Model 9301 Series

Bench Top Chassis





FEATURES

- 6, 10 and 15 Slot Passive Backplane Models
- ISA and ISA/PCI Bus Models
- Baby-AT and ATX Motherboard Models
- AC and DC Mains Options
- Up To 9 Disk Drive Capacity



DESCRIPTION

The 9301 Series is a family of desk top or bench top computer chassis geared towards small footprint application requirements but with expansion capabilities equal to most rack mount systems. There are several choices of backplane types for each of the three basic chassis sizes from six slot through fifteen slot expansion capacity in ISA and ISA/PCI PICMG compatible bus models. For motherboard users, there are chassis for both the Baby-AT and ATX formats.

Power Supplies

Both AC and DC power supplies are offered. The standard unit includes a 115/220VAC universal power supply which is user selectable for line voltage for correct operation. The power supply includes a 24 CFM cooling fan which exhausts out the rear of the chassis. A 48VDC Mains power supply is also available.

Drive Bays

Each model provides at least two drive bays with front panel access. The six slot, ten slot, and Baby-AT models also have a third drive bay mounted below the other two for internal hard disk mounting. The fifteen slot and ATX chassis offers two 5 ¼" and two 3 ½" bays with front panel access as well as additional mounting for up to five more internal 3 ½" drives.

Chassis Cooling

In addition to the fan in the power supply module, the six slot model also includes a 45 CFM cooling fan mounted at the front of the card cage. The Baby-AT motherboard and ten slot models have two 45 CFM fans at the front of the card cage. And the fifteen slot and ATX chassis provide three 45 CFM fans to insure the protective cooling for high intensity applications. The fans draw air into the chassis through a front accessible filter to provide forced air cooling and positive pressurization. The pressurization keeps dirt and airborne contaminants out of the chassis. The airflow is also directed to push clean air out through the drive area and prevent dirt from being sucked into the drive heads on removable media drives. The cooling air for the power supply is channeled separately to insure the card cage is not receiving preheated air. The filters are easily accessible from the front of the chassis without any tools so they can be periodically cleaned or replaced for efficiency.

Mounting

The basic chassis is a desk top or bench top chassis with a relatively small footprint for placing in unobtrusive areas. For more rigorous requirements, the units may be mounted to the floor or to a bulkhead with included mounting brackets which replace the rubber feet on the bottom of the chassis.



DESCRIPTION

GIRSystemTM Noise Containment

Industrial Computer Source's GIRSystem is incorporated into this chassis to make it one of the quietest bench top model chassis available anywhere for today's, and tomorrow's, high performance processors. With exemplary compliance to FCC and CE requirements it can be used globally.

Front Panel

The front panel controls include the normal system operation controls as well as indicators of normal power supply operation and fixed disk activity. Additionally, there are two LED indicators for internal chassis temperature alarm and fan operation status. An internal sensing element continuously monitors the internal temperature and a second sensor is used to monitor the operation of the 45CFM fan(s) for operation.

Rear Panel

The chassis rear panel provides knockouts for end user mounting of system connectors. Multiple knockouts are provided for a combination of DB9, DB25, and DIN connectors. The number and types of knockouts varies with the chassis size and backplane type. The system keyboard connector is also located at the rear panel.

SPECIFICATIONS

Mounting

Bench-top, Floor Mount or Wall Mount with Included Brackets

It is not recommended that the -15 or -ATX models be Wall Mounted Without Strapping to the Wall Due to the Weight of the Chassis

Backplane

Passive: 9301-06x, 9301-10x, 9301-15x Active: 9301-8MB, 9301-ATX

Bus

ISA or ISA/PCI

Number of Expansion Slots

ISA Backplane

6, 10 or 15 16-bit ISA full length expansion slots

ISA/PCI

2 ISA, 1 CPU and 2 PCI or 5 ISA, 1 CPU and 2 PCI or 3 ISA, 1 CPU and 4 PCI or 10 ISA, 1 CPU and 2 PCI or 6 ISA, 1 CPU and 6 PCI

Motherboard

Dependent on motherboard selected

Dimensions (W x H x D)

-06x
7.3" x 11.19" x 16.37"
(185 x 284.2 x 415.8mm)
-10x, -8MB
9.88" x 11.19" x 16.37"
(241.3 x 284.2 x 415.8mm)
-15x, -ATX:
14.0" x 11.19" x 16.37"
(356 x 284.2 x 415.8mm)

Weight

-06x: 21.0lbs (9.26kg) -10x: 25.0lbs (11.34kg) -15x: 32.0lbs (14.51kg)

DISK DRIVE CAPACITY

Front Access

-06, -8MB and -10 Models: One 3½", One 5 ¼", Shock Mounted -15 and -ATX Models: Two 3½", Two 5 ¼", Shock Mounted

