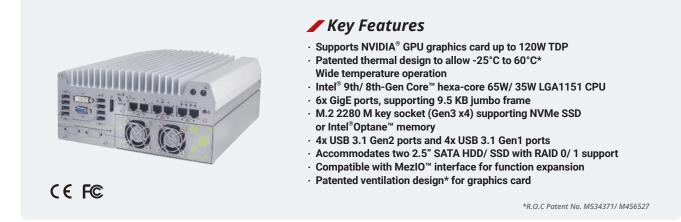


# Nuvo-7160GC Series

Ruggedized GPU-Computing Platform Supporting 120W NVIDIA<sup>®</sup> GPU and Intel<sup>®</sup> 9th/8th-Gen Core<sup>™</sup> Processor



### Introduction

Nuvo-7160GC is a ruggedized GPU-aided edge computer designed for modern machine learning applications such as autonomous driving, facial recognition and machine vision. It supports up to a 120W GPU, delivering 4~6 TFLOPS computing power for inference, as well as Intel<sup>®</sup> 9th/ 8th-Gen Core™ 6-core/ 8-core CPU, offering up to 50% CPU performance enhancement over previous generations.

Thanks to Neousys' patented Cassette design and ingenious ventilation mechanism, Nuvo-7160GC can effectively dissipate the heat generated by the GPU. By introducing the guided airflow from intake to exhaust with powerful fans featuring smart fan control, it allows a 120W GPU to operate at 60°C ambient temperature under 100% GPU loading.

Nuvo-7160GC incorporates rich I/O functions such as USB 3.1 Gen2/ Gen1, GbE, COM and MezIO™ interface in its restricted footprint. It also leverages cutting-edge M.2 NVMe SSD technology for over 2000MB/s disk read/ write speed or Intel® Optane™ memory for the ultimate system acceleration. Neousys Nuvo-7160GC is the ideal solution for emerging edge computing by combining exceptional CPU and GPU performances.

