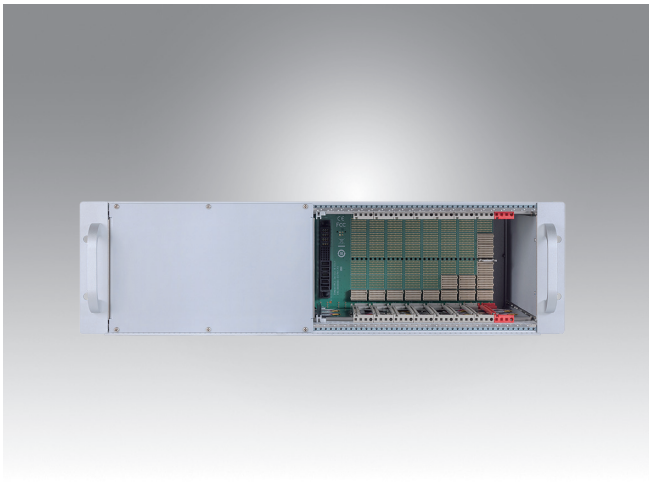
MIC-300A1

CompactPCI® Serial Enclosure for 3U Cards



Features

- 4U/3U height 84HP/44HP enclosure options with 8-slot CPCI-s backplane
- Built-in efficient cooling system in chassis
- PCIe (Gen3), SATA (Gen3), USB2.0/USB3.0, Ethernet (10GBase-T) interfaces support (reserve)
- backplanes with Ethernet routed as full-mesh from the system slot to all peripheral slots (reserve)
- PICMG CompactPCI Serial (CPCI-S.0 R2.0) compliant

Introduction

The MIC-300A1 is a standard enclosure available in 3U or 4U sizes for CompactPCI® Serial applications. It comes in two widths, either 84HP or 44HP, and includes an 8-slot CPCI-S backplane. The backplane also features an integrated 2-slot power adapter board, which supports both AC and DC power inputs. To enhance heat dissi-pation, the enclosure is equipped with an efficient cooling system.

Additionally, the MIC-300A1 offers a Bill of Materials (BOM) option that allows for the inclusion of a fan detection board. This board enables real-time monitoring of the fan's operational status. The CPCI-S backplane is designed with a right-aligned sys-tem slot and 7 peripheral slots. The remaining space on the left side can be utilized by customers for their own backplane or other installations.

The CompactPCI Serial backplane supports various protocols, including PCIe up to Gen3, S-ATA Gen3, USB 2.0, USB 3.0, and Ethernet up to 10G Base-T. Notably, the current backplanes have Ethernet connectivity routed as a full-mesh configuration from the system slot to all peripheral slots (reserve).

Specifications

Backplane		CPCI-Serial backplane 8-Slot, Systemx1, Peripheralx7 ,no RIO support Power Slot: 2-Slot for AC/DC CPCI-Serial Power module , 12V Main ,5V standby		
Cooling		**option1:** 3U 84HP chassis default fan setting:12 pcs fans for system/power/fat pipe slots. Single fan airflow 9.9 CFM, rated speed: 8500 RPM at rated voltage 12V DC **option2:** 4U 84HP chassis Built-in Pull-out fan tray: Default fan setting 2pcs, single fan airflow: 150 CFM, rated speed: 4500 RPM, noise: 54dB at rated voltage 12V DC. **option3:** 4U 44HP chassis Built-in fixed fan tray: default fan setting 4pcs,single Fan airflow: 46.62 CFM, rated speed: 4000 RPM,Noise:40dB at rated voltage 12V DC		
Environment		Operating		Non-Operating
	Temperature	-40 ~ 70 °C (-104 ~ 158 °F)		-40 ~ 70 °C (-104 ~ 158 °F)
	Humidity	95% @ 40 °C, non-condensing		95% @ 60°C, non-condensing
	Shock	10 G, 11ms, each axis three times		
	Vibration	2G rms		
Physical Characteristics		MIC-300A1 84HP 3U Chassis	MIC-300A1 84HP 4U Chassis	MIC-300A1 44HP 3U Chassis
	Dimensions (W x H x D)	482.6 x 250 x 132.55 mm	482.60 x 250 x 177 mm	279.40 x 250 x 177 mm
Compliance		PICMG_CPCI-S_0_R2.0		

https://advave.com

All product specifications are subject to change without notice.

