% | <±1% |
| ACE-828T | <±3% | <±5% | <±2% | <±2% | <±2% | <±1% |

Ordering Information:

ACE-830AP

AC input PFC 300W industrial ATX power supply

ACE-828A

AC input 280W industrial ATX power supply

ACE-828C

+24V DC input industrial ATX power supply

ACE-828T

-48V DC input industrial ATX power supply

ACE-815A/815AP/915A/915AP

150W Power Supply

ACE-815T

150W 48VDC Input ATX Power Supply

ACE-815C

100W 24VDC Input ATX Power Supply

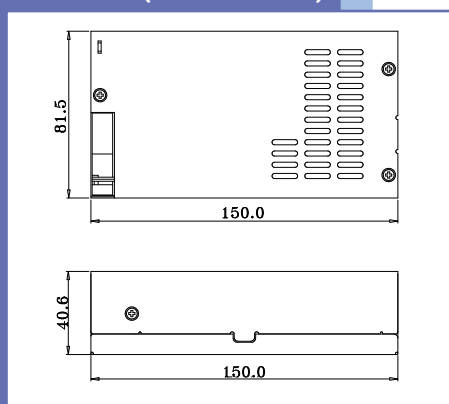


ACE-815A

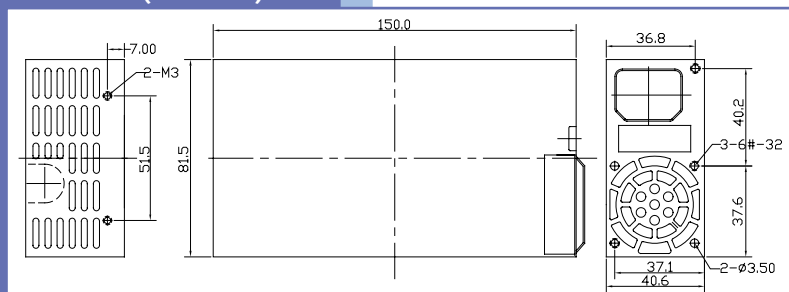


ACE-815T/815C

Dimensions (ACE-815T/815C)



Dimensions (ACE-815A)



Designed for 1U Server Appliance Product !!

SPECIFICATIONS

- **Input** : 90V-264VAC (ACE-815AP, ACE-915AP) 95-132VAC,180-264VAC, manual switch (ACE-815A, ACE-915A), 36V-72VDC (ACE-815T), 18V-32VDC (ACE-815C)

- **ACE-815A/AP, ACE-915A/AP Output Rating** (ACE-915A/AP without 3.3V and 5Vsb output)

| Output | Nominal | Regulation | Ripple/Noise | ACE-915A/AP Min. | ACE-815A/AP Min. | ACE-915A/AP Max. | ACE-815A/AP Max. |
|--------|---------|------------|--------------|------------------|------------------|------------------|------------------|
| 1 | +3.3V | +/-5% | 100mV | - | 0.3A | - | 10A/7A |
| 2 | +5V | +/-5% | 150mV | 1A | 1A | 17A | 14A |
| 3 | +12V | +/-8% | 200mV | 0A | 0A | 5A | 4A |
| 4 | -5V | +/-5% | 200mV | 0A | 0A | 0.2A | 0.2A |
| 5 | -12V | +/-10% | 250mV | 0A | 0A | 0.35A | 0.2A |
| 6 | +5VSB | +/-5% | 200mV | - | 0A | - | 1.5A |

Total Output of +3.3V and +5V shall not exceed 90W (ACE-815A/815AP/915A/915AP)

- **ACE-815T Output Rating**

| Output | Nominal | Regulation | Ripple/Noise | Min. | Max. |
|--------|---------|------------|--------------|------|-------|
| 1 | +3.3V | +/-5% | 50mV | 0.0A | 10.0A |
| 2 | +5V | +/-5% | 50mV | 0.0A | 14.0A |
| 3 | +12V | +/-5% | 120mV | 0.0A | 4.2A |
| 4 | -5V | +/-5% | 100mV | 0.0A | 0.3A |
| 5 | -12V | +/-10% | 120mV | 0.0A | 0.3A |
| 6 | +5VSB | +/-5% | 100mV | 0.0A | 2.0A |

