

Modular Industrial Computer with 14th–12th Gen Intel® Core™ i7/i5/i3 CPU, up to 4x PCIe/PCI, 3x LAN, 2x COM, 6x USB

Overview

The Darveen MIC-9000 Series is a high-performance modular industrial computer powered by the latest 14th–12th Gen Intel® Core™ i7/i5/i3 processors, delivering exceptional computing performance for advanced industrial workloads. The MIC-9000 Series provides rich connectivity with 3 GbE LAN, 2 COM, 6 USB, VGA, HDMI, and DisplayPort interfaces, along with wireless modules including Wi-Fi, 4G LTE, and 5G. To meet diverse application needs, the series offers multiple configurations: MIC-9000 with no expansion, MIC-9011 with 1 PCI and 1 PCIe x16 slots, and MIC-9022 with 2 PCI, 1 PCIe x16, and 1 PCIe x4 slots. In addition, the MIC-9022G can accommodate a GPU card up to 300W to accelerate AI workloads, making it ideal for Industrial IoT, machine vision, and factory automation applications.

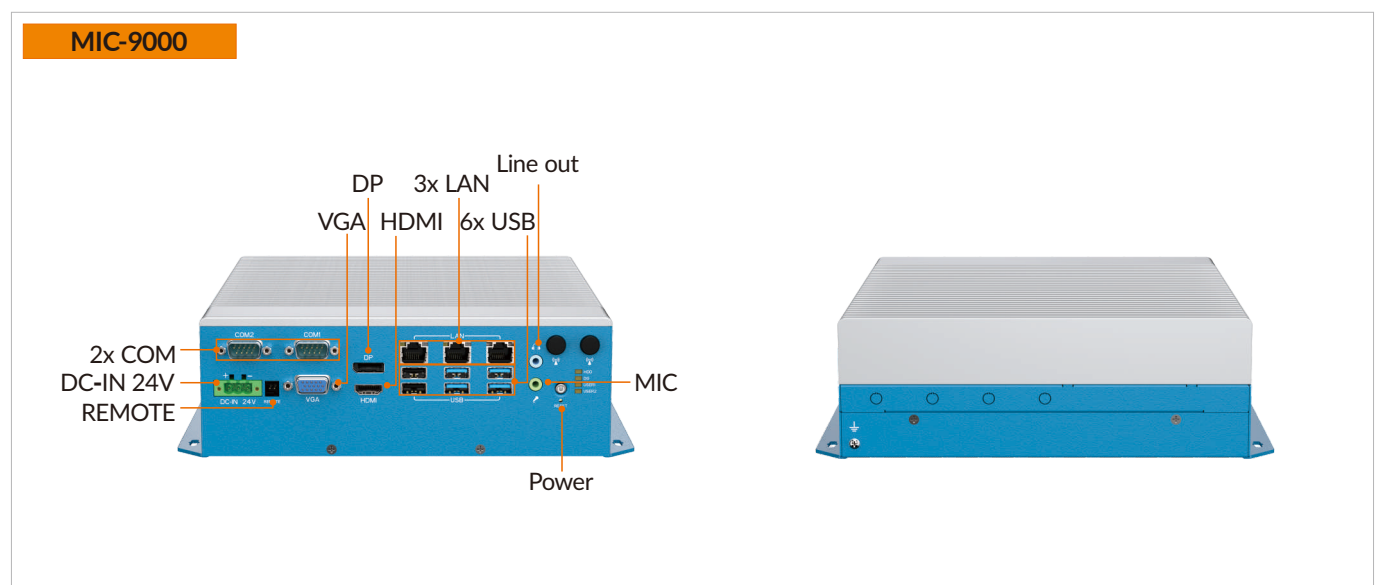
Features

- 14th-12th Gen Intel® Core™ i7/i5/i3 processor
- PCIe/PCI
 - MIC-9011: 1x PCI, 1x PCIe x16
 - MIC-9022 & MIC-9022G: 2x PCI, 1x PCIe x16, 1x PCIe x4
- A GPU card support up to 300W (MIC-9022G)
- 2x COM, 3x GbE LAN, 6x USB
- 1x DP, 1x VGA, 1x HDMI
- 2x M.2 M-Key 2280, 1x M.2 E-Key 2230
- 24V DC-IN

