

# Nuvo-8108GC-QD

**Industrial-grade Edge AI Platform supporting NVIDIA® RTX A6000/A4500 GPU, Intel® Xeon® E and 9th/ 8th-Gen Core™ processor**

## Features

- Supports NVIDIA® RTX A6000 / A4500 GPU cards
- Supports Intel® Xeon® E or 9th/ 8th-Gen Core™ i7/ i5 LGA1151 CPU
- Up to 128GB ECC/ non-ECC DDR4 2133 (4x SODIMM)
- Patented thermal design for -25°C to 60°C rugged operation
- Patented damping brackets to withstand 3 Grms vibration

## System

<b>CPU</b>	Supporting Intel® Xeon® E and 9th/ 8th-Gen CPU (LGA1151 socket) - Xeon E 2176G/ 2278GE (8C/16T) / 2278GEL (8C/16T) - i7-9700E, i7-9700TE, i7-8700, i7-8700T - i5-9500E, i5-9500TE, i5-8500, i5-8500T - i3-9100E, i3-9100TE, i3-8100, i3-8100T
<b>Chipset</b>	Intel® C246 Platform Controller Hub
<b>RAM</b>	Up to 128 GB ECC/ non-ECC DDR4 2133 SDRAM (four SODIMM slots)
<b>Storage Capacity</b>	1x hot-swappable HDD tray for 2.5" HDD/ SSD installation 1x Internal SATA port for 2.5" HDD/ SSD installation, supporting RAID 0/ 1 1x M.2 2280 M key socket (PCIe Gen3 x4) for NVMe SSD or Intel® Optane™ memory installation 2x full-size mSATA port (mux with mini-PCIe)
<b>GPU</b>	Independent NVIDIA® RTX A6000/ A4500 GPU via x16 PEG port, or integrated Intel® UHD graphics 630
<b>AMT / TPM</b>	Supports AMT 12.0 // Support TPM 2.0

## I/O

<b>USB</b>	4x USB 3.1 Gen 2 (10 Gbps ) 4x USB 3.1 Gen 1 (5 Gbps) 1x USB 2.0 (internal for dongle use)
<b>Ethernet</b>	1x Gigabit Ethernet port by Intel® I219-LM 1x Gigabit Ethernet port by Intel® I210-IT
<b>Serial Ports</b>	2x software-programmable RS-232/ 422/ 485 ports
<b>Video</b>	1x VGA 1x DVI-D 1x DisplayPort
<b>Audio</b>	1x 3.5 mm jack for mic-in and speaker-out
<b>Expansion Slots</b>	2x PCIe x16 slot@Gen3, 8-lanes 2x PCIe x8 slots@Gen3, 4-lanes 1x M.2 2242 B key socket supporting dual SIM mode with selected M.2 LTE module 2x full-size mini PCI Express socket

## Mechanical & Environment

<b>DC Input</b>	2x 4-pin pluggable terminal block for 8~48V DC input with ignition control
<b>Dimensions</b>	170.2 mm (W) x 360 mm (D) x 201.8 mm (H)
<b>Weight</b>	5.8 kg
<b>Mounting</b>	Patented damping brackets
<b>Operating temperature</b>	with 35W CPU and one NVIDIA® RTX A6000/ A4500 GPU -25°C ~ 60°C *** with >= 65W CPU and one NVIDIA® RTX A6000/ A4500 GPU -25°C ~ 60°C **/ *** (configured as 35W TDP mode) -25°C ~ 50°C **/ *** (configured as 65W TDP mode)
<b>Storage temperature</b>	-40°C ~ 85°C
<b>Humidity</b>	10%~90% , non-condensing
<b>Vibration</b>	Operating, MIL-STD-810G, Method 514.6, Category 4
<b>Shock</b>	Operating, MIL-STD-810G, Method 516.6, Procedure I, Table 516.6-II
<b>Certification</b>	CE/ FCC Class A, according to EN 55024 & EN 55032

Front



\*\* For i7-9700/ 8700 running at 65W mode, the highest operating temperature shall be limited to 50°C and thermal throttling may occur when sustained full-loading is applied. Users can configure CPU power in the BIOS to obtain higher operating temperatures.

