



# Nuvo-3003LP/3005LP

Intel® 3rd-Gen Core™ i7/i5/i3 Fanless Embedded Controller with Low-Profile Chassis and Swappable HDD Tray

## Features

- Intel® 3rd-Gen i7 Quad-core superb performance
- 240 mm x 225 mm x 69 mm low-profile chassis
- One hot-swappable 2.5" HDD and one fixed 2.5" HDD
- Up to 5x GigE ports, supporting 9.5 KB jumbo frame
- Rugged, -25°C to 70°C fanless operation
- Option of PoE capability
- Option of isolated DIO with COS interrupt support



## Introduction

Nuvo-3005LP/3003LP is the low-profile version of Nuvo-3000 series for some restricted spaces. It features a new chassis which reduces the height from 88 mm to 69 mm, and remains extraordinary reliability in a -25°C to 70°C operating temperature range.

Nuvo-3005LP/3003LP incorporates the cutting-edge 3rd-Gen i7 Quad-core processor and versatile I/O functions such as Gigabit Ethernet ports, USB 3.0 ports and dual independent display outputs. It also offers the options of PoE (Power over Ethernet), isolated DIO and ignition power control for a wider range of applications.

Its newly-designed chassis offers one fixed 2.5" HDD accommodation and one hot-swappable 2.5" HDD tray. Users can take advantage of its storage design for applications that requires frequent HDD replacement. Combining its low-profile chassis and PoE option, Nuvo-3005LP/3003LP is a suitable platform for advanced surveillance/security systems.

## Nuvo-3003LP/3005LP Specifications

System Core		Expansion Bus	
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)	Mini PCI-E	1x internal mini PCI Express socket with USIM socket 1x internal mini PCI Express socket
Chipset	Intel® HM76 Platform Controller Hub	Power Supply & Ignition Control	
Graphics	Integrated Intel® HD Graphics 4000 Controller (i7/i5) Integrated Intel® HD Graphics Controller (Celeron)	DC Input	1x 4-pin power connector for 8~25V DC input
Memory	2x 204-pin SO-DIMM sockets, up to 16 GB DDR3 1333/1600 MHz SDRAM	Ignition Control	1x 3-pin pluggable terminal block for ignition signal input (IGN/GND/V+) (Optional)
I/O Interface		Remote Ctrl. & Status Output	1x 10-pin (2x5) wafer connector for remote on/off control and status LED output
Ethernet	5x Gigabit Ethernet ports by Intel® i210 (Nuvo-3005LP) 3x Gigabit Ethernet ports by Intel® i210 (Nuvo-3003LP)	Power Consumption	With i7-3610QE : 72.96W (3.84A@19V) With i5-3610ME : 48.83W (2.57A@19V)
Video Port	1x DB-15 connector for analog RGB, supporting 2048x1536 resolution 2x DVI-D connectors for DVI/HDMI outputs, supporting 1920x1080 resolution (Supporting dual independent display outputs)	Mechanical	
USB	2x USB 3.0 ports and 2x USB 2.0 ports	Dimension	240 mm (W) x 225 mm (D) x 69 mm (H)
Serial Port	1x software-programmable RS-232/422/485 (COM1)	Weight	3.4 Kg (including 2.5" HDD and DDR3 SO-DIMM)
Isolated DIO	8x isolated DI with COS interrupt and 8x isolated DO(Optional)	Mounting	Wall-mounting (standard) or DIN-Rail mounting (optional)
KB/MS	1x 6-pin mini-DIN connector for PS/2 keyboard/mouse	Environmental	
Audio	1x Mic-in and Speaker-out	Operating Temperature	-25°C ~ 70°C **/** (with i5-3610ME & Celeron 1020E) -25°C ~ 60°C **/** (with i7-3610QE)
Storage Interface		Storage	-40°C ~ 85°C
SATA HDD	1x Internal SATA port for 2.5" HDD/SSD installation 1x hot-swappable HDD tray for 2.5" HDD/SSD installation	Humidity	10%~90% , non-condensing
CFast	1x CFast socket	Vibration	Operating, 5 Grms, 5-500 Hz, 3 Axes (w/ SSD, according to IEC60068-2-64)
		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

\*100% CPU loading is applied using Intel® Thermal Analysis Tool. 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.

- Option of Ignition Power Control
- Option of isolated DIO(8DI + 8DO) (Nuvo-3005LP only)
- Option of PoE capability for 4x GbE(Nuvo-3005LP only)
- Option of DIN-Rail mounting kit
- 120W AC/DC power adapter

## Order Information

### Nuvo-3005LP-I7QC

Intel® Core™i7-3610QE fanless embedded controller with 5x GbE, dual SATA ports and low-profile chassis

### Nuvo-3005LP-I5DC

Intel® Core™i5-3610ME fanless embedded controller with 5x GbE, dual SATA ports and low-profile chassis

### Nuvo-3003LP-C1020

Intel® Celeron™ 1020E fanless embedded controller with 3x GbE, dual SATA ports and low-profile chassis