

Nuvo-3120 Series

Intel® 3rd-Gen Core™ i7/i5 Fanless Controller with Compact Size and Configurable CPU Power Mode



CE FC

Key Features

- 212 mm x 165 mm x 62 mm very compact size
- Intel® 3rd-Gen i7/i5 PGA-type processor
- User-configurable CPU power mode for adaptation to various environments
- Dual GbE ports and four USB3 ports
- DVI/VGA + DisplayPort triple independent display outputs
- Built-in isolated digital I/O with change-of-state (COS) interrupt
- 8 ~ 35V wide-range DC input

Introduction

Introducing the most compact fanless controller supporting PGA-type 3rd-Gen i7/i5 processor!

Neosys' Nuvo-3120 features a very compact 212 mm x 165 mm x 62mm footprint. While other compact fanless controllers adopt low-voltage, BGA-type i7 CPU (17W), Nuvo-3120 supports standard voltage, PGA-type i7/i5 CPU (45W/35W) for flexible CPU selection. A unique feature, configurable CPU power mode, is developed to balance the trade-off between heat-sink size and operating temperature. According to ambient condition, you can configure Nuvo-3120 to operate in maximal performance, reduced performance or extended temperature mode.

Plenty of I/O functions, such as Gigabit Ethernet, USB 3.0, SATA, COM ports, mini-PCIe and isolation DIO are provided in Nuvo-3120's compact chassis. It also supports triple independent display outputs to benefit image-related applications. Compact yet powerful, Nuvo-3120 meets all your requirements for an embedded platform.

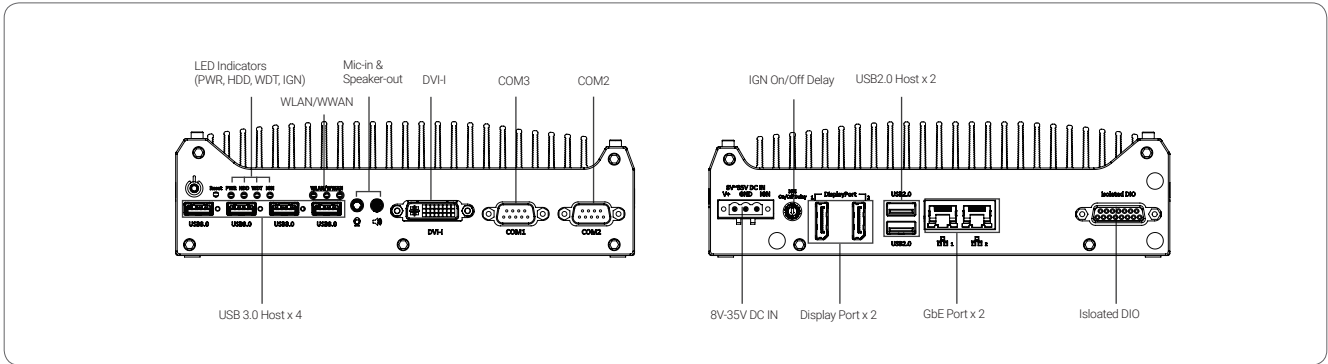
Specifications

System Core		Power Supply & Ignition Control			
Processor	Intel® Core™ i7-3610QE (2.3/3.3 GHz, 6 MB cache) Intel® Core™ i5-3610ME (2.7/3.3 GHz, 3 MB cache) Intel® Celeron™ 1020E (2.2 GHz, 2 MB cache)	DC Input	1x 3-pin pluggable terminal block for 8~25V DC input		
Chipset	Intel® HM76 Platform Controller Hub	Ignition Control	Ignition power control with user-selectable on/off delay (Optional)		
Graphics	Integrated Intel® HD Graphics 4000 Controller	Power Consumption	With i7-3610QE : 72.96W (3.84A@19V) With i5-3610ME : 48.83W (2.57A@19V)		
Memory	1x 204-pin SO-DIMM sockets, up to 8 GB DDR3 1333/1600 MHz SDRAM	Mechanical			
I/O Interface		Dimension	212 mm (W) x 165 mm (D) x 62 mm (H)		
Ethernet	1x Gigabit Ethernet port by Intel® 82579LM, supporting Wake-on-LAN 1x Gigabit Ethernet ports by Intel® i210	Weight	2.7 Kg (incl. CPU, memory and HDD)		
Video Port	1x DVI-I connector for VGA/DVI output, supporting 2048x1536 (VGA) or 1920x1080 (DVI) resolution 2x DisplayPort, supporting 2560x1600 resolution	Mounting	Wall-mounting (standard) or DIN-Rail mounting (optional)		
USB	4x USB 3.0 ports and 2x USB 2.0 ports	Environmental			
Serial Port	2x software-programmable RS-232/422/485 (COM1 & COM2)	Operating Temperature			
Isolated DIO	4x isolated DI with COS interrupt and 4x isolated DO	Maximal Performance	-25°C ~ 50°C**	-25°C ~ 60°C**	-25°C ~ 70°C**
Audio	1x Mic-in and 1x Speaker-out	Reduced Performance	-25°C ~ 60°C**	-25°C ~ 70°C**	-25°C ~ 70°C**
Storage Interface		Extended Temperature	-25°C ~ 70°C**	-25°C ~ 70°C**	-25°C ~ 70°C**
SATA HDD	1x Internal SATA port for 2.5" HDD/SSD	Storage Temperature	-40°C ~ 85°C		
mSATA	1x full-size mSATA (SATA/USB/W_DISABLE#) with USIM socket	Humidity	10%~90% , non-condensing		
Expansion Bus		Vibration	Operating, 5 Grms, 5-500 Hz, 3 Axes (w/ SSD, according to IEC60068-2-64)		
Mini PCI-E	1x full-size mini PCI Express socket with USIM socket 1x half-size mini PCI Express socket	Shock	Operating, 50 Grms, Half-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27)		
		EMC	CE/FCC Class A, according to EN 55022 & EN 55024		