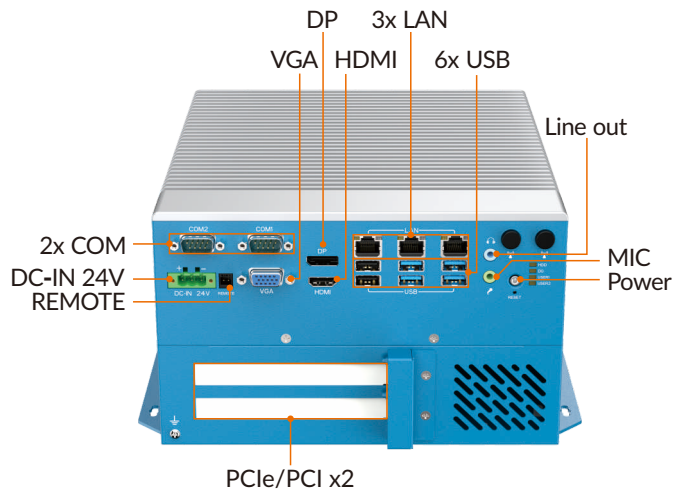


- Wide Temperature
- Rich I/O
- Customizable I/O Board
- Cable-less
- PCIe/PCI Expansion

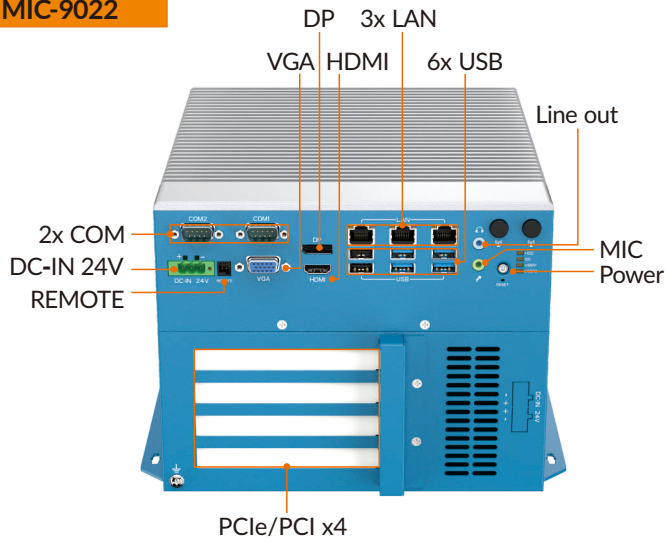
