

MIC-75G30

Dual GPU Expansion Module for Video AI Edge Computing with the MIC-7 Series

Startup Manual

Packing List

Before you begin installing your Expansion Module, please make sure that the following items have been shipped:

• 1 x MIC-75G30 i-Module	P/N: MIC-75G30-00C1
• 2 x 4-pin Phoenix connectors	P/N: 1652003234
• 1 x SATA cable (30 cm / 11.8 in)	P/N: 1700017838
• 1 x SATA cable (40 cm / 15.7 in)	P/N: 1700020978-01
• 1 x mounting bracket (L)	P/N: 1960005359T003
• 1 x mounting bracket (R)	P/N: 1960094392N001
• 6 x screws for mounting brackets	P/N: 1930007259-01
• 2 x GPU brackets	P/N: 1960094390N000
• 10 x screws for GPU brackets	P/N: 1930005673-11
• 5 x shockproof rubber pads	P/N: 1990000505T000
• 1 x MIC-75G30 Startup Manual	P/N: 20415G3002

Note:

* MIC-7 series H SKU does not support MIC-75G30. Please refer to the i-Module datasheet for the compatibility matrix.

* If any of these items are missing or damaged, contact your distributor or sales representative immediately.

For more information on this and other Advantech products, please visit our website at:

<http://www.advantech.com>



For technical support and service, please visit our support website for MIC-770 at:

<http://adv.t.ch/MIC75G30>



Register your products on our website and get 2 months extra warranty for free at:

<http://www.register.advantech.com>



This manual is for MIC-75G30 Rev. C1.

Part No. 20415G3003

Printed in China

4th Edition

January 2025

Specifications

- **Slots 1 & 3:** Blank
- **Slots 2 & 4:** PCIe x16 (signal PCIe x8) for GPU card
- **Slot 5:** PCIe x4

Environment

- **Operating Temp.:** 0~35°C / 32~95°F (35W CPU w/ industrial SSD)
- **Vibration:** With SSD: 1 Grms @ 5~500 Hz, random, 1 hr/axis
- **Shock:** With SSD: 10G, IEC-68-2-27, half-sine wave, 11ms duration

Mechanical Information

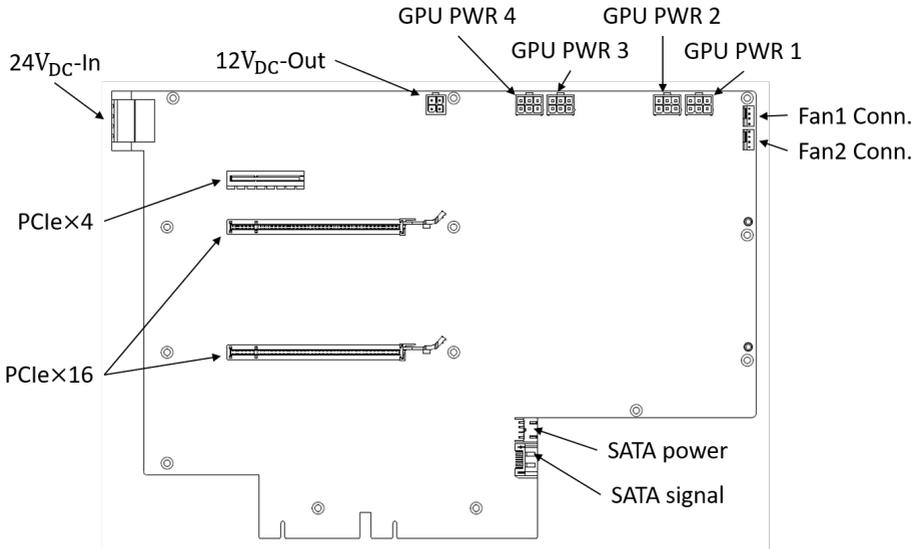
- **MIC-75G30 N.W.:** 5 kg / 11 lb; G.W.: 7 kg / 15.4 lb
- **Dimensions (W×H×D):** 280 × 192 × 385 mm (11 x 7.55 x 15.1 in) (The dimensions provided are the dimensions of the i-Module assembled in the MIC-77xx Series)