### **Specifications**

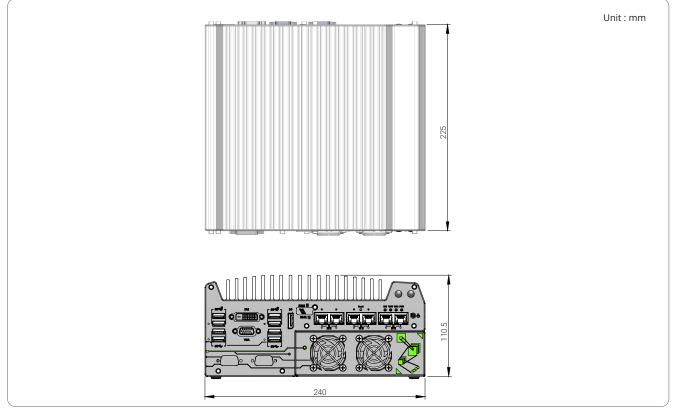
ProcessorLiCA1151 socket, 6SW 35W TDP) - Intel® Core® 17-87001 (1-9700E/ 17-9700FT - Intel® Core® 15-8500/ 1-8900FT (1-9500F / 1-9900FT - Intel® Core® 15-8500/ 1-8900FT (1-9500F / 1-9900FT - Intel® Core® 15-8500/ 1-8900FT (1-9500F / 1-9900FT - Intel® Core® 15-8500/ 1-8900FT (1-9900FT / 1-9900FT) - Sotal location)PCI/PCI Expressinstalling an NVIDL% graphics card dimension is 188 mm(L) x 121 m slot allocation)ChipsetIntel® Core® 15-8500/ 1-8900FT (1-9900FT / 1-9900FT - Intel® Core® 15-8500/ 1-8900FT (1-9900FT / 1-9900FT)Mini PCI Express1x full-size mini PCI Express socket with internal SIM soc (mux with mSATA)GraphicsIntegrated Intel® UHD graphics 630M.21x M.2 2242 B key socket with dual front-accessible S supporting dual SIM mode with selected M.2 LTE modulAMTSupports AMT 12.0Expandable I/O1x MezIO® expansion port for Neousys MezIO® modulPOEt+Optional IEEE 802.3at POE + PSE for Port 3 - Port 6MechanicalTo or ernote control and PWR LED outputPoE+Optional IEEE 802.3at POE + PSE for Port 3 - Port 6MechanicalDimension240 mm (W) x 225 mm (D) x 111 mm (H)USB 3.14x USB 3.1 Gen 21 (0 Gbys) ports 4x USB 3.1 Gen 11 (5 Gbps) portsMountingMauntingWall-mount (standard) or DIN-rail mount (optional) 25K - Go <sup>1</sup> C + ***********************************	System Core		Internal Expan	ision Bus
ChipsetIntel® Q370 platform controller hubNini PCI Express1x full-size mnin PCI express1x full-size mnin PCI express1x full-size mnin PCI express1x full-size mnin PCI express1x full-size mSATA)GraphicsIntegrated Intel® UHD graphics 630Mini PCI Express1x M.2 2242 B key socket with internal SiM soc (mux with mSATA)AMTSupports AMT 12.01x M.2 2242 B key socket with internal SiM soc supporting dual SIM mode with selected M.2 LTE module Expandable I/OT/MSupports TPM 2.01x MezIO*****I/O Interface6x Gigabit Ethernet ports by I219 and 5x I210ExpressEthernet6x Gigabit Ethernet ports by I219 and 5x I210Remote Ctrl. & EtD Output1x 3-pin pluggable terminal block for remote control and PWR LED outputPoE+Optional IEEE 802.3at POE+ PSE for Port 3 ~ Port 6 100 W total power budgetMechanicalUsB 3.14x USB 3.1 Gen1 (5 Gbps) portsWeight4.5 kgVideo Port (Integrated Graphics)1x VGA, supporting 1920 x 1200 resolution 1x DVI-D, supporting 1920 x 1200 resolution 1x	Processor	(LGA1151 socket, 65W/ 35W TDP) - Intel <sup>®</sup> Core™ i7-8700/ i7-8700T/ i7-9700E/ i7-9700TE - Intel <sup>®</sup> Core™ i5-8500/ i5-8500T/ i5-9500E/ i5-9500TE	PCI/PCI Express	(Max. graphics card dimension is 188 mm(L) x 121 mm(W), dual
MemoryUp to 64 GB DDR4 2666/ 2400 SDRAM (two SODIMM slots)M.2supporting dual SiM mode with selected M.2 LTE modulAMTSupports AMT 12.0Expandable I/O1x MezIO™ expansion port for Neousys MezIO™ modulTPMSupports TPM 2.0DC Input1x 3-pin pluggable terminal block for 8-35VDC DC inputI/O Interface6x Gigabit Ethernet ports by I219 and 5x I210DC Input1x 3-pin pluggable terminal block for 8-35VDC DC inputPoE+Optional IEEE 802.3at PoE+ PSE for Port 3 ~ Port 6MechanicalNoutput100 W total power budgetDimension240 mm (W) x 225 mm (D) x 111 mm (H)USB 3.14x USB 3.1 Gen1 (5 Gbps) portsWeight4.5 KgVideo Port (Integrated Graphies)1x VGA, supporting 1920 x 1200 resolution 1x DisplayPort, supporting 1920 x 1200 resolution 	Chipset		Mini PCI Express	1x full-size mini PCI Express socket with internal SIM socket (mux with mSATA)