#+5V, +3.3V and +12V total output not exceed 135W

- **ACE-815C Output Rating**

| Output | Nominal | Regulation | Ripple/Noise | Min. | Max. |
|--------|---------|------------|--------------|------|-------|
| 1 | +3.3V | +/-5% | 50mV | 0.0A | 4.0A |
| 2 | +5V | +/-5% | 50mV | 0.0A | 13.0A |
| 3 | +12V | +/-5% | 120mV | 0.0A | 2.5A |
| 4 | -12V | +/-10% | 120mV | 0.0A | 0.3A |
| 5 | +5VSB | +/-5% | 100mV | 0.0A | 2.0A |

#+5V, +3.3V and +12V total output not exceed 84W



- **Hold-up time** : 16ms min. (AC Input Power Supply only)
- **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.
- **Built-in ball bearing fan**
- **Power Connector**: ATX (ACE-815A/AP/815T/815C) ; P8/P9 (ACE-915A/AP)
- **MTBF** : 100,000hrs at 25°C
- **Safety** : Meets UL 1950, CSA 22.2 Level 3,TUV
- **EMI** : Meets FCC class "B",EN55022 class "B"
Meets Harmonic EN61000-3-2 (ACE-815AP, ACE-915AP)
- **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

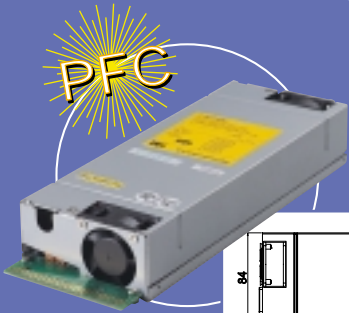
- **ACE-815A** 150W ATX Power Supply
- **ACE-815AP** 150W ATX Power Supply full Range with PFC function
- **ACE-815T** 150W 48VDC ATX Input Power Supply
- **ACE-815C** 100W 24VDC ATX Input Power Supply
- **ACE-915A** 150W AT Power Supply
- **ACE-915AP** 150W AT Power Supply full Range with PFC function

ACE-1010T ACE-1010A/1020A

170W 48VDC Input ATX Power Supply

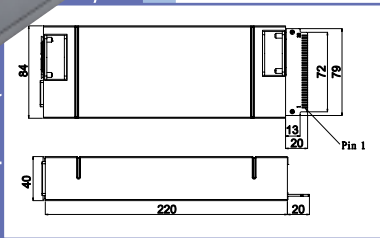
170W/300W ATX Power Supply

The best removable power supply designed for 1U/2U servers !!



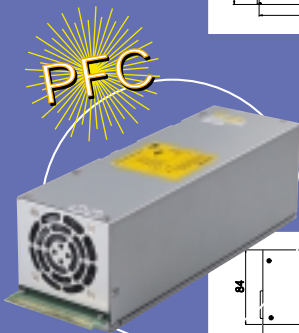
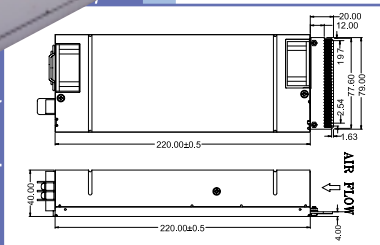
ACE-1010A

Dimensions

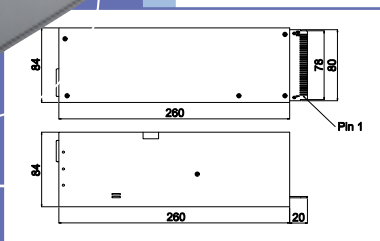


ACE-1010T

Dimensions

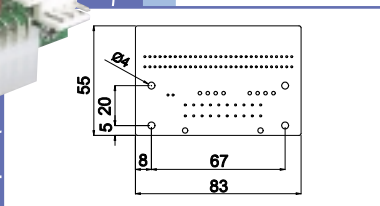


ACE-1020A



PCB-02

Dimensions



SPECIFICATIONS

- Input : 90V-264VAC (ACE-1010A/1020A), 36V-72VDC (ACE-1010T)
- ACE-1010A, 1010T Output Rating * ACE-1010T 50mV

| Output | Nominal | Regulation | Ripple/Noise | Min. | Max. |
|--------|---------|------------|--------------|------|-------|
| 1 | +3.3V | +/-5% | 50mV | 0.3A | 12.0A |
| 2 | +5V | +/-5% | 50mV | 1.5A | 16.0A |
| 3 | +12V | +/-5% | 120mV | 0.1A | 5.0A |
| 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 100W, the power supply's max. output power is 170W

ACE-1020A Output Rating

| Output | Nominal | Regulation | Ripple/Noise | Min. | Max. |
|--------|---------|------------|--------------|------|-------|
| 1 | +3.3V | +/-5% | 50mV | 0.3A | 20.0A |
| 2 | +5V | +/-5% | 50mV | 2.0A | 25.0A |
| 3 | +12V | +/-5% | 120mV | 0.2A | 11.0A |
| 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 145W, the +3.3V, +5V and +12V total output power shall not exceed 250W and the total output of the power supply is max. 300W.

