

# Rugged Expansion Platform Nuvo-8000/ 6000 Series

Flexible Expansion | High Performance | Support Win 10/ Win 7



Win 10/ Win 7

Up to 180W GPU

Up to 7 Expansion Slots

Wide-Range DC Input

## ■ Why Choose Neusys Nuvo-8000 and Nuvo-6000 Series Box PCs?

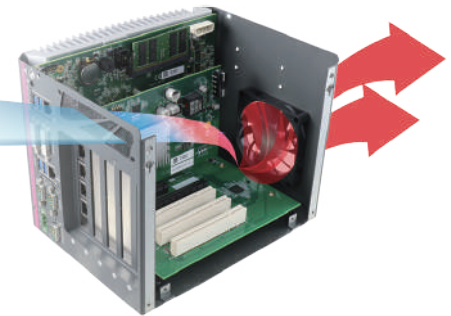
Neusys offers the most comprehensive portfolio of expandable box-PC in the market with numerous configurations of PCIe/PCI slots and CPUs. They are perfect fits for various applications such as industrial automation, machine vision, utility energy, etc.

Nuvo-6000 series is a 6th-Gen Core™ platform and is perfectly compatible with your legacy Windows 7 applications. You can choose from a compact 2-slot system to a flexible 5-slot system with different PCIe/ PCI configurations.

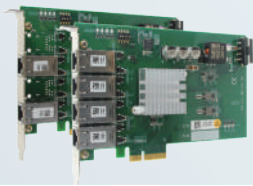


Nuvo-8000 series, leveraging state-of-the-art 9th/ 8th-Gen Core™ CPU, offers extraordinary performance and compatibility for Windows 10 applications. It features 5 models including cost-effective 3-slot/ 5-slot systems to the high-end, high-performance 7-slot Nuvo-8034. In addition, all Nuvo-8000 series models support NVIDIA® GPU to power modern deep-learning vision applications.

All Neusys expandable box-PCs feature best-in-class thermal design and guarantee rugged -25°C to 60°C operation. And the front-accessible I/O design allows for easy deployment inside a cabinet. With a variety of slot configurations, Windows 7/ 10 support and the capability of GPU computing, there is a perfect Neusys Box PC for your solution!

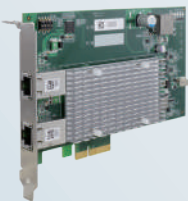


## Expansion PCI Express Cards



### PCIe-PoE354at/352at

4-port/ 2-port server-grade gigabit 802.3at PoE+ machine vision frame grabber card



### PCIe-PoE550X

2-port 10GbE network adapter with IEEE 802.3at PoE+ machine vision frame grabber card



### PB-2500J

Industrial-grade intelligent supercapacitor-based power backup module



### PCIe-USB381F

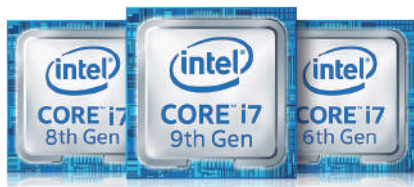
8-port USB 3.1 Gen1 host adapter card with four independent controllers

## Rugged Box PCs Key Features

- Supports Intel® 9th/ 8th/6th-Gen Core™ i7/ i5 /i3 CPU
- Windows 7 and Windows 10 support
- Up to 7 PCIe/ PCI expansion slots
- Supports NVIDIA® GPU for deep-learning vision applications
- -25°C to 60°C wide-temperature operation
- 2x GbE, 4x USB 3.1 and up to 5x COM ports
- Dual DVI display outputs, supporting 1920 x 1200 resolution
- Up to 3x 2.5" SATA HDD/ SSD accommodation and 1x mSATA socket



## Benefits of Neusys Box PC



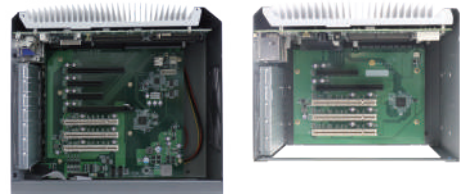
### High performance embedded system

Support up to Intel® 9th/8th-Gen Core™ i7 processors to offer tremendous processing performance.



### GPU support for edge AI computing

Support various GPU graphics cards that works as GPU-aided edge computing platform and can benefit the development/implementation of related applications.



### Flexible expansion

Provides up to seven PCIe/ PCI expansion slots and supports vision-specific, motion, data acquisition I/O, graphics card, etc.



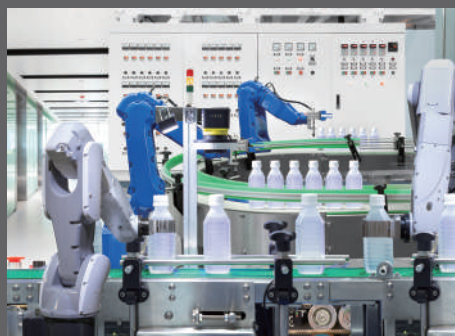
### Front-accessible I/O design

The front accessible I/O design makes it easy to connect and organize cables.

