MIC-75G20

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

Features

- Offering powerful GPU solution with NVIDIA 350W, 2.75-slot width, 334.6mm length GPU cards for new AI application
- Dual 24V$_{DC}$ power inputs with reliable power and OCP solution for up to 700W maximum peak power currency
- Intelligent power status indicating LED for system and GPU card independently
- Flexible GPU card holders (R.O.C. Patent Pending), ensuring GPU card's stability and reliability
- Support up to 1Grms Op. vibration
- Support up to 60C Op. temp. with 350W GPU and 4-port PoE card installed with PWM fan control for intelligent thermal management
- Dual front removable 2.5" storage bay for easy swap
- IP30 rating with fan filter, suitable for outdoor or industrial environment
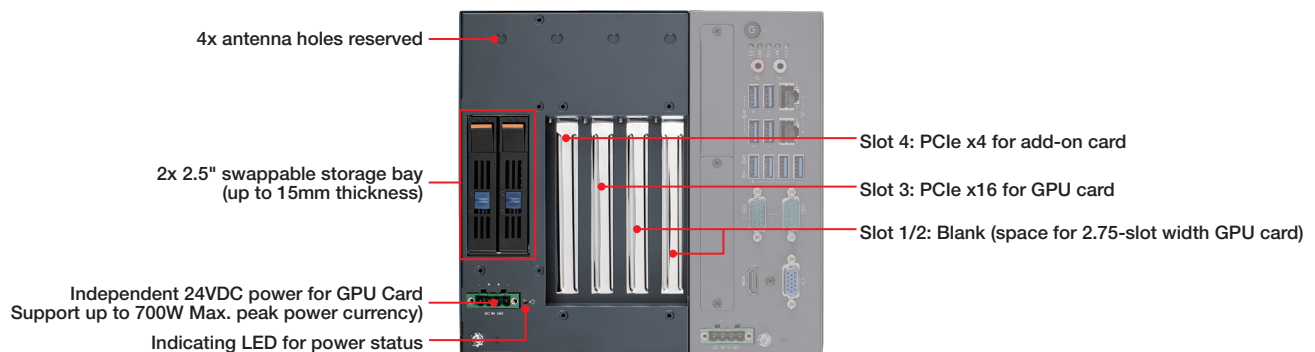- Compact size design

Introduction

MIC-75G20 supports NVIDIA 2.75-slot width high performance 350W triple fan based cards. Robust power design ensures MIC-7 systems and GPU card's reliability under high power consumption application. Suitable for Video AI Edge computing, 3D image processing and vision application.
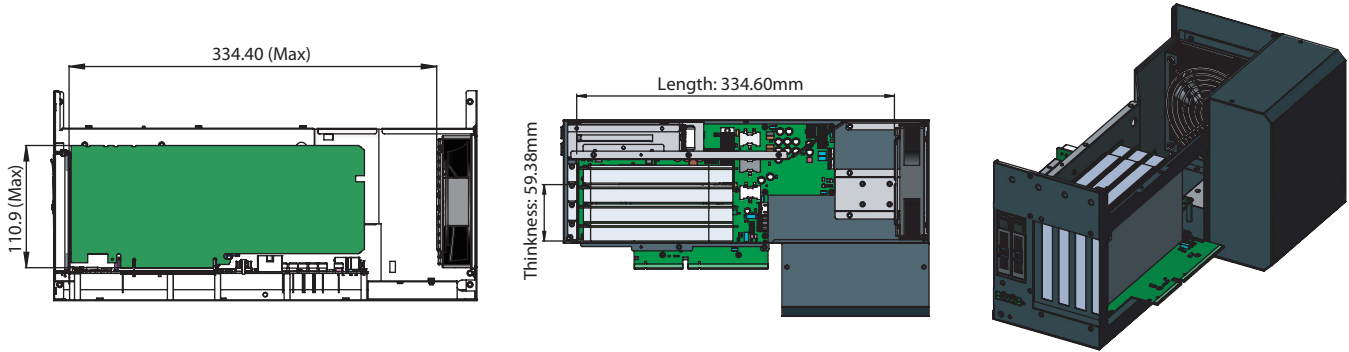
Specification

Expansion slot	Slot 1/2: Blank, Slot 3: PCIe x16, Slot 4: PCIe x4
SATA Connector	1 x SATA Signal, 1 x SATA Power
Storage	2 x 2.5" swappable HDD/SSD storage bay
Power	Input: Dual 24 V$_{DC}$ (one on MIC-7000 system, one on MIC-75G20)
	Power consumption: Max. Load: 448W (tested with 350W GPU, PoE card and MIC-770 system with 65W CPU)
	Power solution supports up to maximum 700W (Tested with 350W GPU card's peak power consumption)
	2 x 6-pin Conn. for GPU card (12V$_{DC}$, 17A for each Conn.)
	1 x 4-pin Conn. for add-on card (12V$_{DC}$, 5A)
GPU Card Dimension	Thickness: 59.38 mm (2.75-slot width), Length: 334.6 mm, Height: 110.9 mm Support up to triple-fan fan GPU cards
LED	1x indicating LED for power status
Enviroment	Operating Temp.: -10~60 °C (35W CPU w/ industrial wide-temp. RAM/SSD)
	Vibration: With SSD: 1 Grms @ 5~500 Hz, randon, 1 hr/axis
	Shock: With SSD: 10G, IEC-68-2-27, half-sine wave, 11 ms duration
Mechanical	MIC-75G20 N.W. 3.5 kg; G.W.: 5.5 kg Dimension (W x H x D): 130 x192 x 385 mm
Fan	1x 12025 cooling fan embedded (2200 RPM, 82 CFM, Max. 36.5 dB)