- Hold-up time : 17ms min. (ACE-1010A/1020A)
- Efficiency : 68% typ.
- Protection : Over Voltage 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.
- Built-in ball bearing fan
- MTBF : min. 50,000hrs
- 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-1010A, 1020A)
- 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



PCB-02 ACE-1010A/1010T/1020A Power Connection Board

- Work with ACE-1010A/1010T/1020A ATX power supply
- Emulate ATX push button function to control power on/off.
- Standard ATX power connector and accessory device 5V/12V connectors.

ORDERING INFORMATION

- ACE-1010T : 170W 48VDC Input in ATX Power Supply
- ACE-1010A : 170W ATX Power Supply
- ACE-1020A : 300W ATX Power Supply
- PCB-02 : ACE-1010A/1010T/1020A Power Connection Board

ACE-940AP ▶ 390W PS/2 SPS Type NEW

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

AC Input Industrial PS/2 Type Power Supply

PFC

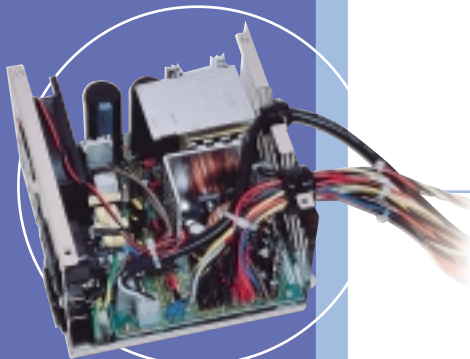


ACE-940AP

PFC



ACE-93X Series



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

Built-in ball bearing cooling fan (Selected Models)

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

- Storage Temperature : -40_i~75_iC

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

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 ball bearing 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 ball bearing 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

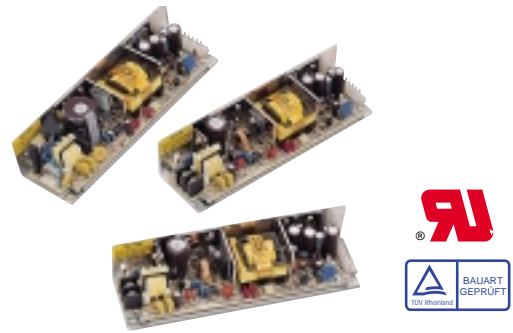
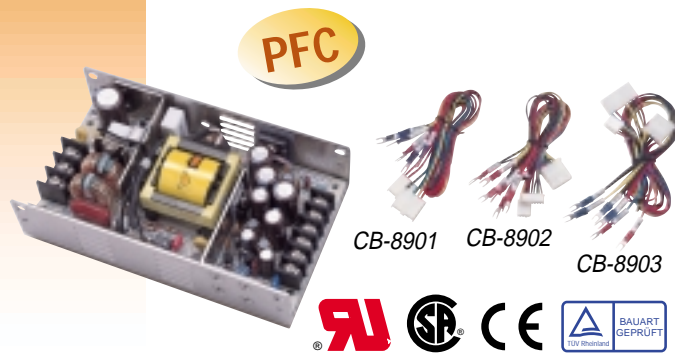
250W +24V DC input PS/2 type power supply

ACE-916V

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

ACE-890 Industrial 1U Power Supply

ACE-855/845 AC/DC Input LCD Panel PC 55W Power Supply



Specifications

● Input / Output Table : (at 50°C)