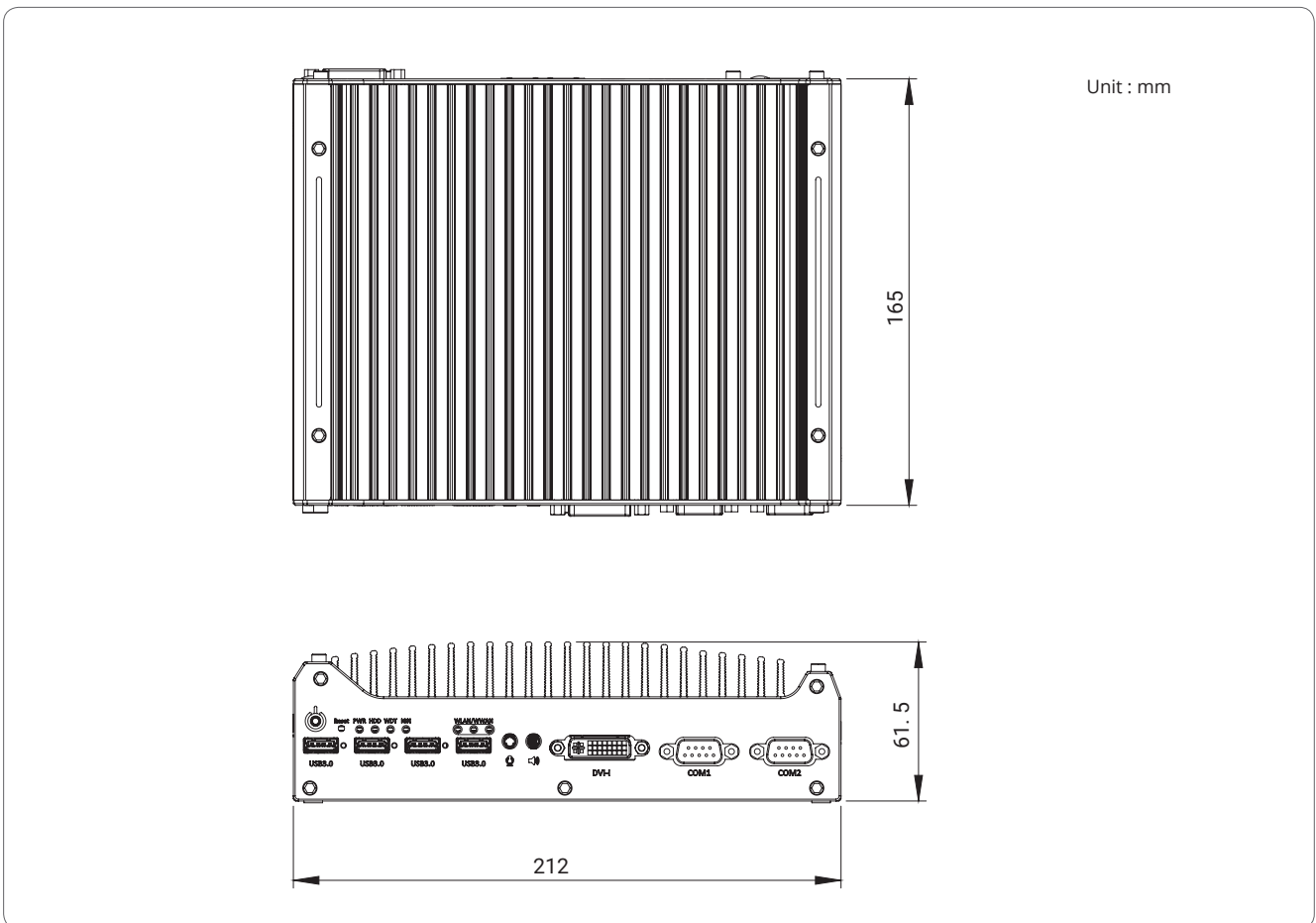
* The 100% CPU loading is applied using Passmark® BurnInTest™ v7.0. For detail testing criteria, please contact Neosys Technology

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

Appearance



Dimensions



Ordering Information

Model No.	Product Description
Nuvo-3120-I7QC	Intel® Core™ i7-3610QE fanless controller with compact size and configurable CPU power mode
Nuvo-3120-I5DC	Intel® Core™ i5-3610ME fanless controller with compact size and configurable CPU power mode
Nuvo-3120-C1020	Intel® Celeron™ 1020E fanless controller with compact size and configurable CPU power mode

Option of ignition power control

Optional Accessories

- DIN-Rail mounting kit
- 120 W AC/DC power adapter