## Applications



Machine vision



Automation



AI inspection system

# Rugged Expansion Platform Specification Table



Model Name	Nuvo-8003	Nuvo-8023	Nuvo-8032	Nuvo-8041	Nuvo-8034	
<b>Chassis</b>	<b>Dimensions (W x D x H)</b>	150 x 235 x 182mm	184 x 235 x 182mm	184 x 235 x 182mm	184 x 235 x 182mm	259 x 280 x 198mm
	<b>Weight</b>	3 kg	3.6 kg	3.6 kg	3.6 kg	7 kg
	<b>Construction</b>	Aluminum alloy with heavy duty metal	Aluminum alloy with heavy duty metal	Aluminum alloy with heavy duty metal	Aluminum alloy with heavy duty metal	Aluminum alloy with heavy duty metal
<b>System</b>	<b>Processor</b>	Supporting Intel® 9th/ 8th-Gen Core™ LGA1151 CPU - Intel® Core™ i7-9700TE/ i7-8700/ i7-8700T - Intel® Core™ i5-9500TE/ i5-8500/ i5-8500T - Intel® Core™ i3-9100TE/ i3-8100/ i3-8100T - Intel® Pentium® G5400T (4M Cache, 3.1GHz, 35W TDP) - Intel® Celeron® G4900T (2M Cache, 2.9GHz, 35W TDP)				Supporting Intel® Xeon® E and 9th/ 8th - Gen CPU(LGA1151 socket) - Intel® Xeon® Processor E-2176G/ E-2124G/ E-2278GE/ E-2278GEL - Intel® Core™ i7-9700E/ i7-9700TE/ i7-8700/ i7-8700T - Intel® Core™ i5-9500E/ i5-9500TE/ i5-8500/ i5-8500T - Intel® Core™ i3-9100E/ i3-9100TE/ i3-8100/ i3-8100T
	<b>Chipset</b>	Intel® H310	Intel® H310	Intel® H310	Intel® H310	Intel® H310
	<b>Graphics</b>	Integrated Intel® UHD Graphics 630 or independent 125W GPU via x16 PEG port				Independent GPU via x16 (@ x8 signals) PEG port, or integrated Intel® UHD graphics 630
	<b>Memory</b>	Up to 32 GB DDR4-2666	Up to 32 GB DDR4-2666	Up to 32 GB DDR4-2666	Up to 32 GB DDR4-2666	Up to 128 GB DDR4-2133
<b>I/O Interface</b>	<b>Ethernet</b>	2	2	2	2	2
	<b>Video Port</b>	2x DVI-D	2x DVI-D	2x DVI-D	2x DVI-D	1x VGA, 1x DVI-D, 1x DisplayPort
	<b>Serial Port</b>	2x RS-232/ 422/ 485 3x 3-wire RS-232	2x RS-232/ 422/ 485 3x 3-wire RS-232	2x RS-232/ 422/ 485 3x 3-wire RS-232	2x RS-232/ 422/ 485 3x 3-wire RS-232	2x RS-232/422/485 ports 2x RS-232
	<b>USB 2.0</b>	2	2	2	2	1
	<b>USB 3.1</b>	4	4	4	4	4
	<b>USB 3.2</b>	-	-	-	-	4
	<b>Audio</b>	1x mic-in and speaker-out	1x mic-in and speaker-out	1x mic-in and speaker-out	1x mic-in and speaker-out	1x mic-in and speaker-out
<b>Storage Interface</b>	<b>SATA HDD</b>	2x 2.5" HDD/ SSD	2x 2.5" HDD/ SSD	2x 2.5" HDD/ SSD	2x 2.5" HDD/ SSD	2x hot-swap tray for 2.5" HDD/SSD
	<b>mSATA / eSATA</b>	1x mSATA	1x mSATA	1x mSATA	1x mSATA	1x mSATA
<b>Expansion Bus</b>	1x PCI Express x16 slot @Gen3, 16-lanes 1x PCI Express x8 slot @Gen2, 4-lanes 1x PCI Express x4 slot @Gen2, 1-lane	1x PCI Express x16 slot @Gen3, 16-lanes 1x PCI Express x4 slot @Gen2, 2-lanes 1x PCI Express x4 slot @Gen2, 1-lane 2x 33MHz/ 32-bit 5V PCI slots	1x PCI Express x16 slot @Gen3, 16-lanes 1x PCI Express x8 slot @Gen2, 4-lanes 3x 33MHz/ 32-bit 5V PCI slots	1x PCI Express x16 slot @Gen3, 16-lanes 4x 33MHz/ 32-bit 5V PCI slots	2x PCI Express x16 slot @Gen3, 8-lanes 2x PCI Express x8 slot @Gen3, 4-lanes 3x 33MHz/ 32-bit 5V PCI slots	
<b>Power Supply</b>	<b>DC Input</b>	8-35V DC	8-35V DC	8-35V DC	8-35V DC	8-35V DC
<b>Environmental</b>	<b>Operating Temperature</b>	-25°C~60°C	-25°C~60°C	-25°C~60°C	-25°C~60°C	-25°C~60°C
	<b>Certification</b>	CE/FCC Class A, according to EN55032 & EN55035	CE/FCC Class A, according to EN55032 & EN55035	CE/FCC Class A, according to EN55032 & EN55035	CE/FCC Class A, according to EN55032 & EN55035	CE/FCC Class A, according to EN55032 & EN55034