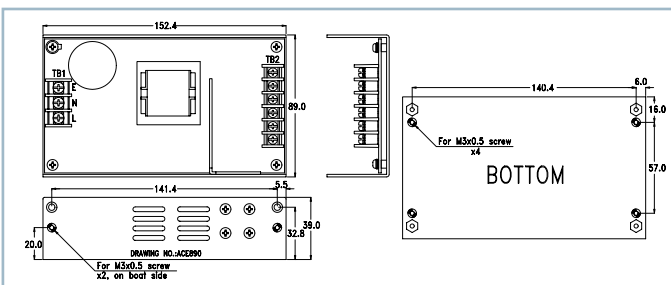
| Model | Input Voltage | Rated Load | | | Max Output | | |
|----------------|---------------|------------|------|------|------------|------|------|
| | | +5V | +12V | -12V | +5V | +12V | -12V |
| ACE-890A/890AP | 85 ~ 264V AC | 10A | 2.5A | 0.5A | 12A | 4A | 1A |
| ACE-890C | 18V ~ 36V DC | 10A | 2.5A | 0.5A | 12A | 4A | 1A |
| ACE-890P | 70V ~ 132V DC | 10A | 2.5A | 0.5A | 12A | 4A | 1A |
| ACE-890T | 36V ~ 72V DC | 10A | 2.5A | 0.5A | 12A | 4A | 1A |
| ACE-890V | 9V ~ 16V DC | 9A | 2.5A | 0.5A | 12A | 4A | 1A |

- **Ripple and Noise** : Less than +5V@50mV and less than ±12V@100mV
- **Line Regulation** : The line regulation for each output is less than ±1%, while measuring at rated loading and ±10% of input voltage changing
- **Load Regulation** : Less than ±1%@+5V and ±5%@±12V
- **Efficiency** : Higher than 70%
- **Hold-up Time (ACE-890A/890AP)** : 16ms (typical)@115V AC
- **Protection** : Over voltage protection. The trip point is around 5.7V ~ 7.0V output
- **Operating Temperature** : -20°~70°C (Derating curve will occur 50°~70°C)
- **Storage Temperature** : -20°~85°C
- **Altitude** : 0~10,000ft
- **MTBF** : - ACE-890A : 268,358 Hours
- ACE-890P : 265,827 Hours
- ACE-890T : 269,884 Hours
- ACE-890C : 252,383 Hours
- ACE-890V : 245,424 Hours.
- **Safety** : Meets UL 1950, CSA 22.2 No. 234, VDE EN 60 950
- **EMI** : - Meets FCC docket 20780 curve "B", EN55022 "B"
- Harmonic EN 61000-3-2 for ACE-890AP
- **EMS Standard (Design to meet the following limits)** :
- IEC 801-2 15KV (Air Discharge)
- IEC 801-3, 10V/M
- IEC 801-4, 2KV
- IEC 801-5, 2KV
- **Dimensions** : 89(W) x 39(H) x 152.4(D)mm; (3.5" x 1.5" x 6")

Ordering Information:

- ACE-890AP** AC input 90W industrial PFC power supply
- ACE-890A** AC input 90W industrial power supply
- ACE-890C** 24V DC input 90W industrial power supply
- ACE-890P** 100V DC input 90W industrial power supply
- ACE-890T** 48V DC input 90W industrial power supply
- ACE-890V** 12V DC input 75W industrial power supply
- CB-8901** DC output cable for backplane (P8/P9 type) and HDD/FDD, 40cm
- CB-8902** DC output cable for CPU card (271-08TS) and HDD/FDD, 40cm
- CB-8903** DC output cable for NOVA series SBC (Molex 26-60-4080) and HDD/FDD, 40cm

Dimensions:



Specifications

● Input Table :

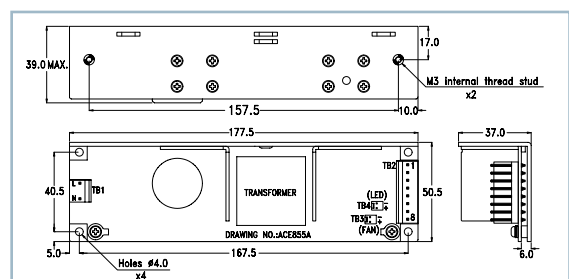
| Model | Input Voltage | Input Current |
|----------|-------------------------|--------------------------|
| ACE-855A | 85 ~ 264V AC, 47 ~ 63Hz | 2A@115V AC or 1A@230V AC |
| ACE-855C | +16 ~ +32V DC | 9A@+16V DC |
| ACE-845V | +9.5 ~ +18V DC | 10A@+9.5V DC |

● Output Table: (at 50°C):

| Model | Rated Load | | Max. Output | |
|----------|------------|------|-------------|------|
| | +5V | +12V | +5V | +12V |
| ACE-855A | 8A | 1.2A | 10A | 4A |
| ACE-855C | 8A | 1.2A | 10A | 4A |
| ACE-845V | 8A | 1.1A | 8A | 2A |

