

# Nuvo-8108GC-XL

## Industrial-grade Edge AI Platform Supporting NVIDIA® RTX 30 series GPU Card, Intel® Xeon® E and 9th/ 8th-Gen Core™ Processor, 8~48V wide-range DC Input and Built-in Ignition Control



### Key Features

- Supports an NVIDIA® RTX 30 series graphics card up to RTX 3080
- Supports Intel® Xeon® E or 9th/ 8th-Gen Core™ i7/ i5 LGA1151 CPU
- Up to 128GB ECC/ non-ECC DDR4 2133 (4x SODIMM)
- One x16 (8-lanes), one x8 (4-lanes), Gen3 PCIe slots for add-on cards
- 2x M.2 B key and 3x full-size mini-PCIe sockets
- 8~48V wide-range DC input with built-in ignition power control
- Patented thermal design for -25°C to 60°C rugged operation\*
- Patented damping brackets\* to withstand 1 Grms vibration

\*R.O.C Patent No. M534371 / M491752

## Specifications

System Core		Expansion Bus	
Processor	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	PCI Express	2x PCIe x16 slot@Gen3, 8-lanes 2x PCIe x8 slots@Gen3, 4-lanes
Chipset	Intel® C246 Platform Controller Hub	M.2	1x M.2 2242 B key socket supporting dual SIM mode with selected M.2 LTE module
Graphics	Independent GPU via x16 PEG port, or integrated Intel® UHD Graphics 630	Mini-PCIe	2x full-size mini PCI Express socket
Memory	Up to 128 GB ECC/ non-ECC DDR4 2133 SDRAM (four SODIMM slots)	<b>Power Supply</b>	
AMT	Supports AMT 12.0	DC Input	2x 4-pin pluggable terminal block for 8~48V DC input with ignition control
TPM	Supports TPM 2.0	<b>Mechanical</b>	
<b>I/O Interface</b>		Dimension	193 mm (W) x 388 mm (D) x 198 mm (H)
Ethernet	1x Gigabit Ethernet port by Intel® I219-LM 1x Gigabit Ethernet port by Intel® I210-IT	Weight	5.2 kg
Video Port	1x VGA, supporting 1920 x 1200 resolution 1x DVI-D, supporting 1920 x 1200 resolution 1x DisplayPort, supporting 4096 x 2304 resolution	Mounting	Wall-mount with damping brackets
Serial Port	2x software-programmable RS-232/ 422/ 485 ports (COM1/ COM2)	<b>Environmental</b>	
USB 3.1	4x USB 3.1 Gen2 (10 Gbps) ports 4x USB 3.1 Gen1 (5 Gbps) ports	Operating Temperature	with 35W CPU and one NVIDIA® RTX 30 Series GPU -25°C ~ 60°C *** with >= 65W CPU and one NVIDIA® RTX 30 Series GPU -25°C ~ 60°C **/ *** (configured as 35W TDP mode) -25°C ~ 50°C **/ *** (configured as 65W TDP mode)
USB 2.0	1x USB 2.0 ports (internal for dongle use)	Storage Temperature	-40°C ~ 85°C
Audio	1x 3.5 mm jack for mic-in and speaker-out	Humidity	10%~90% , non-condensing
<b>Storage Interface</b>		Vibration	Operating, MIL-STD-810G, Method 514.6, Category 4; and 3 Grms, 5-500 Hz, 3 Axes
SATA	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	Shock	Operating, MIL-STD-810G, Method 516.6, Procedure I, Table 516.6-II
M.2	1x M.2 2280 M key socket (PCIe Gen3 x4) for NVMe SSD or Intel® Optane™ memory installation	EMC	CE/ FCC Class A, according to EN 55024 & EN 55032
mSATA	2x full-size mSATA port (mux with mini-PCIe)		

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

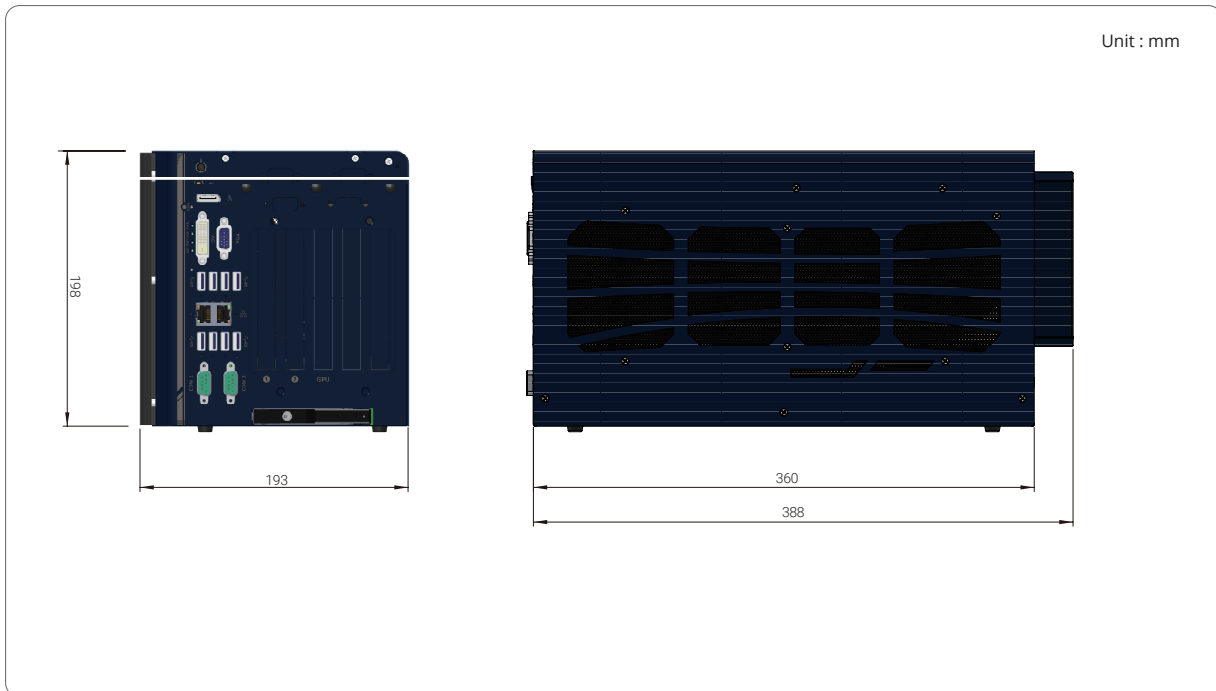
\*\*\* For sub-zero operating temperature, a wide temperature HDD or Solid State Disk (SSD) is required.

# Nuvo-8108GC-XL

## Appearance



## Dimensions



## Ordering Information

Model No.	Product Description
<b>Nuvo-8108GC-XL</b>	Industrial-grade edge AI platform supporting NVIDIA® RTX 30 series GPU Card, Intel® Xeon® E and 9th/ 8th-Gen Core™ processor with 8-48V wide-range DC input and built-in ignition control

## Optional Accessories

<b>PA-480W-DIN</b>	480W AC-DC power Adapter(SDR-480-24) DIN-rail mount, 24V 20A, 90~264VAC/127~370VDC, Terminal Block, -20~+70°C, Meanwell SDR-480-24
--------------------	--