MemoryUp to 64 GB DDR4 2666/ 2400 SDRAM (two SODIMM slots)Supporting Qual SIM mode with selected M.2 L1 E modulAMTSupports AMT 12.0Expandable I/O1 x MezIO <sup>™</sup> expansion port for Neousys MezIO <sup>™</sup> modulTPMSupports TPM 2.0DC Input1 x 3-pin pluggable terminal block for 8-35VDC DC inputI/O InterfaceOptional IEEE 802.3at PoE+ PSE for Port 3 ~ Port 6DC Input1 x 3-pin pluggable terminal block for remote control and PWR LED outputPoE+Optional IEEE 802.3at PoE+ PSE for Port 3 ~ Port 6MechanicalDimension240 mm (W) x 225 mm (D) x 111 mm (H)USB 3.14x USB 3.1 Gen2 (10 Gbps) ports 4x USB 3.1 Gen1 (5 Gbps) portsMechanicalMountingWall-mount (standard) or DIN-rail mount (optional)Video Port (Integrated Graphic)1x VGA, supporting 1920 x 1200 resolution 1x DisplayPort, supporting 1920 x 1200 resolution 	Graphics	Integrated Intel <sup>®</sup> UHD graphics 630		1x M.2 2242 B key socket with dual front-accessible SIM sockets, supporting dual SIM mode with selected M.2 LTE module
AMT       Supports AMT 12.0         TPM       Supports TPM 2.0         I/O Interface       Power Supply         Ethernet       6x Gigabit Ethernet ports by I219 and 5x I210       DC Input       1x 3-pin pluggable terminal block for 8-35VDC DC input         PoE+       Optional IEEE 802.3at POE+ PSE for Port 3 - Port 6 100 W total power budget       Mechanical       Dimension       240 mm (W) x 225 mm (D) x 111 mm (H)         USB 3.1       4x USB 3.1 Gen1 (5 Gbps) ports       Weight       4.5 Kg         Video Port (Integrated Graphics)       1x VGA, supporting 1920 x 1200 resolution 1x DVI-D, supporting 1920 x 1200 resolution 1x DVI-D, supporting 0496 x 2324 resolution       Mounting       Wall-mount (standard) or DIN-rail mount (optional)         Serial Port       2x software-programmable RS-232/422/485 ports (COM1/ COM2) 2x RS-232 ports (COM3/ COM4)       With 35W CPU and 120W GPU -25°C - 60°C **/*** (configured as 35W TDP) -25°C - 60°C **/*** (configured as 35W TDP)         Storage Interface       Storage 11tel <sup>®</sup> DAID /1       1x M.2 2280 M key socket (PCle Gen3 x4) for NVMe SSD or intel <sup>®</sup> Optimed <sup>®</sup> memory installation, supporting RAID /1       Storage 14umidity       00%-90%, non-condensing         M.2       1x Mull-size mSATA port (mux with mini-PCle)       Vibration       Operating, MiL-STD-810G, Method 516.6, Procedure I, Table 516.6-II	Memory	Up to 64 GB DDR4 2666/ 2400 SDRAM (two SODIMM slots)		
IVM       Supports IPM 2.0         I/O Interface       DC Input       1x 3-pin pluggable terminal block for 8-35VDC DC input         Ethernet       6x Gigabit Ethernet ports by I219 and 5x I210       Remote Ctrl. & LED Output       1x 3-pin pluggable terminal block for 8-35VDC DC input         PoE+       Optional IEEE 802.3at PoE+ PSE for Port 3 ~ Port 6       Dimension       240 mm (W) x 225 mm (D) x 111 mm (H)         USB 3.1       4x USB 3.1 Gen2 (10 Gbps) ports       Mechanical       Dimension       240 mm (W) x 225 mm (D) x 111 mm (H)         Video Port (Interface       1x VGA, supporting 1920 x 1200 resolution 1x DVI-b, supporting 1920 x 1200 resolution 1x DVI-b, supporting 4096 x 2304 resolution       Mounting       Wall-mount (standard) or DIN-rail mount (optional)         Serial Port       2x software-programmable RS-232/422/485 ports (COM1/ COM2) 2x RS-232 ports (COM3/ COM4)       Operating Temperature       With 35W CPU and 120W GPU -25°C ~ 60°C **/**** (configured as 35W TDP) -25°C ~ 60°C **/**** (configured as 65W TDP) -25°C ~ 50°C **/**** (configured as 65W TDP) -25°C ~ 50°C **/**** (configured as 65W TDP) -25°C ~ 50°C **/******         SATA HDD       2x internal SATA port for 2.5″ HDD/ SSD installation, supporting RAID 0/1       Storage       -40°C ~ 85°C         Muaidity       10%-90%, non-condensing       Vibration       Operating, MIL-STD-810G, Method 514.6, Category 4         M2.       1x full-size mSATA port (mux with mini-PCle)       Shock       Operating, MIL-STD-810G, Method 516.6,	AMT	Supports AMT 12.0	Expandable I/O	1x MezIO™ expansion port for Neousys MezIO™ modules