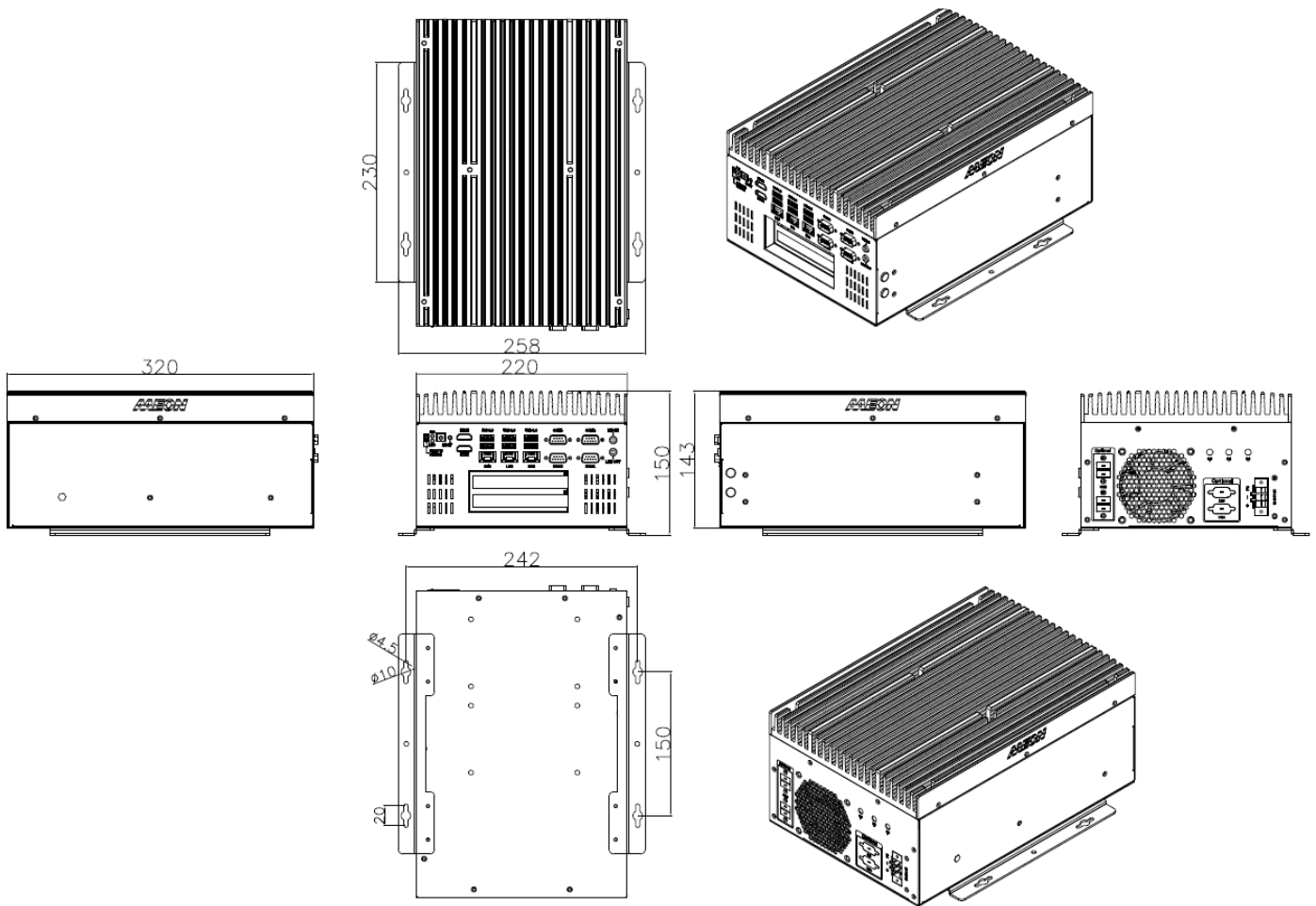
\*\*\* For sub-zero operating temperature, a wide temperature HDD or Solid State Disk (SSD) is required.

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## Environmental

<b>Operating Temp.</b>	-4°F ~ 140°F (-20°C ~ 60°C) according to IEC68-2 with 0.5 m/s airflow
<b>Storage Temp.</b>	-49°F ~ 176°F (-45°C ~ 80°C)
<b>Humidity</b>	5 ~ 95% @ 40°C, non-condensing
<b>Anti-Vibration</b>	1 Grms/ 5 ~ 500Hz/ operation (with SSD)
<b>Anti-Shock</b>	50G peak acceleration (11msec) (with SSD)
<b>Certification</b>	CE / FCC Class A, UKCA

## Dimensions (mm)



## Ordering information

Models	PCH	LAN	USB 3.2 Gen 1	RS-2/422/485	Audio	Storage	Display	Expansion	Mounting	Power	Operating Temp.
<b>BOXER-6840-CFL-A1-1010</b>	C246	3	6	4	1x Mic-in 1x Line-out	1x 2.5" SATA drive bay 1x mSATA (optional) 1x M.2 2280 NVMe SSD slot	2x HDMI	1x Full-size mini card 1x Half-size mini card 1x M.2 M 2280 key 1x PCIe x4 1x PCIe x16	Wallmount	DC in 12~24V with 3-pin terminal block	-20°C~60°C with 0.5m/s airflow

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## Packing list

- **2x Wallmount bracket**
- **1x 3 Pin DC-in power connector**
- **1x Screw package**
- **1x Thermal pad package**
- **BOXER-6840-CFL**

## Optional accessories

- **963X000008**  
Security bracket for expansion card
- **1255901209**  
120W power adapter
- **1255902400**  
240W power adapter
- **1255903300**  
330W power adapter
- **1255X00021**  
480W power adapter (DIN rail)
- **1702031802**  
Power cord (US type)
- **1702031803**  
Power cord (European type)
- **170203180E**  
Power cord (Japanese Type)
- **9741324A00**  
Wi-Fi module & antenna
- **9741EG25G0**  
4G module & antenna (global)