I/O Connectors

Connectors

No.	Item	Function
1	DCIN1	24V _{DC} in
2	PPCIE1	PCIe x16 slot
3	PPCIE2	PCIe x16 slot
4	PPCIE3	PCIe x4 slot
5	SATAPWR1	4-pin SATA power connector (5V)
6	SATA1	SATA signal connector
7	SYSFAN1	4-pin fan connector
8	SYSFAN2	4-pin fan connector
9	GPUPWR1	6-pin power connector for GPU card (12V, 17A)
10	GPUPWR2	6-pin power connector for GPU card (12V, 17A)
11	GPUPWR3	6-pin power connector for GPU card (12V, 17A)
12	GPUPWR4	6-pin power connector for GPU card (12V, 17A)
13	DC12VOUT1	4-pin power connector (12V, 5A)

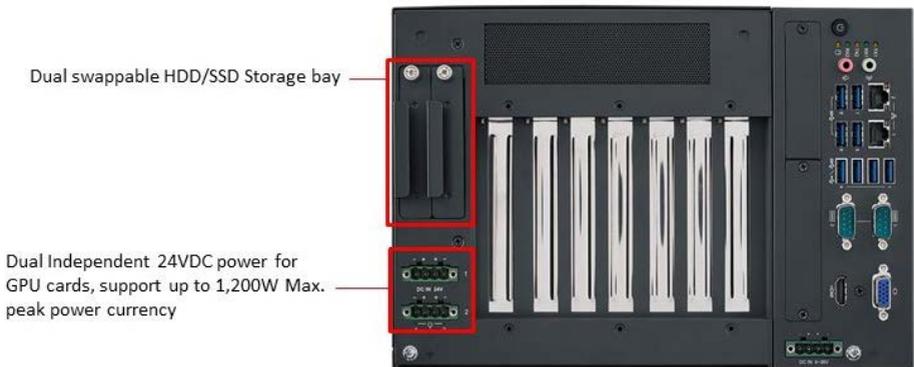
I/O Connectors (Cont.)



Front View

MIC-75G30

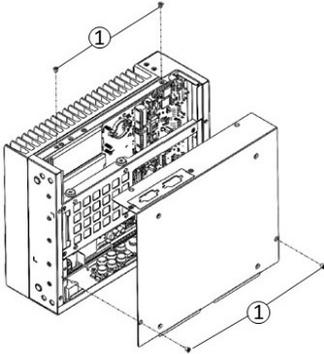
Front View



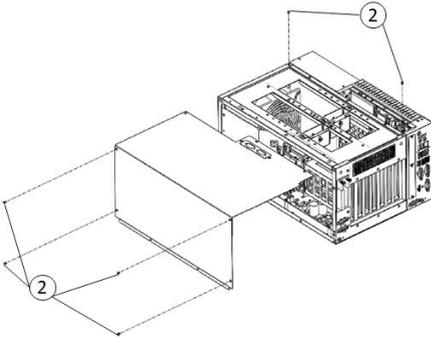
Simple Installation Process

MIC-75G30 can be assembled with all MIC-7 series IPC systems.

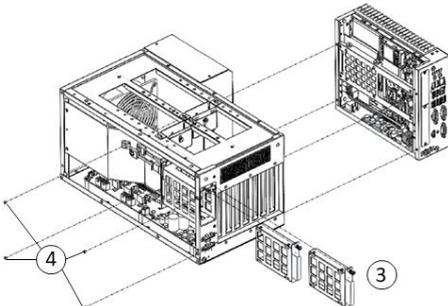
1. Unscrew the MIC-7 series system screws and remove the bottom cover.



