

# Nuvo-6108GC

Industrial-grade GPU Computing Platform supporting 250W nVidia® GPU and Intel® Xeon® E3 v5 or 6th-Gen Core™ Processor



CE FC

## Key Features

- Supports Intel® Xeon® E3 v5 or 6th-Gen Core™ i7/i5 LGA1151 CPU
- Supports nVidia® GPU with up to 250W TDP
- Patented thermal design for -25 °C to 60 °C rugged operation\*
- Two x8, Gen3 PCIe slots for add-on cards
- Dual GbE ports and four USB 3.0 ports
- Four 2.5" SATA drives with RAID 0/1/5/10 support
- Automatic temperature sensing and fan control
- Patented damping brackets\* to withstand 1 Grms Vibration

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

## Introduction

Nuvo-6108GC is world's first industrial-grade GPU computer supporting high-end graphics cards. It's designed to fuel emerging GPU-accelerated applications, such as artificial intelligence, VR, autonomous driving and CUDA computing, by accommodating nVidia® GTX 1080 or TITAN X GPU.

Leveraging Intel® C236 chipset, Nuvo-6108GC supports Xeon® E3 v5 or 6th-Gen Core™ i7/i5 CPU with up to 32 GB ECC/non-ECC DDR4 memory. It incorporates general computer I/O like Gigabit Ethernet, USB 3.0 and serial ports. In addition to the x16 PCIe port for GPU installation, Nuvo-6108GC further provides two x8 PCIe slots so you can have additional devices for information collection and communication.

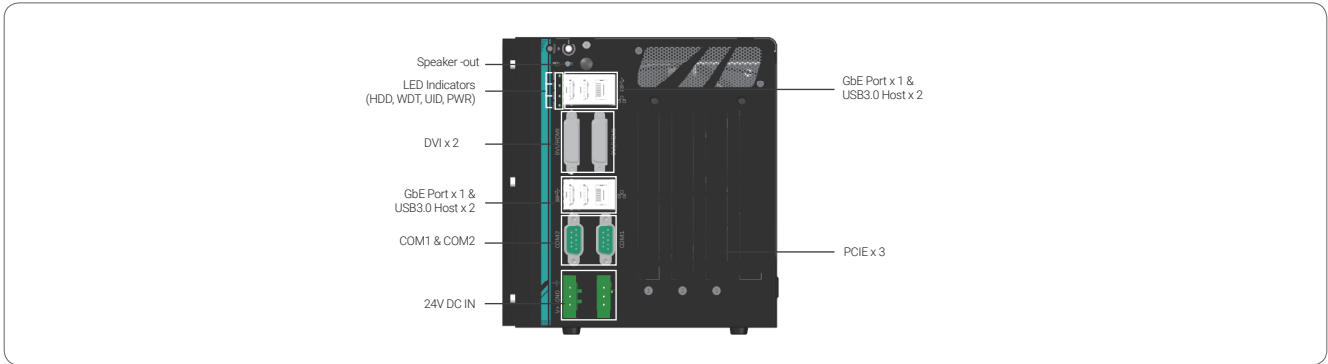
Nuvo-6108GC comes with sophisticated power design to handle heavy power consumption and power transient of a 250W GPU. Furthermore, to have reliable GPU performance for industrial environments, Nuvo-6108GC inherits Neosys' patented design\* of tuned cold air intake to effectively dissipate the heat generated by GPU. This unique design guarantees the operation at 60°C with 100% GPU loading and make Nuvo-6108GC extremely reliable for demanding field usage.