Front View

- 4x antenna holes reserved
- 2x 2.5" swappable storage bay (up to 15mm thickness)
- Independent 24VDC power for GPU Card Support up to 700W Max. peak power currency
- Indicating LED for power status
- Slot 4: PCIe x4 for add-on card
- Slot 3: PCIe x16 for GPU card
- Slot 1/2: Blank (space for 2.75-slot width GPU card)

GPU Card Dimension Guide

334.40 (Max)

110.9 (Max)

Length: 334.60mm

Thinkness: 59.38mm

Ordering Information

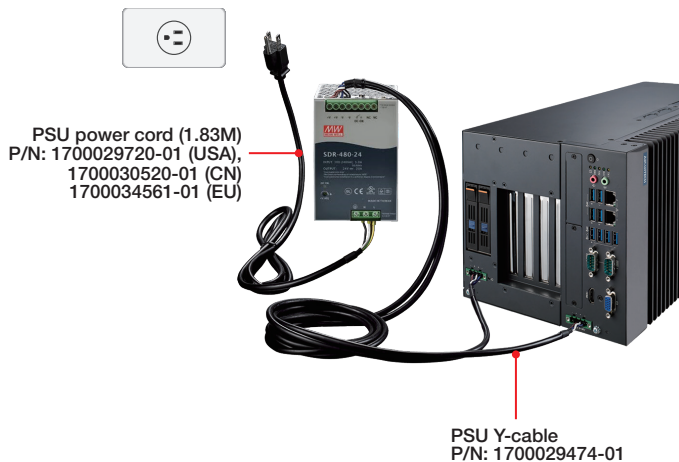| Part Number	Description
MIC-75G20-10B1	GPU i-Module with 1 PCIe x16, 1x PCIe x4, 2x 2.5" swappable storage bay

Packing List

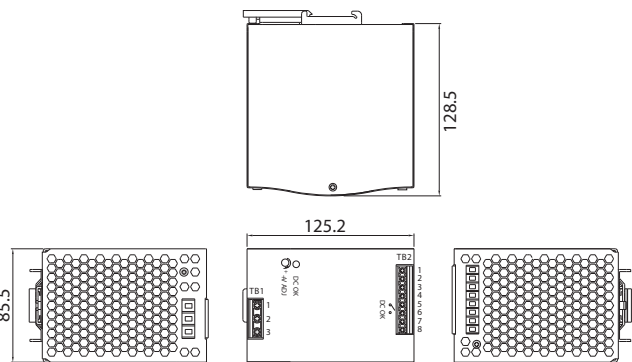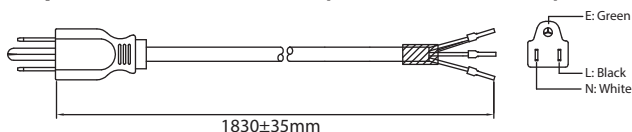| Part Number	Description	Quantity
1652003234	4-pin phoenix connector	2
1700017838	SATA cable (30cm)	1
1700020978-01	SATA cable (40cm)	1
1700024985-01	HDD BP power cable	1
1700023022-01	GPU power cable (6 to 6/8 Pin)	2
1960005359T00A	Mounting bracket (small)	1
1960094392N013	Mounting bracket (large)	1
1930007259-01	Screw for mounting bracket	4
20415G2010	MIC-75G20 Start-up manual	1

Optional Accessories

Part Number	Description
96PSD-A480W24-MS*	DIN RAIL PSU 100-240V 480W 24V (Peak power 720W, 3 Sec.)
1700029474-01	PSU Y-Cable, UL2464, 18AWG, 1.5M
1700029720-01	PSU power cord (USA), AC Conn., 3-pin, 10A, 125V, UL/CSA, 1.83M
1700030520-01	PSU power cord (CN), AC Conn., 3-pin, 10A, 250V, CCC, 1.5M
1700034561-01	M cable Type E 3P/TEMx3 80CM (EU)
1700022074-11	4-pin 12V$_{DC}$ power cable (40cm, for PoE card)

* Recommend to use for powering MIC-75G20 + MIC-7000.

Power Supply Cabling Guide

PSU power cord (1.83M)
P/N: 1700029720-01 (USA),
1700030520-01 (CN)
1700034561-01 (EU)

PSU Y-cable
P/N: 1700029474-01

128.5

125.2

85.5

TB2 pin-out
(connect from PSU DC to MIC)

Pin No.	Assignment
1, 2	DC OUTPUT+V
3, 4	DC OUTPUT-V
5, 6	Relay Contact
7, 8	NC

TB1 pin-out
(connect from AC to PSU)

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

Y type cable

Connect from PSU to the MIC-7000 and MIC-75G20 via optional PSU Y-cable with 2x 4-pin phoenix connector (1652003234)

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

E: Green

L: Black
N: White

1830±35mm

Mounting Type and Dimensions

Example: MIC-770 + MIC-75G20

W x H x D: 207 x 192 x 385 mm

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