I/O Interfaces



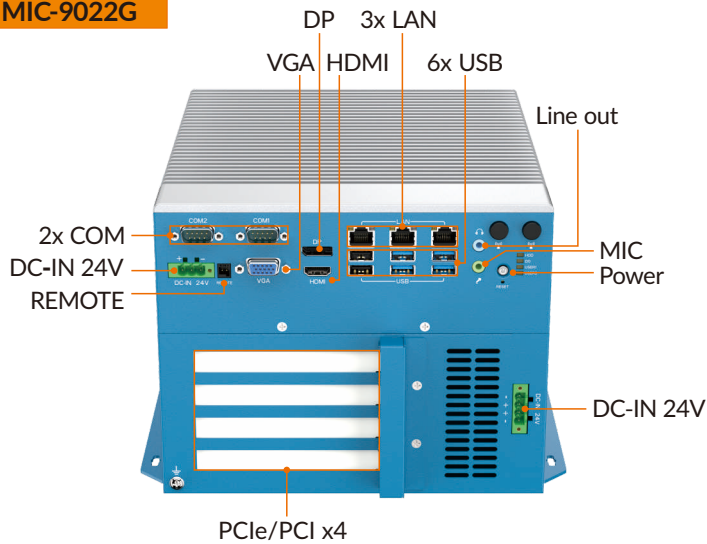
MIC-9011



MIC-9022



MIC-9022G

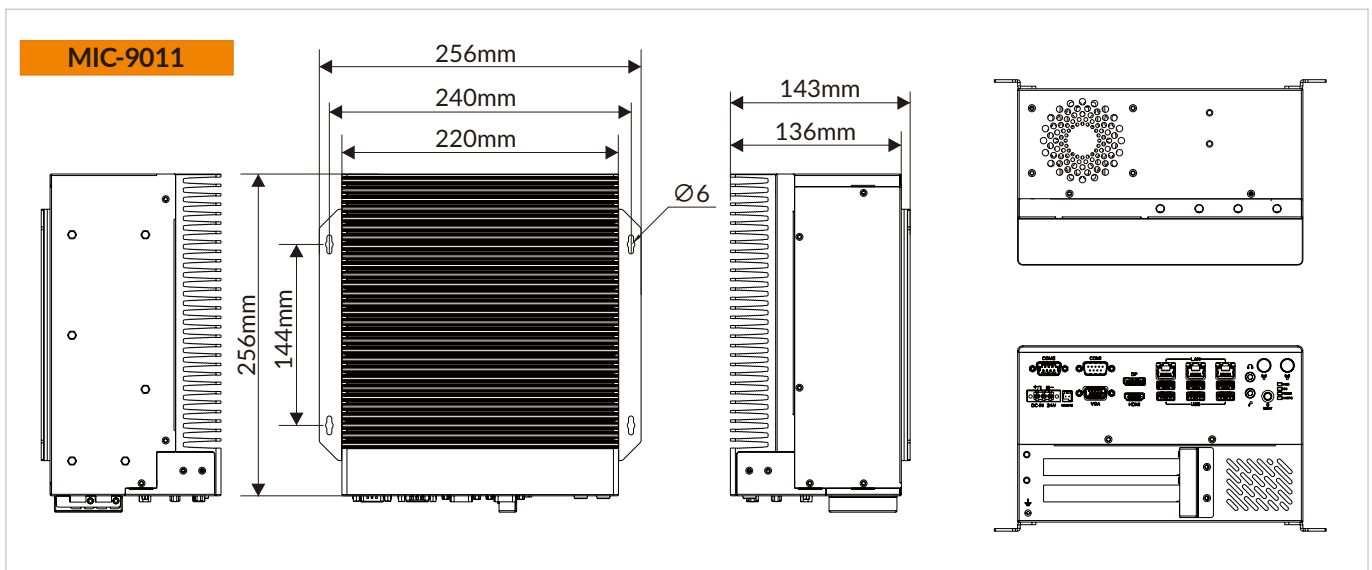
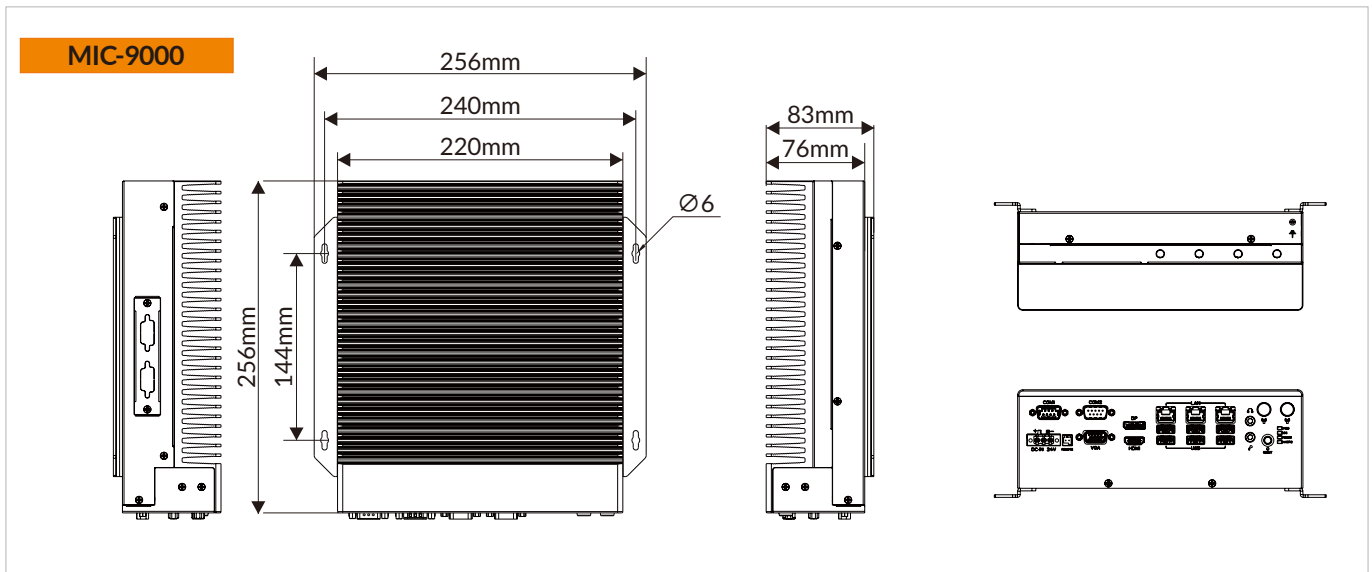