Model Name	Nuvo-6002	Nuvo-6023	Nuvo-6032	Nuvo-6041	
<b>Chassis</b>	<b>Dimensions (W x D x H)</b>	124 x 225 x 174mm	184 x 225 x 174mm	184 x 225 x 174mm	
	<b>Weight</b>	2.8 kg	3.5 kg	3.5 kg	
	<b>Construction</b>	Aluminum alloy with heavy duty metal	Aluminum alloy with heavy duty metal	Aluminum alloy with heavy duty metal	Aluminum alloy with heavy duty metal
<b>System</b>	<b>Processor</b>	Supports Intel® 6th-Gen Core™, Pentium® and Celeron® LGA1151 CPU - Intel® Core™ i7-6700TE - Intel® Core™ i5-6500TE - Intel® Core™ i3-6100TE - Intel® Pentium® 4400TE - Intel® Celeron® 3900TE	Supports Intel® 6th-Gen Core™, Pentium® and Celeron® LGA1151 CPU - Intel® Core™ i7-6700TE - Intel® Core™ i5-6500TE - Intel® Core™ i3-6100TE - Intel® Pentium® 4400TE - Intel® Celeron® 3900TE	Supports Intel® 6th-Gen Core™, Pentium® and Celeron® LGA1151 CPU - Intel® Core™ i7-6700TE - Intel® Core™ i5-6500TE - Intel® Core™ i3-6100TE - Intel® Pentium® 4400TE - Intel® Celeron® 3900TE	Supports Intel® 6th-Gen Core™, Pentium® and Celeron® LGA1151 CPU - Intel® Core™ i7-6700TE - Intel® Core™ i5-6500TE - Intel® Core™ i3-6100TE - Intel® Pentium® 4400TE - Intel® Celeron® 3900TE
	<b>Chipset</b>	Intel® H110	Intel® H110	Intel® H110	Intel® H110
	<b>Graphics</b>	Intel® HD Graphics 530/510	Intel® HD Graphics 530/510	Intel® HD Graphics 530/510	Intel® HD Graphics 530/510
	<b>Memory</b>	Up to 32 GB DDR4-2133	Up to 32 GB DDR4-2133	Up to 32 GB DDR4-2133	Up to 32 GB DDR4-2133
	<b>Ethernet</b>	2	2	2	2
<b>I/O Interface</b>	<b>Video Port</b>	2x DVI-D	2x DVI-D	2x DVI-D	2x DVI-D
	<b>Serial Port</b>	2x RS-232/ 422/ 485 3x 3-wire RS-232	2x RS-232/ 422/ 485 3x 3-wire RS-232	2x RS-232/ 422/ 485 3x 3-wire RS-232	2x RS-232/ 422/ 485 3x 3-wire RS-232
	<b>USB 2.0</b>	-	-	-	-
	<b>USB 3.1</b>	4	4	4	4
	<b>USB 3.2</b>	-	-	-	-
	<b>Audio</b>	1x mic-in and speaker-out	1x mic-in and speaker-out	1x mic-in and speaker-out	1x mic-in and speaker-out
<b>Storage Interface</b>	<b>SATA HDD</b>	1x 2.5" HDD/SSD	3x 2.5" HDD/SSD	3x 2.5" HDD/SSD	3x 2.5" HDD/SSD
	<b>mSATA / eSATA</b>	1x mSATA	1x mSATA	1x mSATA	1x mSATA
<b>Expansion Bus</b>	1x PCI Express x16 slot @Gen 3, 16 lanes 1x PCI Express x8 slot @Gen2, 4-lanes	1x PCI Express x16 slot @Gen3, 16-lanes 1x PCI Express x4 slot @Gen3, 2-lanes 1x PCI Express x4 slot @Gen3, 1-lanes 2x 33MHz/ 32-bit PCI slots	1x PCI Express x16 slot @Gen 3, 16 lanes 1x PCI Express x8 slot @Gen2, 4-lanes 3x 33MHz/32-bit PCI slots	1x PCI Express x16 slot @Gen 3, 16 lanes 4x 33MHz/32-bit PCI slots	
<b>Power Supply</b>	<b>DC Input</b>	8-35V DC	8-35V DC	8-35V DC	8-35V DC
<b>Environmental</b>	<b>Operating Temperature</b>	-25°C~60°C	-25°C~60°C	-25°C~60°C	-25°C~60°C
	<b>Certification</b>	CE/FCC Class A, according to EN 55022, EN 55024 & EN 55032	CE/FCC Class A, according to EN 55022, EN 55024 & EN 55032	CE/FCC Class A, according to EN 55022, EN 55024 & EN 55032	CE/FCC Class A, according to EN 55022, EN 55024 & EN 55032



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