2. Unscrew the 6 screws on MIC-75G30 and remove the side cover.

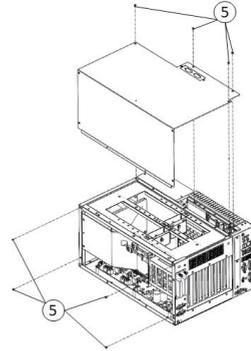


3. Before aligning the MIC-75G30 and MIC-7 Series, remove the HDD bracket and adapter bracket by undoing the screws.
4. Secure the MIC-75G30 and MIC-7 Series using the 4 screws.



Simple Installation Process (Cont.)

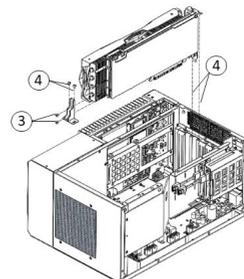
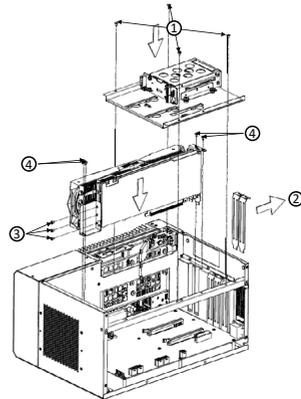
5. Secure the MIC-75G30's side cover with 8 screws.



GPU Card Bracket Assembly

1. Remove the GPU bracket by unscrewing the 6 screws.
2. Remove the adapter bracket to make space for the GPU card.
3. Secure the GPU bracket to the GPU card with 2 screws.
4. Secure the GPU bracket to the riser card and chassis with 4 screws.
5. Secure the GPU bracket back in place with 6 screws.

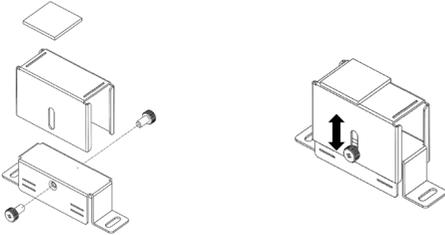
Note: The installation of the second GPU card works the same way.



GPU Card Bracket Assembly (Cont.)

1. Release screw group 1 to adjust the bracket to the optimal position to attach the GPU card.
2. Release screw group 2 to adjust the bracket to optimal height to secure the GPU card.

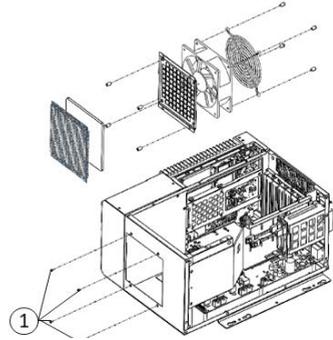
Note: The rubber pads are adjustable. Please adjust the rubber pads to contact the GPU cards and other expansion cards.



Fan Filter Replacement

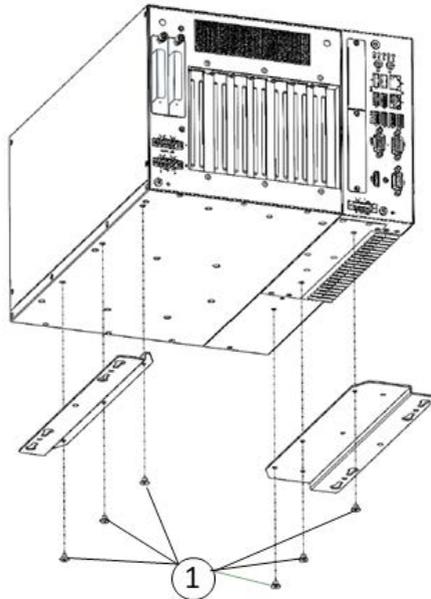
We recommend you replace the fan filter at regular intervals to ensure the stability of system cooling.

1. Remove the system cover and remove the old fan filter.
2. Replace with a new fan filter and reassemble the system cover using screws.