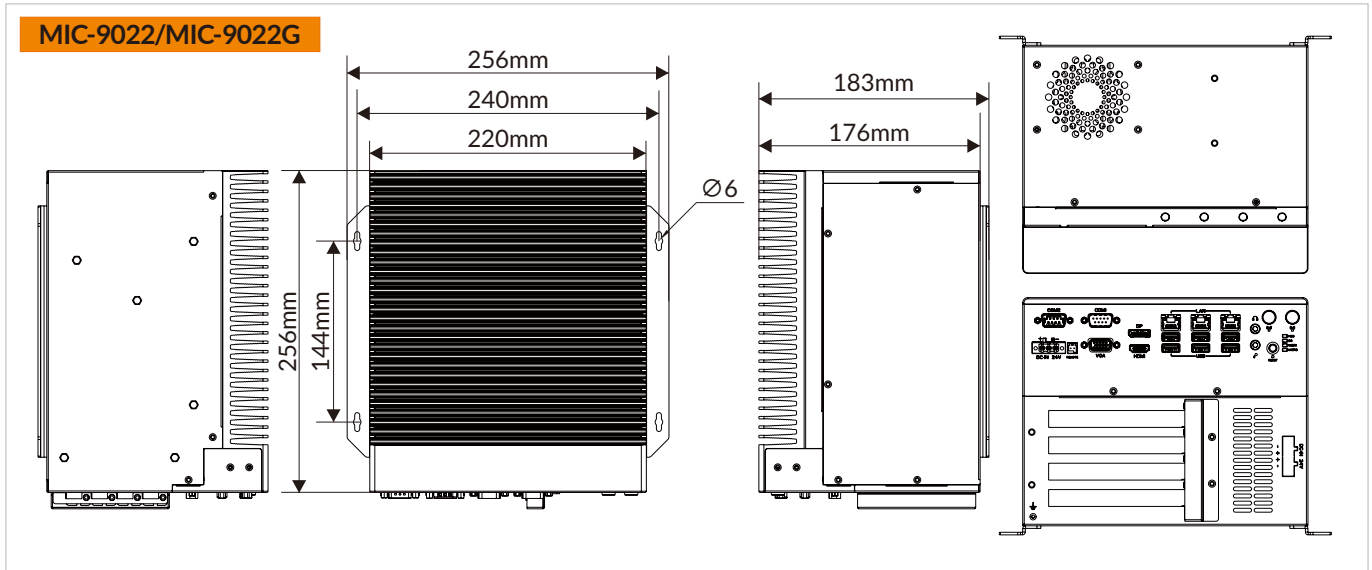
Specifications

System	MIC-9000	MIC-9011	MIC-9022/MIC-9022G
CPU	14th/13th/12th Gen Intel® Core™ i7/i5/i3 Socket CPU (LGA1700)		
CPU TDP	65W (PL1=45W, PL2=65W)		
Chipset	Intel® H610 (Default)/ Q670		
Memory	2x DDR5 SO-DIMM up to 64GB		
Storage	2x M.2 2280 SATA (H610) / 2x M.2 2280 RAID 0/1 (Q670)		
Graphics	Intel® UHD Graphics 770		
BIOS	AMI 128Mbit SPI Flash		
TPM	TPM 2.0 (optional)		
Watchdog Timer	Software programmable supports 256 levels system reset		
I/O Ports			
USB	2x USB 2.0, 4x USB3.0 (H610) / 6x USB3.0 (Q670)		
Serial	2x DB9, COM1: RS-232/422/485 (BIOS selectable), COM2: RS-232		
Ethernet	1x Intel® I219, 2x Intel® I210-AT (Supports wake On LAN)		
Display	1x DP1.4a (up to 4096 x 2304@60Hz), 1x HDMI (up to 4096 x 2160@60Hz), 1x VGA (up to 1920 x 1200@60Hz). Supports triple independent displays		
SIM Card Slot	1x NANO SIM (inside)		
Antenna	6x SMA-type		
CAN bus	2x CAN 2.0B (optional, share with M.2 2230)		
Expansion Slot			
PCI/PCIe	–	1x PCI, 1x PCIe x16	2x PCI, 1x PCIe x16, 1x PCIe x4 (x2 signal)
M.2	1x M.2 M-Key 2280 SATA, 1x M.2 E-Key 2230 WIFI & BT 1x M.2 M-Key 3042/2280 SATA (H610)/1x M.2 M-Key 3042/3052/2280 SATA (Q670)		
RF Communication			
Wi-Fi	1x M.2 2230 E-Key		
Cellular	1x M.2 3042/3052 B-Key		
Bluetooth	1x M.2 2230 E-Key		
GNSS	1x M.2 3042/3052 B-Key		
Audio			
Audio	Mic in, line out		
Power			
Button	Yes		
Remote Power On/Off	2-Pin remote		
DC Input	24V		
Power Adaptor	AC-DC, 24V@7.5A, 180W		AC to DC, 24V 180W (MIC-9022 optional) AC to DC, 24V 480W (MIC-9022G optional)
Power Consumption (CPU/Memory Only)	Typical: 76W, Max: 102.3W		