IVO Interface       Mathematical         Ethernet       6x Gigabit Ethernet ports by I219 and 5x I210       Remote Ctrl. & LED Output       1x 3-pin plugable terminal block for remote control and PWR LED output         PoE+       Optional IEEE 802.3at POE+ PSE for Port 3 ~ Port 6 100 W total power budget       Mechanical         USB 3.1       4x USB 3.1 Gen2 (10 Gbps) ports       Mechanical         Video Port (Integrated Graphics)       1x VGA, supporting 1920 x 1200 resolution 1x DisplayPort, supporting 1920 x 1200 resolution 1x DisplayPort, supporting 4096 x 2304 resolution       Mounting       Wall-mount (standard) or DIN-rail mount (optional)         Serial Port       2x software-programmable RS-232/422/485 ports (COM1/ COM2) 2x RS-232 ports (COM3/ COM4)       With 35W CPU and 120W GPU -25° C - 60°C **         Audio       1x 3.5 mm jack for mic-in and speaker-out       Storage Interface       Storage       -40°C ~ 85°C         SATA HDD       2x internal SATA port for 2.5" HDD/ SSD installation, supporting RAID 0/1       Storage       -40°C ~ 85°C         M.2       1x M.2 2280 M key socket (PCIe Gen3 x4) for NVMe SSD or Intel <sup>®</sup> Optane <sup>™</sup> memory installation       Vibration       Operating MIL-STD-810G, Method 514.6, Category 4         MSATA       1x full-size mSATA port (mux with mini-PCle)       Shock       Operating, MIL-STD-810G, Method 516.6, Procedure I, Table 516.6-II	ТРМ	Supports TPM 2.0	Power Supply	
Ethernet6x Gigabit Ethernet ports by 1219 and 5x 1210Remote Ctrl. & LED Output1x 3-pin pluggable terminal block for remote control and PWR LED outputPoE+Optional IEEE 802.3at PoE+ PSE for Port 3 ~ Port 6 100 W total power budgetMechanicalImage: Control and PWR LED outputUSB 3.14x USB 3.1 Gen2 (10 Gbps) ports 4x USB 3.1 Gen2 (16 Gbps) ports 4x USB 3.1 Gen2 (16 Gbps) ports 4x USB 3.1 Gen2 (10 Gbps) ports 	I/O Interface		DC Input	1x 3-pin pluggable terminal block for 8~35VDC DC input
PoE+         100 W total power budget         Mechanical           USB 3.1         4x USB 3.1 Gen2 (10 Gbps) ports 4x USB 3.1 Gen1 (5 Gbps) ports         Dimension         240 mm (W) x 225 mm (D) x 111 mm (H)           Wideo Port (Integrated Graphics)         1x VGA, supporting 1920 x 1200 resolution 1x DisplayPort, supporting 1920 x 1200 resolution 1x DisplayPort, supporting 4096 x 2304 resolution         Environmental           Serial Port         2x software-programmable R5-232/422/485 ports (COM1/ COM2) 2x R5-232 ports (COM3/ COM4)         Operating Temperature         With 35W CPU and 120W GPU -25°C ~ 60°C ** With 65W CPU and 120W GPU -25°C ~ 60°C **/*** (configured as 35W TDP) -25°C ~ 50°C **/*** (configured as 65W TDP)           Storage Interface         1x M.2 2280 M key socket (PCIe Gen3 x4) for NVMe SSD or Intel® Optane <sup>™</sup> memory installation, supporting RAID 0/ 1         Storage Temperature         -40°C ~ 85°C           Mundity         10%-90%, non-condensing         Vibration         Operating, MIL-STD-810G, Method 514.6, Category 4           mSATA         1x full-size mSATA port (mux with mini-PCIe)         Shock         Operating, MIL-STD-810G, Method 516.6, Procedure I, Table 516.6-II		6x Gigabit Ethernet ports by I219 and 5x I210		
