# **AD\ANTECH**

#### **MIC-75G30**

# Dual GPU Expansion Module for Video AI Edge Computing with MIC-7 Series Startup Manual

## Packing List

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

- · 1x MIC-75G30 i-Module
- · 2x 4-pin phoenix connector
- 1x SATA cable (30 cm/11.8 in) 1
- 1x SATA cable (40 cm/15.7 in)
- · 1x Mounting bracket (L)
- · 1x Mounting bracket (R)
- 6x Screw for mounting bracket P/N: 1930007259-01
- · 2x GPU bracket
- 10x Screw for GPU bracket
- · 5x Shock Proof Rubber
- 1x MIC-75G30 Start-up manual

If any of these items are missing or damaged, please 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



P/N: MIC-75G30-00A1

P/N: 1652003234

P/N: 1700017838

P/N: 1700020978-01

P/N: 1960005359T003

P/N: 1960094392N001

P/N: 1960094390N000

P/N: 1990000505T000

P/N: 1930005673-11

P/N: 20415G3000

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

http://advt.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 the MIC-75G30 Re	ev. A1.
Part No. 20415G3000	1st Edition
Printed in China	August 2020

#### Specifications

#### Expansion Slot

- · Slot 1 & 3: Blank
- Slot 2 & 4: PCIe × 16 (signal PCIe × 8) for GPU card
- Slot 5: PCIe × 4

#### Environment

- Operating Temp.: 0 ~ 40 °C/32 ~ 104 °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**

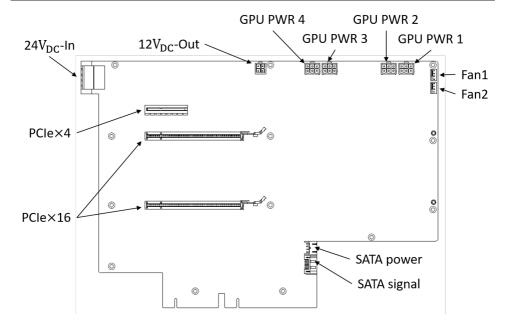
- MIC-75G30 N.W.: 5 kg/11 lb; G.W.: 7 kg/15.4 lb
- Dimension (W×H×D): 280 × 192 × 385 mm (11 x 7.55 x 15.1 in ) (The dimensions provided are the dimensions of the i-Module assembled in the MIC-77xx Series)

Note: By using MIC-7500 and MIC-7900, width will be decreased by 4 mm / 0.15 in.

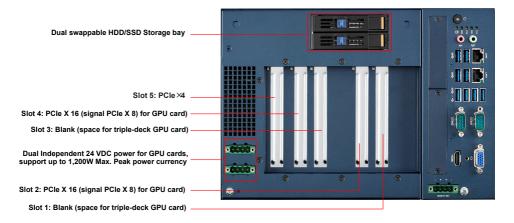
# I/O Connectors

Connectors			
No.	Item	Function	
1	DCIN1	24V <sub>DC</sub> in	
2	PPCIE1	PCIe×16 slot	
3	PPCIE2	PCIe×16 slot	
4	PPCIE3	PCIe×4 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.)



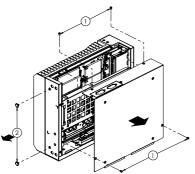
# Front View



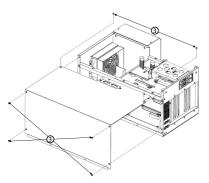
## **Simple Installation Process**

 $\rm MIC\text{-}75G30$  can be assembled with all MIC-7 series IPC systems.

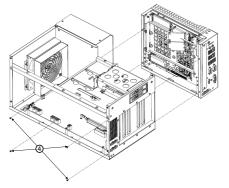
- 1. Unscrew MIC-7 series system screws and remove the bottom cover.
- 2. Remove 2x dust covers (IMPORTANT!).



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

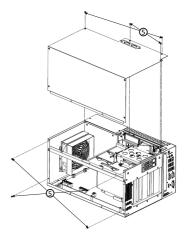


 Before aligning the MIC-75G30 and MIC-7 Series, remove the HDD bracket and adapter bracket by undoing the screws, then secure the MIC-75G30 and MIC-7



#### Simple Installation Process (Cont.)

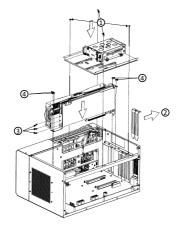
5. Secure the MIC-75G30's side cover with 8x screws.



## **GPU Card Bracket Assembly**

- 1. Remove the HDD bracket by unscrewing the 4x screws.
- 2. Remove the adapter bracket to make space for the GPU card.
- 3. Secure the GPU bracket to the GPU card with 3x screws
- 4. Secure the GPU bracket to the riser card and chassis with 2x screws respectively.

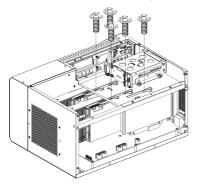
Note: The installation of the second GPU card works the same.



# GPU Card Bracket Assembly (Cont.)

 After securing the GPU card to the system and before returning the HDD bracket, install the rubbers(P/N) to the HDD bracket to secure the GPU card.

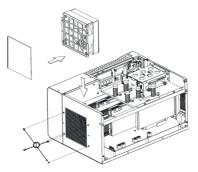
Note: The rubbers are adjustable, please adjust the rubber to contact with the GPU cards and other expansion cards.



### Fan Filter Replacement

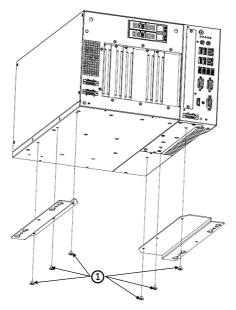
We recommend you replace the fan filter at regular intervals to ensure the stability of system cooling.

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



#### **Mounting Bracket Assembly**

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

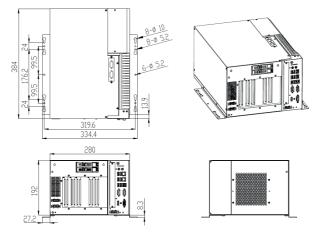


## System Dimensions

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: By using MIC-7500 and MIC-7900, width will be decreased by 4 mm (0.15 in).



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

# Power Supply Cabling Guide

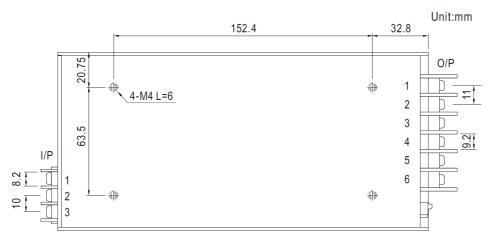
- The DC-DC power cord (Recommend P/N: 1700031413-01) should be assembled to 4-pin Phoenix connectors (1652003234)
  Note: please note the VCC " - + + - "
- 2. All 4-pin phoenix connectors should be connected to the system, 2 to MIC-75G30 and 1 to MIC-7 Series.



DC-DC PSU power cord: 1700031413-01

### Power Supply Cabling Guide (Cont.)

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



AC Input Terminal Pin No. Assignment

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

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)