Ordering Information

PN	Description	Chassis Slot QTY	Backplane slot	Power Slot	Backplane QTY	Fan	RIO	Dimension (W x D x H)
MIC-300A1-S1S1	MIC-300A1 3U CPCI-S 84HP Chassis with 8-slot BP	21	8	2	1	√	×	482.6 x 250 x 132.55 mm
MIC-300A1-S1S3	MIC-300A1 4U CPCI-S 84HP chassis with 8-slot BP	21	8	2	1	√	×	482.60 x 250 x 177 mm
MIC-300A1-S1S4	MIC-300A1 4U CPCI-S 44HP chassis with 8 slot BP	11	8	2	1	√	×	279.40 x 250 x 177 mm

Note:
Chassis without blank panel default, if required, need to order separately
3U 4HP blank panel: 1960117152S001
3U 8HP blank panel: 1960117153S001

Related Main Board and Front I/O Board:

Models	Description
MIC-330	3U CPCI-S CPU board
MIC-3810	3U CPCI-S PCIe Carrier board
MIC-3820	3U CPCI-S SATA Carrier board
MIC-3811	3U CPCI-S Dual Mini-PCIe Carrier board
MIC-3954D	3U CPCI-S Quad M.2 carrier
MIC-3954E	3U CPCI-S Quad MiniPCIe Carrier for Wifi/GPS/BT
MIC-3812	3U CPCI-S MXM carrier board
MIC-3860	3U CPCI-S 4 Ports Gigabit Ethernet Card
XMIC330-HAC300S	3U CPCI-S 300W AC-DC Power
MIC-3890	3U CPCI-S 110V input/250W DC Power

Backplane Topology

Option 1: 21-Slot 3U Chassis

Physical Slot NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Left	→																				Right
Cooling											Fan							Fan		Fan	
Function Block	free space										power slot		peripheral slot					fat pipe slot	fat pipe slot	system slot	space reserved for CPU board I/O extension

Option 2: 21-Slot 4U Chassis

Physical Slot NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Left	→																				Right
Cooling											Fan tray with 2pcs 120 x 120 x 25 mm fan										
Function Block	free space										power slot		peripheral slot					fat pipe slot	fat pipe slot	system slot	space reserved for CPU board I/O extension

Option3: 11-Slot 4U Chassis

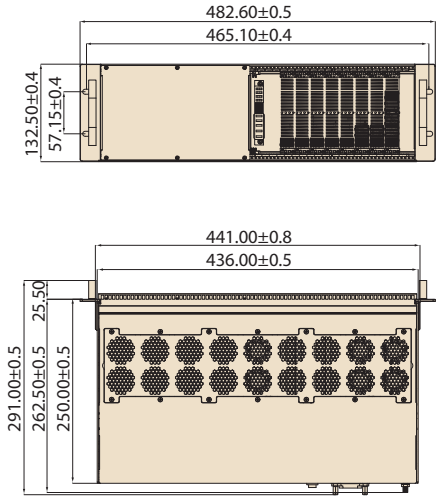
Physical Slot NO.	1	2	3	4	5	6	7	8	9	10	11
Left	→										Right
Cooling	Fan tray with 4pcs 80 x 80 x 25.4 mm fan										
Function Block	Power slot		Peripheral Slot					Fat Pipe Slot	Fat Pipe Slot	System Slot	Space Reserved for CPU board I/O Extension

https://advavee.com

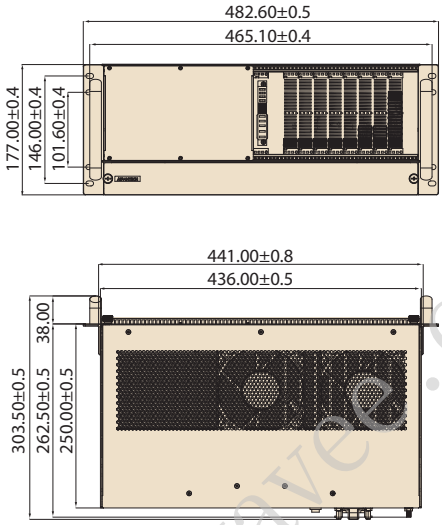
Dimensions

Unit: mm

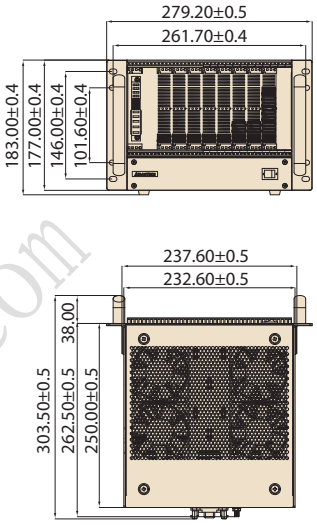
MIC-300A1-S1S1



MIC-300A1-S1S3



MIC-300A1-S1S4



Front View

MIC-300A1-S1S1

MIC-300A1-S1S3

MIC-300A1-S1S4

Related Power Supply

MIC-3890V2-B1D1

MIC330-HAC300S

https://advavee.com