- **Inrush Current (ACE-855A)** : Not exceed 115V@30A AC or 230V AC@60A
- **Ripple and Noise** : Less than 1% of output voltage
- **Line Regulation** : The line regulation for each outputs are less than ±1%, while measuring at rated loading and ±10% of input voltage changing
- **Load Regulation** : Less than ±3%@+5V, ±5%@+12V
- **Efficiency** : Higher than 70%
- **Hold-up Time (ACE-855A)** : 16ms (typical)@115V AC
- **Altitude** : 0 ~ 10,000ft
- **Protection** : Over voltage protection. The trip point is around 5.7V ~ 7.0V output
- **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-855A : 335,874 Hours
- ACE-855C : 327,482 Hours
- ACE-845V : 339,662 Hours
- **Safety** : Meets UL 1950; CSA 22.2 No. 234, VDE EN 60 950
- **EMI** : Meets FCC docket 20780 curve "B", EN50081-2 : CISPR curve "B"
- **EMS Standard (Design to meet the following limits)** :
- EN 50082-2
- IEC 801-2 8KV (Air Discharge) criteria B
- IEC 801-3, 10V/M criteria B
- IEC 801-4, 2KV criteria B
- IEC 801-5, 2KV criteria B
- **Operating Temperature** : -20° ~ 70°C (Derating curve will occur 50° ~ 70°C)
- **Storage Temperature** : -20° ~ 85°C
- **Dimensions** : 50.5(W) x 37(H) x 177.5(D)mm; (2" x 1.5" x 7")

Dimensions:



ACE-870/865 AC/DC Input Compact Size 70W Power Supply



- EMI :
 - ACE-870A/870AP : Meets FCC docket 20780 curve "B"
 - ACE-870AP : Harmonic EN 61000-3-2
- Operating Temperature : 0° ~ 50°C
- Storage Temperature : -20° ~ 85°C
- Dimensions : 81(W) x 50(H) x 127(D)mm; (3.2" x 2" x 5")



CB-870A CB-870B CB-870C CB-870D

Specifications

● Input Table :

| Model | Input Range | Input Current |
|----------------|------------------------|---------------------------------|
| ACE-870A/870AP | 85~264V AC, 47~63Hz | 1.5A@115V AC or 0.8A@230V AC |
| ACE-870T | +36 ~ +72V DC | 4A@+48V DC |
| ACE-870C | +18 ~ +36V DC | 6A@+24V DC |
| ACE-865V | +8 ~ +16V DC | 12A@+12V DC |

● Output Table: (at 50°C)

| Model | Rated Load | | | | Max. Output | | | |
|----------------|------------|------|------|------|-------------|------|------|------|
| | +5V | +12V | -5V | -12V | +5V | +12V | -5V | -12V |
| ACE-870A/870AP | 7A | 2.5A | 0.3A | 0.3A | 10A | 4A | 0.5A | 0.5A |
| ACE-870T | 7A | 2.5A | 0.3A | 0.5A | | | | |
| ACE-870C | 7A | 2.5A | 0.3A | 0.5A | 4A | 0.3A | 0.5A | |
| ACE-865V | 6A | 2A | 0.3A | 0.5A | 4A | 0.3A | 0.5A | |

- Ripple and Noise : Less than 50mV@+5V; 100mV@Others
- Line Regulation : The line regulation for each outputs are less than $\pm 1\%$ @+5V; $\pm 2\%$ @+12V; $\pm 3\%$ @-5V & -12V
- Load Regulation : Less than $\pm 3\%$ @+5V & +12V, $\pm 5\%$ @-5V & -12V
- Efficiency : Higher than 70%
- Hold-up Time (ACE-870A/870AP) : 16ms (typical)@115V AC
- Altitude : 0 ~ 10,000ft
- Protection : Over voltage protection. The trip point is around 5.7V ~ 7.0V output
- MTBF :
 - ACE-870A : 296,831 Hours
 - ACE-870T : 277,126 Hours
 - ACE-870C : 276,238 Hours
 - ACE-865V : 246,485 Hours
- Safety : Meets UL 1950; CSA 22.2 No. 234, VDE EN 60 950

Ordering Information:

ACE-870AP

AC input compact size PFC power supply

ACE-870A

AC input compact size power supply

ACE-870T

+48V DC input compact size power supply

ACE-870C

+24V DC input compact size power supply

ACE-865V

+12V DC input compact size power supply

CB-870A

DC Cable set for ACE-870 power to backplane with P8/P9 connector, 40cm

CB-870B

DC Cable set for ACE-870 power to CPU card with 8-pin connector, 40cm

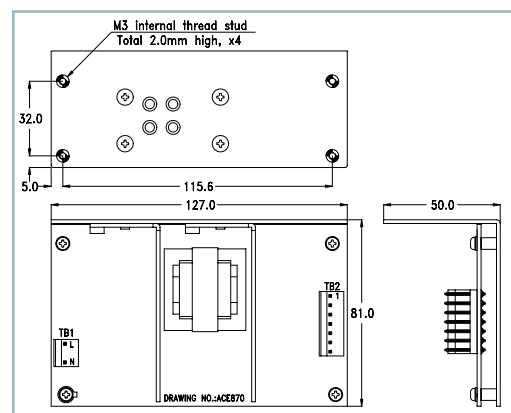
CB-870C

DC Cable set for ACE-870 power to CPU card with 8-pin & P8/P9 connector, 40cm

CB-870D

ACE-870A/870AP AC input cable kit, 60cm

Dimensions:



ACE-723

Rugged AC/DC Input 230W Power Supply



Specifications

Input Table :

| Model | Input Range | Input Current |
|----------|---------------------------------------|--------------------------|
| ACE-723A | 85~135V AC or 180~265V AC, 47 ~ 440Hz | 5A@115V AC or 3A@230V AC |
| ACE-723B | 85~135V AC or 180~265V AC, 47 ~ 440Hz | 5A@115V AC or 3A@230V AC |
| ACE-723T | -36 ~ -72V DC | 8A@-48V DC |
| ACE-723C | +19 ~ +30V DC | 16A@+24V DC |

Output Table (at 40°C) :

| Model | Rated Load | | | | | Max. Output | | | | |
|----------|------------|------|-----|------|------|-------------|------|------|------|------|
| | +5V | +12V | -5V | -12V | +24V | +5V | +12V | -5V | -12V | +24V |
| ACE-723A | 20A | 6A | 1A | 1A | | 33A | 12A | 1.5A | 1.5A | |
| ACE-723B | 21A | 5A | | 1A | 1A | 33A | 12A | | 1.5A | 1.5A |
| ACE-723T | 22A | 6A | 1A | 1A | | 33A | 12A | 1.5A | 1.5A | |
| ACE-723C | 22A | 6A | 1A | 1A | | 33A | 12A | 1.5A | 1.5A | |

- **Inrush Current (ACE-723A/B)** : Not exceed 15A@115V AC or 30A@230V AC
- **Ripple and Noise** : Less than 100mV
- **Line Regulation** : The line regulation for each outputs are less than $\pm 1\%$, while measuring at rated loading and $\pm 10\%$ of input voltage changing
- **Load Regulation** : Less than $\pm 1\%$ @ $\pm 5V$ and $-12V$, $\pm 4\%$ @ $+12V$ and $+24V$ (ACE-723B)
- **Efficiency** : Higher than 75%
- **Hold-up Time (ACE-723A/B)** : 20ms (typical)@115V AC
- **Protection** : Over voltage protection. The trip point is around 5.9V ~ 7.0V output
- **Thermal Protection** : Built in $110\pm 5^\circ\text{C}$ thermal switch in HS1
- **Altitude** : 0 ~ 10,000ft
- **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
- **Hi-pot isolation** :
 - 4300V DC, input to output for one minute
 - 2200V DC, input to ground for one minute
- **MTBF** :
 - ACE-723A : 206,500 Hours
 - ACE-723B : 206,300 Hours
 - ACE-723T : 206,700 Hours
 - ACE-723C : 205,900 Hours
- **Safety** : Meets UL 478, 1012, 1950; CSA 22.2 No. 234, VDE EN 60 950
- **EMI** : Meets FCC docket 20780 curve "A", EN50081-2 : CISPR22 "A"
- **EMS Standard (Design to meet the following limits)** :
 - EN 50082-2
 - IEC 801-1 8KV (Air Discharge) criteria B
 - IEC 801-3, 10V/M criteria A
 - IEC 801-4, 2KV criteria B
 - IEC 801-5, 2KV criteria B
- **Built-in ball bearing cooling fan**
- **Operating Temperature** : $-20^\circ \sim 70^\circ\text{C}$
(Derating curve will occur $50^\circ \sim 70^\circ\text{C}$)
- **Storage Temperature** : $-20^\circ \sim 85^\circ\text{C}$
- **Dimensions** : 112(W) x 51(H) x 203(D)mm; (4.4" x 2" x 8")