Internal

-06x, -8MB and -10x Models: Single 3 ½" Drive Bay, Shock Mounted -15x and -ATX Models: Up to five 3½" Low Profile, Shock Mounted

Cooling Fans

24CFM in the power supply One 45CFM Front of Card Cage (-06x) Dual 45CFM Front of Card Cage (-10x, -8MB) Three 45 CFM Front of Card Cage (-15x, -ATX)

Keyboard Connection

Passive backplane

Rear panel DIN (AT) connector

Motherboard

Dependent on motherboard selected

Front Panel Indicators

Power On/Off
Disk Activity
Internal Temperature Warning
Fan Status Warning
Power Supply Status - +/-5VDC, +/-12VDC,
+3.3VDC

Front Panel Controls

Power On/Off Switch Speaker Volume Adjustment Reset Switch



DESCRIPTION CONT.

POWER SUPPLIES

Standard - Passive Backplane Models

250W Output

104-250VAC, 47-63Hz, Switch Selected

+5VDC @ 25A

+12VDC @ 9.5/14A

-5VDC @ 1A

-12VDC @ 1A

Note: The -5V & -12V combined not to exceed 13.5W total.

Standard - ATX Motherboards Models

250W Output

104-250VAC, 47-63Hz, Switch Selected

+3.3 @ 14A

+5V @ 25A

+12VDC @ 9.5A

-5VDC @ 1A

-12VDC @ 1A

Note: The +3.3V & +5V combined not to exceed 125W and the combined load of the -5V & -12V cannot exceed 13.5W.

Optional

A3 - 300W Output

Not available with ATX models 104-250VAC, 47-63Hz, Switch Select

+5VDC @ 32A

+12VDC @ 8/20A Pk

-5VDC @ 3A

-12VDC @ 2A

Note: The -5V & -12V combined not to exceed 25W total.

A4 - 400W Output

Not available with ATX models

104-250VAC, 47-63Hz, Switch Select

+5VDC @ 50A

+12VDC @ 11/18A Pk

-5VDC @ 3A

-12VDC @ 2A

Note: The -5V & -12V combined not to exceed 25W total.

C3- 300W Output

Available with ATX Model Only

104-250VAC, 47-63Hz, Switch Selected

+3.3VDC @ 14A

+5VDC @ 30A

+12VDC @ 12A

-5VDC @ 1A

-12VDC @ 1A

Note: The total load of the +3.3V & +5V cannot exceed 150W and the total load of the -5V & -12V cannot exceed 13.5W.

B4 - 400W Output

Available with ISA/PCI Backplane Models Only Required for SB21064 or SB686P(V) Single

Board Computers

104-250VAC, 47-63Hz, Switch Select

+3.3VDC @ 15A

+5VDC @ 50A

+12VDC @ 18/28A Pk

-5VDC @ 1A

-12VDC @ 2A

Note: The -5V and -12V combined not to exceed 25W total. The total power capacity cannot exceed 400W.

DC Input Power Supply

D4 - 300WOutput

Not available for ATX Models

48VDC, Mains Power Supply

+5VDC @ 35A

+12VDC @ 8/10A

-5VDC @ 0.5A

-12VDC @ 2A

Note: Power output may not exceed listed power supply

capacity.

Note: Troubleshooting a chassis may require a load on the power supply. Industrial Computer Source offers an optional ISA plug-in Power Supply Load Board that provides the minimum loading requirements of 0.96A load on +12VDC and 4A load on +5VDC. Please mention Model 10273-01B when ordering. Please note that different power supplies require different loading factors and it is possible that more than one load card may be required.

Operating Environment (AC Models only)

Temperature

10 to 50°C

Humidity

8 to 90% RHNC

Altitude

25,000 ft (7,695m)

Shock

10g, 3 axis

Vibration

1.5g, 3 axis

Storage Environment (AC Models only)

Temperature: -40 to +60°C Humidity: 8 to 90% RHNC

SPECIFICATIONS CONT.

MTBF(MIL-HDBK-217E) @ 30°C

Standard Non- ATX Power Supply 59,000 P.O.H.

A3 - 300W Power Supply 80,000 P.O.H.

A4 - 400W Power Supply 80,000 P.O.H.

B4 - 400W Power Supply 80,500 P.O.H.

ATX-Standard 250W Power Supply 59,000 P.O.H.

C3 - 300W ATX Power Supply 59,000 P.O.H.

D4 - 300W Power Supply 110,000 P.O.H.

Agency Approvals

FCC Part 15, Class B UL Recognized Component CE Compliant 73/23/EEC, EMC 89/336/EEC

Note: Specific model's agency approvals are noted in the ordering guide.