USB 3.1       4x USB 3.1 Gen2 (10 Gbps) ports 4x USB 3.1 Gen1 (5 Gbps) ports 4x USB 3.1 Gen1 (5 Gbps) ports       Weight       4.5 Kg         Video Port (Integrated Graphics)       1x VGA, supporting 1920 x 1200 resolution 1x DisplayPort, supporting 4096 x 2304 resolution       Mounting       Wall-mount (standard) or DIN-rail mount (optional)         Serial Port       2x software-programmable RS-232/422/485 ports (COM1/ COM2) 2x RS-232 ports (COM3/ COM4)       Derating Temperature       With 35W CPU and 120W GPU -25°C ~ 60°C **         Audio       1x 3.5 mm jack for mic-in and speaker-out       Operating Temperature       With 65W CPU and 120W GPU -25°C ~ 60°C **         Storage Interface       Storage 1x M.2 2280 M key socket (PCIe Gen3 x4) for NVMe SSD or Intel® Optane™ memory installation       Storage Temperature       -40°C ~ 85°C         Munidity       10%-90%, non-condensing       Vibration       Operating, MIL-STD-810G, Method 514.6, Category 4         mSATA       1x full-size mSATA port (mux with mini-PCIe)       Shock       Operating, MIL-STD-810G, Method 516.6, Procedure I, Table 516.6-II	PoE+		Mechanical	
Video Port (Integrated Graphics)     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 (standard) or DIN-rail mount (optional)       Serial Port     2x software-programmable RS-232/422/485 ports (COM1/ COM2) 2x RS-232 ports (COM3/ COM4)     Departing Temperature     With 35W CPU and 120W GPU -25°C ~ 60°C ** With 65W CPU and 1			Dimension	240 mm (W) x 225 mm (D) x 111 mm (H)
Video Port (Integrated Graphics)       1x DVI-D, supporting 1920 x 1200 resolution 1x DisplayPort, supporting 4096 x 2304 resolution       Environmental         Serial Port       2x software-programmable RS-232/422/485 ports (COM1/ COM2) 2x RS-232 ports (COM3/ COM4)       Operating Temperature       With 35W CPU and 120W GPU -25°C ~ 60°C **         Audio       1x 3.5 mm jack for mic-in and speaker-out       Operating Temperature       Operating -25°C ~ 60°C **/**** (configured as 35W TDP) -25°C ~ 50°C **/**** (configured as 65W TDP)         Storage Interface       Storage Temperature       -40°C ~ 85°C         SATA HDD       2x internal SATA port for 2.5″ HDD/ SSD installation, supporting RAID 0/1       Storage Temperature       -40°C ~ 85°C         M.2       1x M.2 2280 M key socket (PCIe Gen3 x4) for NVMe SSD or Intel® Optane <sup>TM</sup> memory installation       Vibration       Operating, MIL-STD-810G, Method 514.6, Category 4         MSATA       1x full-size mSATA port (mux with mini-PCIe)       Shock       Operating, MIL-STD-810G, Method 516.6, Procedure I, Table 516.6-II	USB 3.1		Weight	4.5 Kg
It DUI-D, supporting 1920 x 1200 resolution 1x DisplayPort, supporting 4096 x 2304 resolution       Environmental         Serial Port       2x software-programmable RS-232/422/485 ports (COM1/ COM2) 2x RS-232 ports (COM3/ COM4)       Operating Temperature       With 35W CPU and 120W GPU -25°C ~ 60°C ** With 65W CPU and 120W GPU -25°C ~ 60°C ** With 65W CPU and 120W GPU         Audio       1x 3.5 mm jack for mic-in and speaker-out       Operating Temperature       With 35W CPU and 120W GPU -25°C ~ 60°C ** With 65W CPU and 120W GPU         Storage Interface       2x internal SATA port for 2.5″ HDD/ SSD installation, supporting RAID 0/ 1       Storage Temperature       -40°C ~ 85°C         M.2       1x M.2 2280 M key socket (PCIe Gen3 x4) for NVMe SSD or Intel® Optane <sup>M</sup> memory installation       Vibration       Operating, MIL-STD-810G, Method 514.6, Category 4         MSATA       1x full-size mSATA port (mux with mini-PCIe)       Shock       Operating, MIL-STD-810G, Method 516.6, Procedure I, Table 516.6-II	Video Port	1x DVI-D, supporting 1920 x 1200 resolution	Mounting	Wall-mount (standard) or DIN-rail mount (optional)