Ordering Information:

ACE-723A

Rugged AC input 230W power supply

ACE-723B

Rugged AC input 230W PC and +24V power supply

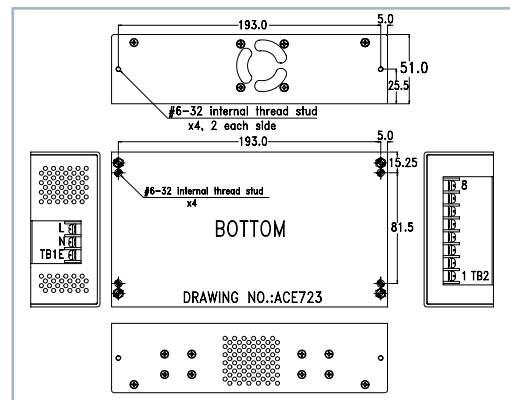
ACE-723T

Rugged -48V DC input 230W power supply

ACE-723C

Rugged 24V DC input 230W power supply

Dimensions:



ACE-716

Rugged AC/DC Input 150W Power Supply



Specifications

Input Table :

| Model | Input Range | Input Current |
|----------------|--|-----------------------------|
| ACE-716A/716AP | 85~135V AC or 180~265V AC, 47~440Hz | 4A@115V AC or 2A@230V AC |
| ACE-716T | -36 ~ -72V DC | 6A@-48V DC |
| ACE-716C | +19 ~ +30V DC | 12A@+24V DC |

Output Table (at 50°C) :

| Model | Rated Load | | | | Max. Output | | | |
|----------------|------------|------|------|------|-------------|------|-----|------|
| | +5V | +12V | -5V | -12V | +5V | +12V | -5V | -12V |
| ACE-716A/716AP | 18A | 4A | 0.5A | 1A | 25A | 10A | 1A | 1A |
| ACE-716T | 18A | 4A | 0.5A | 1A | 25A | 10A | 1A | 1.5A |
| ACE-716C | 18A | 4A | 0.5A | 1A | 25A | 10A | 1A | 1.5A |

- **Inrush Current (ACE-716A/716AP)** : Not exceed 15A@115V AC or 30A@230V AC
- **Ripple and Noise** : Less than 100mV
- **Line Regulation** : The line regulation for each outputs are less than $\pm 1\%$, while measuring at rated loading and $\pm 10\%$ of input voltage changing
- **Load Regulation** :
 - ACE-716A/716AP : Less than $\pm 3\%$ @ $\pm 5V$ and $-12V$, $\pm 6\%$ @ $+12V$
 - ACE-716T/C : Less than $\pm 1\%$ @ $\pm 5V$ and $-12V$, $\pm 4\%$ @ $+12V$
- **Efficiency** :
 - ACE-716A/716AP : Higher than 75%
 - ACE-716T/C : Higher than 70%
- **Hold-up Time (ACE-716A/716AP)** : 20ms (typical)@115V AC
- **Altitude** : 0 ~ 10,000ft
- **Protection** : Over voltage protection. The trip point is around 5.9V ~ 7.0V output
- **Thermal Protection** : Built in $110\pm 5^\circ\text{C}$ 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

- **Hi-pot isolation** :
 - 4300V DC, input to output for one minute
 - 2200V DC, input to ground for one minute
- **MTBF** :
 - ACE-716A : 188,800 Hours
 - ACE-716T : 212,050 Hours
 - ACE-716C : 187,490 Hours
- **Safety** : Meets UL 478, 1012, 1950; CSA 22.2 No. 234, VDE EN 60 950
- **EMI** :
 - Meets FCC docket 20780 curve "A", EN50081-2 : CISPR22 "A"
 - Harmonic EN 61000-3-2 for ACE-716AP
- **EMS Standard (Design to meet the following limits)** :
 - EN 50082-2
 - IEC 801-1 8KV (Air Discharge) criteria B (ACE-716A/716AP)
 - IEC 801-3, 10V/M criteria A
 - IEC 801-4, 2KV criteria B (ACE-716A/716AP)
 - IEC 801-5, 2KV criteria B (ACE-716A/716AP)
- **Built-in ball bearing cooling fan**
- **Operating Temperature** : $-20^\circ \sim 70^\circ\text{C}$
(Derating curve will occur $50^\circ \sim 70^\circ\text{C}$)
- **Storage Temperature** : $-20^\circ \sim 85^\circ\text{C}$
- **Dimensions** : 97(W) x 40.5(H) x 198(D)mm;
(3.8" x 1.6" x 7.8")