Operating System			
Windows	Windows 10/11		
Linux	Ubuntu		
Mechanical			
Dimensions (W x D x H)	220 x 256 x 76 mm (8.66 x 10.08 x 3.27 inches)	220 x 256 x 136 mm (8.66 x 10.08 x 5.35 inches)	220 x 256 x 176 mm (8.66 x 10.08 x 6.93 inches)
Weight (N.W.)	4.3 kg (9.48 lbs)	4.6 kg (10.15 lbs)	5.6 kg (12.35 lbs)
Mounting	Wall-mount		
Material	Aluminum Alloy + Sheet Metal		

Environment	
Operating Temperature	-10°C to 50°C with 0.7 m/s air flow
Storage Temperature	-40°C to 85°C (-40°F to 185°F)
Relative Humidity	10% to 95% (non-condensing)
Certification	
EMC	CE, FCC, Class A

Dimensions





Packing List

Part No.	Description	Quantity
-	MIC-90XX barebone system	1
A.01.003.000701	Wall mount bracket	2
A.01.003.000699	M3 screw kit	1
A.01.003.000700	3-Pin Phoenix terminal (power interface) & 2-Pin Phoenix terminal (remote switch)	1
A.01.003.000698	4G/5G module extension board	1

Ordering Information

Part No.	Description
MIC-9000-A0	LGA1700, 2x DDR5 SO-DIMM up to 64GB, 3x LAN, 2x COM, 6x USB, 1x DP, 1x VGA, 1x HDMI, 24V DC-IN
MIC-9011-A0	LGA1700, 2x DDR5 SO-DIMM up to 64GB, 3x LAN, 2x COM, 6x USB, 1x DP, 1x VGA, 1x HDMI, 1x PCI, 1x PCIe x16, 24V DC-IN
MIC-9022-A0	LGA1700, 2x DDR5 SO-DIMM up to 64GB, 3x LAN, 2x COM, 6x USB, 1x DP, 1x VGA, 1x HDMI, 2x PCI, 1x PCIe x16, 1x PCIe x4, 24V DC-IN
MIC-9022G-A0	LGA1700, 2x DDR5 SO-DIMM up to 64GB, 3x LAN, 2x COM, 6x USB, 1x DP, 1x VGA, 1x HDMI, 2x PCI, 1x PCIe x16, 1x PCIe x4, 300W Power, 24V DC-IN

Optional Accessories

Part No.	Description
C.02.009.000234	AC to DC adapter, 24V 180W
A.02.001.000069	AC to DC adapter, 24V 480W