Serial Port       2x R5-232 ports (COM3/ COM4)         Audio       1x 3.5 mm jack for mic-in and speaker-out         Storage Interface       -25°C ~ 60°C **         SATA HDD       2x internal SATA port for 2.5″ HDD/ SSD installation, supporting RAID 0/ 1         M.2       1x M.2 2280 M key socket (PCIe Gen3 x4) for NVMe SSD or Intel® Optime™ memory installation         mSATA       1x full-size mSATA port (mux with mini-PCIe)    Operating Temperature -25°C ~ 60°C ** With 65W CPU and 120W GPU -25°C ~ 60°C ** With 65W CPU and 120W GPU -25°C ~ 60°C ** (configured as 35W TDP) -25°C ~ 60°C ** (configured as 65W TDP) -25°C ~ 50°C **/*** -20°C ~ 50°C **/*** -20°C **/*** -20°C ~ 50°C **/*** -20°C ~ 50°C **/*** -20°C ~ 50°C **/*** -20°C ~ 50°C			Environmental	l
Audio     1x 3.5 mm jack for mic-in and speaker-out     Temperature     -25°C ~ 60°C **/*** (configured as 35W TDP)       Storage Interface     -25°C ~ 60°C **/*** (configured as 35W TDP)     -25°C ~ 60°C **/*** (configured as 35W TDP)       SATA HDD     2x internal SATA port for 2.5″ HDD/ SSD installation, supporting RAID 0/1     Storage Temperature     -40°C ~ 85°C       M.2     1x M.2 2280 M key socket (PCIe Gen3 x4) for NVMe SSD or Intel® Optane™ memory installation     Humidity     10%-90%, non-condensing       Wibration     Operating, MIL-STD-810G, Method 514.6, Category 4     Shock     Operating, MIL-STD-810G, Method 516.6, Procedure I, Table 516.6-II	Serial Port			-25°C ~ 60°C ** With 65W CPU and 120W GPU
Storage internace     Storage internace       SATA HDD     2x internal SATA port for 2.5" HDD/ SSD installation, supporting RAID 0/1     Storage Temperature     -40°C ~ 85°C       M.2     1x M.2 2280 M key socket (PCIe Gen3 x4) for NVMe SSD or Intel® Optane™ memory installation     Humidity     10%~90%, non-condensing       Wibration     Operating, MIL-STD-810G, Method 514.6, Category 4     Shock     Operating, MIL-STD-810G, Method 516.6, Procedure I, Table 516.6-II	Audio	1x 3.5 mm jack for mic-in and speaker-out		
SATA HDD     2x Internal SATA port for 2.5° HDD/ SSD installation, supporting RAID 0/1     Temperature     -40°C ~ 85°C       M.2     1x M.2 2280 M key socket (PCIe Gen3 x4) for NVMe SSD or Intel® Optane™ memory installation     Humidity     10%~90%, non-condensing       MSATA     1x full-size mSATA port (mux with mini-PCIe)     Vibration     Operating, MIL-STD-810G, Method 514.6, Category 4       Shock     Operating, MIL-STD-810G, Method 516.6-II     Shock     Operating, MIL-STD-810G, Method 516.6-II	Storage Interfa	ce		-25°C ~ 50°C **/*** (configured as 65W TDP)
M.2     1x M.2 2280 M key socket (PCIe Gen3 x4) for NVMe SSD or Intel® Optane™ memory installation     Humidity     10%-90%, non-condensing       Wibration     Operating, MIL-STD-810G, Method 514.6, Category 4       mSATA     1x full-size mSATA port (mux with mini-PCIe)     Shock     Operating, MIL-STD-810G, Method 516.6, Procedure I, Table 516.6-II		2x internal SATA port for 2.5" HDD/ SSD installation,		-40°C ~ 85°C
M.2     or Intel® Optane™ memory installation     Vibration     Operating, MIL-STD-810G, Method 514.6, Category 4       mSATA     1x full-size mSATA port (mux with mini-PCIe)     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	Humidity	10%~90% , non-condensing
Shock Table 516.6-II			Vibration	Operating, MIL-STD-810G, Method 514.6, Category 4
EMC CELECC Class A according to EN 55032 & EN 55034	mSATA	1x full-size mSATA port (mux with mini-PCle)	Shock	
			EMC	CE/FCC Class A, according to EN 55032 & EN 55024

\* For i7-9700E and 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 A start and any depined. Start and only and a start and a start



#### Appearance Mic-in & Speaker-out COM1 & COM2 LED Indicators (HDD, WDT, IGN, PWR) Mezl0™ I/O COM4 x 1 8V~35V DC IN USB 3.1 Gen2 x2 DVI-D USB 3.1 Gen2 x2 SIM Socket x2 Π 6 0 0 DisplayPort x1 GbE x6 USB 3.1 Gen1 x2 VGA USB 3.1 Gen1 x2 PCIE x 1 COM3 x 1 Remote Co and PWR LED Output

### Dimensions



# **Ordering Information**

Model No.	Product Description
Nuvo-7160GC	Intel <sup>®</sup> 9th/8th-Gen Core™ GPU-computing platform with 6x GbE and MezIO™ interface, supporting selected NVIDIA <sup>®</sup> 120W GPU
Optional IEEE 802.3at	t PoE+ for GbE ports 3 ~ 6

## **Optional Accessories**

PA-280W-ET2	W-ET2 280W AC/DC power adapter 24V/11.67A; 16AWG/100cm; cord end terminals for terminal block, operating temperature : -30°C to 6	
Damping bracket	nping bracket Neousys' patented damping brackets assembly for Nuvo-7160GC/ Nuvo-7164GC	

MezIO <sup>™</sup> -C180	MezIO <sup>™</sup> module with 4x RS-232/ 422/ 485 ports and 4x RS-232 ports	MezIO <sup>™</sup> -V20-EP	MezlO™ module with ignition power control function for in-vehicle application
MezIO <sup>™</sup> -C181	MezIO™ module with 4x RS-232/ 422/ 485 ports and 4x RS-422/ 485 ports	MezIO <sup>™</sup> -U4	MezlO™ module with 4x USB 3.1 ports
MezIO <sup>™</sup> -D220	MezIO™ module with 8-CH isolated digital input and 8-CH isolated digital output	MezIO <sup>™</sup> -G4	MezIO <sup>™</sup> module with 4x GigE ports
MezIO <sup>™</sup> -D230	MezIO™ module with 16-CH isolated digital input and 16-CH isolated digital output	MezIO <sup>™</sup> -G4P	MezIO <sup>™</sup> module with 4x IEEE 802.3at PoE+ ports
			Only Nuvo-7160-PoE support MezIO-G4P