Mounting Bracket Assembly

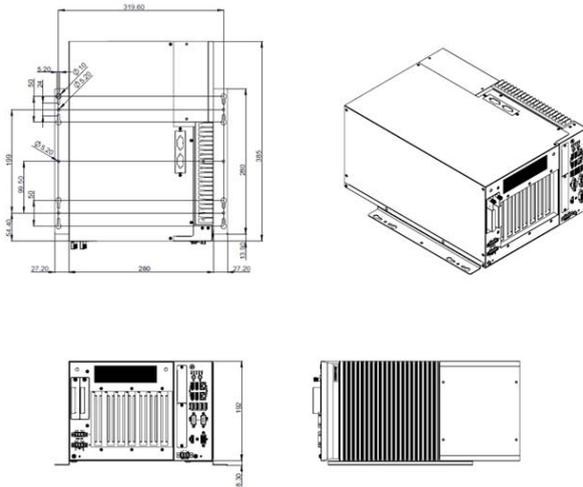
Secure the left (1960005359T003) and right (1960094392N001) mounting brackets using 6 screws.



System Dimensions

Example: MIC-770 + MIC-75G30

W x H x D: 280 x 192 x 385 mm (11 x 7.55 x 15.1 in)



Note: We recommend reserving at least 25 mm (0.98 in) of space on the rear side for fan airflow.

Power Supply Cabling Guide

1. The DC-DC power cord (Recommended P/N: 1700031413-01) should be assembled to 4-pin Phoenix connectors (1652003234).
Note: please note the VCC "- + + -"
2. All 4-pin Phoenix connectors should be connected to the system; 2 to MIC-75G30 and 1 to the MIC-7 Series.

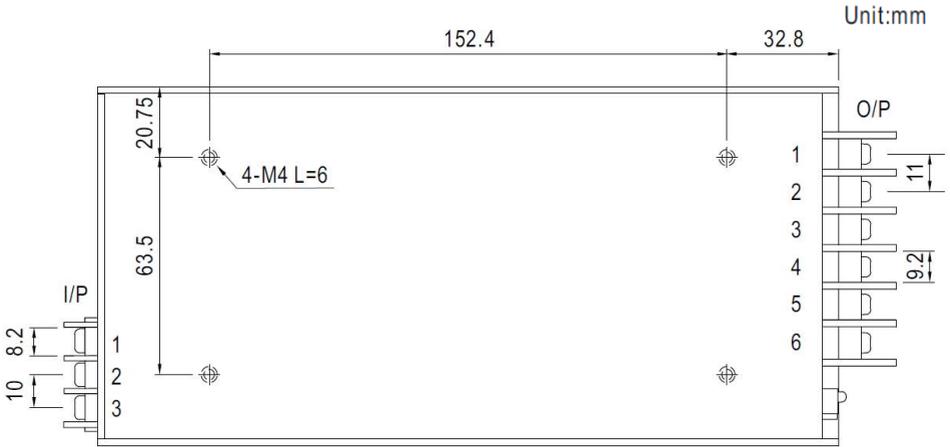


AC-DC PSU power cord (1.83M)
P/N: 1700029720-01 (USA)
1700030520-01 (CN)
1700031408-01 (EU)

DC-DC PSU power cord: 1700031413-01

Power Supply Cabling Guide (Cont.)

3. The DC-DC power cord (Recommended P/N: 1700031413-01) should be assembled to the PSU (Recommended P/N: XMIC-HRPG-1000-24) +V and -V with the corresponding VCC of the other end.



AC Input Terminal Pin No.
Assignment

Pin No.	Assignment
1	AC/L
2	AC/N
3	FG \perp

DC Output Terminal Pin No.
Assignment

Pin No.	Assignment
1~3	+V
4~6	-V

PSU power cord & Pin Definition (connect from AC to DC)

P/N: 1700029720-01 (USA)
1700030520-01 (CN)