Specifications are for the power supply, chassis, and backplane. Choice of motherboard, CPUs or other user selected feature cards may reduce the maximum specifications. Operating altitude, temperature and power supply loading are interactive and affect the actual specifications according to application. Special backplanes and chassis paint colors are available on request. Consult the factory for a quotation to meet your requirements.

Allowed Combinations

	8MB	06	06P	10	10P	10P4	ATX	15	15P	15P6
STD	X	X	X	X	X	X	X	X	X	X
A3	X	X	X	X	X	X		X	X	X
A4	X	X	X	X	X	X		X	X	X
B4			X		X	X			X	X
C3							X			
D4	X	X	X	X	X	X		X	X	X



Model 9301-10 Top View

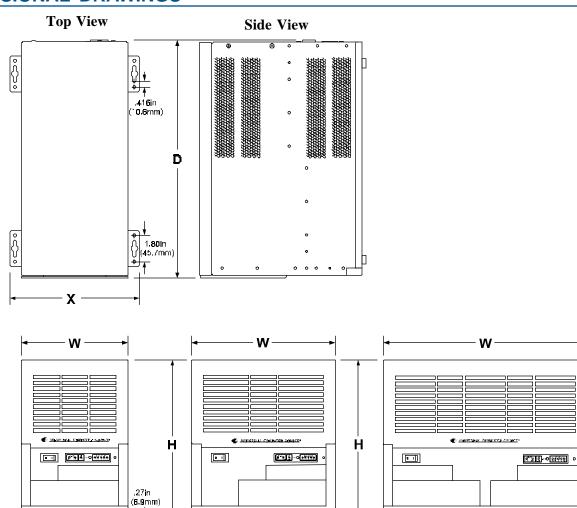


Model 9301-15 Top View



Model 9301-06 Top View





9301-06 Front View

9301-8MB, -10 Front View

9301-15, ATX Front View

Models	Backplane	W	X	Н	D	Weight
9301-06	Passive	7.3 in (185 mm)	8.163 in (207.34 mm)	11.19 in (284.2 mm)	16.37 in (415.8 mm)	21.0 lbs (9.26kg)
9301-8MB	Active	9.88 in (251 mm)	10.743 in (272.87 mm)	11.19 in (284.2 mm)	16.37 in (415.8 mm)	25.0 lbs (11.34 kg)
9301-10	Passive	9.88 in (251 mm)	10.743 in (272.87 mm)	11.19 in (284.2 mm)	16.37 in (415.8 mm)	25.0 lbs (11.34 kg)
9301-15	Passive	14 in (356 mm)	14.863 in (377.52 mm)	11.19 in (284.2 mm)	16.37 in (415.8 mm)	32.0 lbs (14.51 kg)
9301-ATX	Active	14 in (356 mm)	14.863 in (377.52 mm)	11.19 in (284.2 mm)	16.37 in (415.8 mm)	32.0 lbs (14.51 kg)







9301-15 Rear View

ORDERING GUIDE

9301 - Insert The Backplane Option Chosen Here - If Alternate Power Supply Desired, Insert Option Here

Base unit includes: 250W 120/220 VAC Power Supply. Select one Backplane Option. DC Power Supplies

replaces the standard Power Supply

Example 1: 9301-8MB-D4

Motherboard Mounting, 300W, 48VDC Mains Power

Example 2: 9301-06

6 Slot ISA, Passive Backplane, 250W, 110/220VAC Power Supply

BACKPLANE TYPE (SELECT ONE)

Option	Description
8MB	Standard Baby AT Motherboard Mounting
06	6 Slot ISA Passive Backplane
06P	ISA/PCI Passive Backplane, 2 ISA, 1 CPU, 2 PCI
10	10 Slot ISA Backplane
10P	ISA/PCI Passive Backplane, 5 ISA, 1 CPU, 2 PCI
10P4	ISA/PCI Passive Backplane, 3 ISA, 1 CPU, 4 PCI
ATX	ATX Motherboard Mounting Chassis Mounting Hardware Kit
15	15 Slot ISA Passive Backplane
15P	ISA/PCI Passive Backplane 10 ISA, 1 CPU, 2 PCI
15P6	ISA/PCI Passive Backplane 6 ISA, 1 CPU, 6 PCI

POWER SUPPLY OPTIONS (250W, 120/220 VAC STANDARD)

Option	Description
A3	300W, 120/220VAC Power Supply
A4	400W. 120/220VAC Power Supply
	A3 and A4 Power Supply options are not available with ATX chassis
B4	400W, 120/220VAC w/3.3VDC Output
	B4 only available with 06P, 10P, 10P4, 15P and 15P6 backplane options
	(B4 required for SB21064 RISC processor board and SB686P(V) Pentium Pro models)
C3	300W, 120/220VAC, ATX
	C3 available only with ATX chassis
D4	300W, 48VDC Mains Power Supply
	DC options not available on ATX chassis