Ordering Information:

ACE-716AP

Rugged AC input 150W PFC power supply

ACE-716A

Rugged AC input 150W power supply

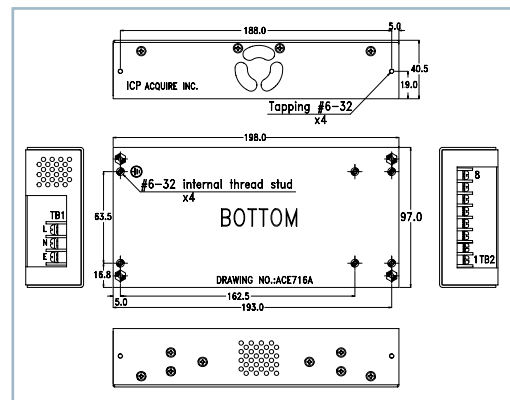
ACE-716T

Rugged -48V DC input 150W power supply

ACE-716C

Rugged 24V DC input 150W power supply

Dimensions:



ACE-905A 40W Embedded ATX Power Supply

Designed to provide Embedded SBC (for example Wafer-5821) 5Vsb and PS-ON signal interface for Wake-on-Lan, Wake-on-Modem, ...etc advance functions.



- EMI : Meets FCC class "B", EN55022 class "B"
- 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

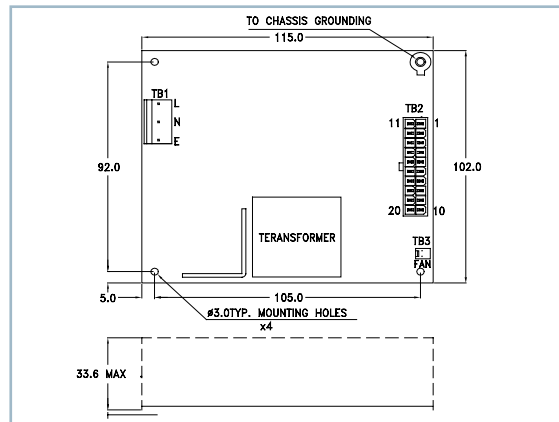
Ordering Information:

ACE-905A
40W Embedded ATX Power Supply

Specifications

- Input : 90V-264VAC, Molex 5273-05A type connector
- Output Rating : standard ATX power connector
+5V : Max. 5A +12V : Max. 3A 5Vsb : 0.5A
Total Output of +5V and +12V shall not exceed 40W.
- Hold-up time : 20ms min. at 115VAC
- Efficiency : 74% typ.
- Protection : Over Voltage/Load Protection and Short Circuit Protection
- Power On(PS-ON) signal provided
- 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.
- Built-in ball bearing fan
- MTBF : over 100,000hrs at 25 C
- Safety : Meets UL 1950, CSA 22.2 Level 3, TUV

Dimensions:



ACE-540A 24V DC Output Industrial Power Supply



- Safety : UL 1950, CSA 22.2 No. 234, VDE EN 60 950
- EMI : FCC docket 20780 curve "B", EN55022
- EMS Standard :
 - EN-50082-1
 - IEC 801-2 8KV (Air Discharge) criteria B
 - IEC 801-3, 3V/M criteria B
 - IEC 801-4, 2KV criteria B
 - IEC 801-5, 2KV criteria B

Specifications

- Input : Voltage : 85 ~ 264V AC
- Output : - 2A@24V DC, 50°C with 20CFM air cooling
- 1.7A@24V DC, 50°C with free air cooling
- Load Regulation : Less than ±1% by changing the output
- Efficiency : Higher than 70%
- Hold-up Time : 20ms (typical)@115V AC
- Protection : Over voltage protection.
The trip point is around 26.2V ~ 31V output
- Operating Temperature : -20° ~ 70°C
(Will derate the output to 70% when operating at 70°C)
- Storage Temperature : -40° ~ 85°C
- Altitude : 0 ~ 10,000ft
- MTBF : 396,220 Hours.

Dimensions:

