

Rugged Embedded



# Nuvo-6000 Series

Intel® 6th-Gen Core™ i7/ i5/ i3 Expansion Box-PC with Up to 5 PCIe/ PCI Slots



CE FCC

## Key Features

- Supports Intel® 6th-Gen Core™ i7/ i5/ i3, Pentium® and Celeron® LGA1151 CPU
- Up to five expansion slots
  - x16 PCIe, x8 PCIe and three PCI slots (Nuvo-6032)
  - x16 PCIe and x8 PCIe slots (Nuvo-6002)
- Rugged, -25 °C to 60 °C fanless operation
- 2x GbE, 4x USB 3.1 and 5x COM ports
- Dual DVI display outputs
- Up to 3x 2.5" SATA HDD/SDD and 1x mSATA socket
- Wall-mounting, (optional DIN-rail and rack-mount)
- Optional fan with automatic temperature sensing and fan control

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## Introduction

Nuvo-6000 series is the perfect replacement of your bulky rack-mount or wall-mount IPC systems. Leveraging Intel® 6th-Gen Skylake platform, it delivers the same computing power as traditional IPCs, but in a more compact form-factor and fanless operation.

Nuvo-6000 Series has up to 5-slot capacity that gives the same level of expandability as most IPCs. With different PCIe and PCI combination from 2 PCIe slots to 5 PCIe/PCI slots, Nuvo-6000 Series makes up four models for customers to choose. There must be one that best meets your industrial automation or machine vision application needs.

Nuvo-6000 series supports LGA1151 socket-type CPU, thus you can choose from Core™ i7 to Celeron® depending on your performance and cost consideration. The front-accessible I/O design, including 2 GbE, 4 USB 3.1 Gen1 and 5 COM ports, makes it easier to access your Nuvo-6000 when it's placed inside a cabinet or a rack.

Neosys' proven fanless design on Nuvo-6000 presents extraordinary reliability in all circumstances. And its versatile mounting options make it fit for desktop, cabinet or a 19" rack. With similar performance and cost, better form-factor and reliability, Nuvo-6000 series is speaking for itself on the new horizon of industrial computer.

## Specifications

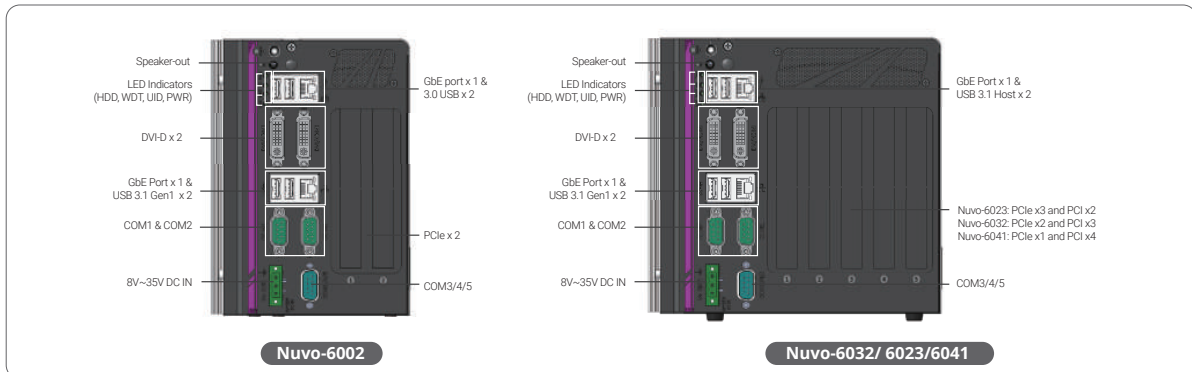
	Nuvo-6002	Nuvo-6032	Nuvo-6023	Nuvo-6041		Nuvo-6002	Nuvo-6032	Nuvo-6023	Nuvo-6041
System Core					Expansion Bus				
Processor	Supports Intel® 6th-Gen Core™, Pentium® and Celeron® LGA1151 CPU Intel® Core™ i7-6700TE (8M Cache, 2.4/ 3.4 GHz, 35W TDP) Intel® Core™ i5-6500TE (6M Cache, 2.3/ 3.3 GHz, 35W TDP) Intel® Core™ i3-6100TE (4M Cache, 2.7 GHz, 35W TDP) Intel® Pentium® G4400TE (3M Cache, 2.4 GHz, 35W TDP) Intel® Celeron® G3900TE (2M Cache, 2.3 GHz, 35W TDP)				PCI/PCI Express	1x PCIe x16 slot @ Gen3, 16-lanes 1x PCIe x8 slot @ Gen2, 4-lanes	1x PCIe x16 slot @ Gen3, 16-lanes 1x PCIe x8 slot @ Gen2, 4-lanes	1x PCIe x16 slot @ Gen3, 16-lanes 1x PCIe x4 slots @ Gen2, 2-lanes 1x PCIe x4 slots @ Gen2, 1-lane	1x PCIe x16 slot @ Gen3, 16-lanes
Chipset	Intel® H110 platform controller hub				PCI	-	3x 33MHz/ 32-bit 5V PCI slots	2x 33MHz/ 32-bit 5V PCI slots	4x 33MHz/ 32-bit 5V PCI slots
Graphics	Integrated Intel® HD 530/ 510 controller				mSATA	1x full-size mSATA socket (mux with USB 2.0 signals)			
Memory	Up to 16 GB DDR4-2133 (single SODIMM slot)				Power Supply				
I/O Interface					DC Input	1x 3-pin pluggable terminal block for 8–35VDC DC input			
Ethernet	1x Gigabit Ethernet port by Intel® I219-LM 1x Gigabit Ethernet port by Intel® I210-IT				Mechanical				
Video Port	2x DVI-Ds for DVI outputs, supporting 1920x1200 resolution				Dimension	124 mm (W) x 225 mm (D) x 174 mm (H)	184 mm (W) x 225 mm (D) x 174 mm (H)		
Serial Port	1x software-programmable RS-232/ 422/ 485 ports (COM1) 1x software-programmable RS-422/ 485 ports (COM2) 3x 3-wire RS-232 ports (COM3/ COM4/ COM5)				Weight	2.8 Kg	3.5 Kg		
USB 3.1	4x USB 3.1 Gen1 (5 Gbps) ports				Mounting	Wall-mount (standard), DIN-rail mount (optional) or Rack-mount (optional)			
Audio	1x Speaker-out				Environmental				
Storage Interface					Operating Temperature	-25°C ~ 60°C			
SATA HDD	1x SATA port for 2.5" HDD/ SSD installation	3x SATA ports for 2.5" HDD/ SSD installation			Storage Temperature	-40°C ~ 85°C			
mSATA	1x full-size mSATA port (mux with mini-PCIe)				Humidity	10%–90% , non-condensing			
* For i7-6700 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 drive or Solid State Disk (SSD) is required.					Vibration	Operating, 5 Grms, 5-500 Hz, 3 Axes (w/ SSD, according to IEC60068-2-64)		Operating, MIL-STD-810G, Method 514.6, Category 4	
					Shock	Operating, 50 Grms, Half-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27)		Operating, MIL-STD-810G, Method 516.6, Procedure I, Table 516.6-II	
					EMC	CE/FCC Class A, according to EN 55022, EN 55024 & EN 55032		CE/FCC Class A, according to EN55032 & EN55035	