## Specifications

System Core		Expansion Bus/ Internal I/O Interface	
<b>Processor</b>	Intel® Xeon® E3 v5 or 6th-Gen Core™ LGA1151 CPU - Intel® Xeon® Processor E3-1275 v5 (8M Cache, 3.6/4.0 GHz) - Intel® Xeon® Processor E3-1268L v5 (8M Cache, 2.4/3.4 GHz) - Intel® Core™ i7-6700 (8M Cache, 3.4/4.0 GHz) - Intel® Core™ i5-6500 (6M Cache, 3.2/3.6 GHz) - Intel® Core™ i7-6700TE (8M Cache, 2.4/3.4 GHz) - Intel® Core™ i5-6500TE (6M Cache, 2.3/3.3 GHz)	<b>PCI Express</b>	1x PCIe x16 slot @ Gen3, 16-lanes PCIe signals for GPU 2x PCIe x8 slot @ Gen3, 4-lanes PCIe signals
<b>Chipset</b>	Intel® C236 Platform Controller Hub	<b>M.2</b>	1x M.2 B key socket for 3G/4G options with SIM socket
<b>Graphics</b>	Independent GPU via x16 PEG port, or Integrated Intel® HD 530 Controller	<b>mini-PCIe</b>	1x full-size mini PCI Express socket
<b>Memory</b>	Up to 32 GB ECC/non-ECC DDR4-2133	<b>Remote Ctrl. &amp; Status Output</b>	1x 2x6-pin 2.0mm pin-header connector for remote on/off control and status LED output
<b>I/O Interface</b>		<b>Power Supply</b>	
<b>Ethernet</b>	1x Gigabit Ethernet port by Intel® I219-LM 1x Gigabit Ethernet port by Intel® I210-IT	<b>DC Input</b>	1x3-pin pluggable terminal block for 24 VDC input
<b>Native Video Port</b>	2x DVI-D connectors for DVI outputs, supporting 1920x1200 resolution	<b>Remote Ctrl.</b>	1x3-pin pluggable terminal block for remote on/off control
<b>Serial Port</b>	2x Software-programmable RS-232/422/485 ports	<b>Mechanical</b>	
<b>USB</b>	4x USB 3.0 ports	<b>Dimension</b>	164 mm (W) x 360 mm (D) x 174 mm (H)
<b>Audio</b>	1x Speaker-out	<b>Mounting</b>	Wall-mounting with damping brackets
<b>Storage Interface</b>		<b>Environmental</b>	
<b>SATA</b>	4x SATA ports for 2.5" HDD/SSD installation, supporting RAID 0/1/5/10	<b>Operating Temperature</b>	-25°C ~ 60°C with 100% CPU/GPU loading **/***
		<b>Storage Temperature</b>	-40°C ~ 85°C
		<b>Humidity</b>	10%~90% , non-condensing
		<b>Vibration</b>	Operating, 1 Grms, 5-500 Hz, 3 Axes (w/ GPU, fan and HDD), according to IEC60068-2-64)
		<b>EMC</b>	CE/FCC Class A, according to EN 55022 & EN 55024

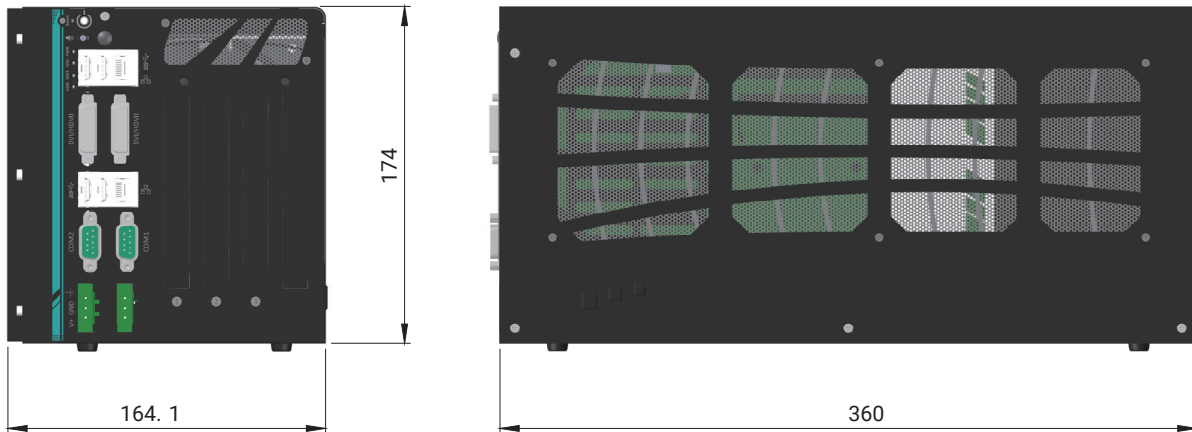
\*\* The CPU and GPU loading is applied using Passmark® BurnInTest 8.0 with 35 TDP CPU. Operating Temperature degrades with higher TDP CPU. For detail testing criteria, please contact Neosys Technology  
\*\*\* For sub-zero operating temperature, a wide temperature HDD drive or Solid State Disk (SSD) is required.

## Appearance



## Dimensions

Unit : mm



## Ordering Information

Model No.	Product Description
<b>Nuvo-6108GC</b>	Industrial-grade GPU Computing Platform supporting 250W nVidia® GPU and Intel® Xeon® E3 v5 or 6th-Gen Core™ Processor
<b>Nuvo-6108GC-1080</b>	Industrial-grade GPU Computing Platform with 250W nVidia® GPU and Intel® Xeon® E3 v5 or 6th-Gen Core™ Processor

## Optional Accessories

24V, 280W AC/DC power adapter