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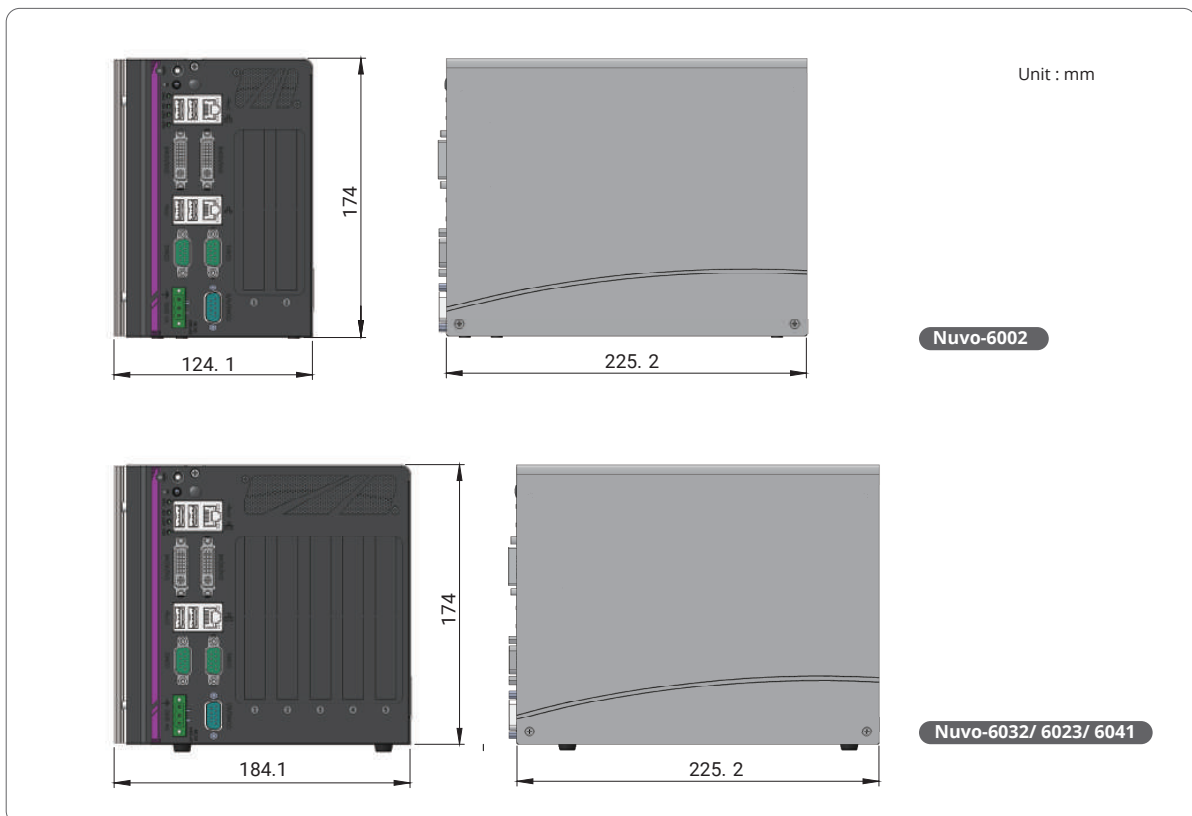
Nuvo-6000 Series



## Appearance



## Dimensions



## Ordering Information

Model No.	Product Description
<b>Nuvo-6002</b>	Intel® 6th-Gen Core™ fanless Box-PC with 1x PCIe x16 slot and 1x PCIe x8 (@ x4 signals) slot
<b>Nuvo-6032</b>	Intel® 6th-Gen Core™ fanless Box-PC with 1x PCIe x16 slot, 1x PCIe x8 (@ x4 signals) slot and 3x PCI slots
<b>Nuvo-6023</b>	Intel® 6th-Gen Core™ fanless Box-PC with 3x PCIe slot and 2x PCI slots
<b>Nuvo-6041</b>	Intel® 6th-Gen Core™ fanless Box-PC with 1x PCIe and 4x PCI slots

## Optional Accessories

<b>PA-120W-OW</b>	120W AC/ DC power adapter 20V/ 6A; 18AWG/ 120cm; cord end terminals for terminal block, operating temperature : -30°C to 70 °C
<b>PA-160W-OW</b>	160W AC/DC power adapter 20V/ 8A; 18AWGx4C/ 120cm, cord end terminals for terminal block, operating temperature : -30°C to 70 °C
<b>Fankit-80</b>	Fan assembly for Nuvo-6000 series, 80x80x15 mm
<b>Cbl-DB9F-3DB9M-15CM</b>	1x DB9 (female) to 3x DB9 (male), for Nuvo-6000 series, length: 15CM
<b>DINRAIL-E</b>	DIN-rail mount assembly for Nuvo-6000 series
<b>Rmkit-Nuvo6000</b>	Rack mounting assembly for Nuvo-6000/ 8000 series

## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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