

Rugged Embedded



# Nuvo-2400 Series

Intel® Celeron® Bay Trail fanless Shoebox IPC with Dual Display Output, Dual GbE and Triple PCI/PCIe slots



CE FC

## Key Features

- Intel® Celeron® Bay Trail J1900 quad-core processor
- 3x PCI slots or 1x PCIe x4 + 2x PCI slots
- Rugged, -25°C to 70°C fanless operation
- Dual independent display via DVI-I
- 2x SATA ports for 2.5" HDD/ SSD
- 2x RS-232/ 422/ 485 and 2x RS-232
- Optional isolated 8-ch DI and 8-ch DO
- 8 to 25V DC wide-range input

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## Introduction

Nuvo-2400 series are fanless shoebox IPCs with 3 PCI or 2 PCI + 1 PCIe expansion slots. The expansion slots are provided for add-on cards, such as COM port cards and frame grabbers. Nuvo-2430 provides 3 PCI slots, while Nuvo-2421 provides one PCIe x4 slot with and two PCI slots (1-lane PCI Express 2.0 signal).

Nuvo-2400 series facilitate the integration of both remote on/ off switch and the system status indicators with corresponding signals reserved for buttons and LEDs outside of Nuvo-2400 so users can power on/ off Nuvo-2400 externally. Furthermore, there are optional 24V DC rated and isolated 8-channel digital inputs/ 8-channel digital outputs. This makes Nuvo-2400's DI/O compatible with many industrial sensors, indicators, coils and actuators.

Powered by Intel® Celeron® Bay Trail J1900 series quad-core processor, Nuvo-2400 series show outstanding computing power and is even more power efficient compared to its predecessors. Nuvo-2400 supports dual independent displays, dual 2.5" SATA bays and dual gigabit LAN ports with teaming and PXE. These features, together with 3 expansion slots, maximize the flexibility of Nuvo-2400 for various applications.

## Specifications

System Core		Expansion Bus	
Processor	Intel® Celeron® Bay Trail J1900 quad-core processor (2.42GHz, 2M cache)	PCI	3x PCI Slot with 33MHz, 32-bit PCI signal (Nuvo-2430) 2x PCI Slot with 33MHz, 32-bit PCI signal (Nuvo-2421)
Graphics	Integrated Intel® HD graphics	PCI Express (Nuvo-2421 only)	1x PCI Express x4 slot with 1-lane Gen2 PCI Express signal
Memory	Up to 8GB DDR3L-1333MHz SDRAM (single SODIMM slot)	<b>Power Supply</b>	
<b>Front Panel I/O Interface</b>		DC Input	8~25V DC
Ethernet	2x Gigabit Ethernet by Intel® Ethernet controller I210	<b>Mechanical</b>	
Video Port	1x DVI-I for VGA and DVI dual independent display support	Dimension	139 mm (W) x 225 mm (D) x 160 mm (H)
Serial Port	2x BIOS-configurable RS-232/ 422/ 485 (COM1 & COM2)	Weight	2.2 kg
USB 3.1	1x USB 3.1 Gen1 (5 Gbps) ports	Mounting	Wall-mount (standard) or DIN-rail mount (optional)
USB 2.0	3x USB 2.0 ports	<b>Environmental</b>	
Audio	1x Mic-in and 1x speaker-out	Operating Temperature	-25°C ~ 70°C, 100% CPU loading **/**
<b>Internal I/O Interface</b>		Storage Temperature	-40°C ~ 85°C
Serial Port	2x RS-232 (COM3 & COM4)	Humidity	10%~90% , non-condensing
Parallel Port	1x parallel port	Vibration	Operating, 5 Grms, 5-500 Hz, 3 Axes (w/ SSD, according to IEC60068-2-64)
Isolated DIO	Optional 8-CH DI and 8-CH DO (polling mode only)	Shock	Operating, 50 Grms, Half-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27)
Remote Control & Status Output	1x 3-pin 2.0mm wafer connector for remote on/ off control 1x 2x6-pin 2.0mm pin-header connector for status output	EMC	CE/FCC Class A, according to EN 55022, EN 55024
<b>Storage Interface</b>			
SATA HDD	2x internal SATA ports for 2.5" HDD/ SSD installation		

\* 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.

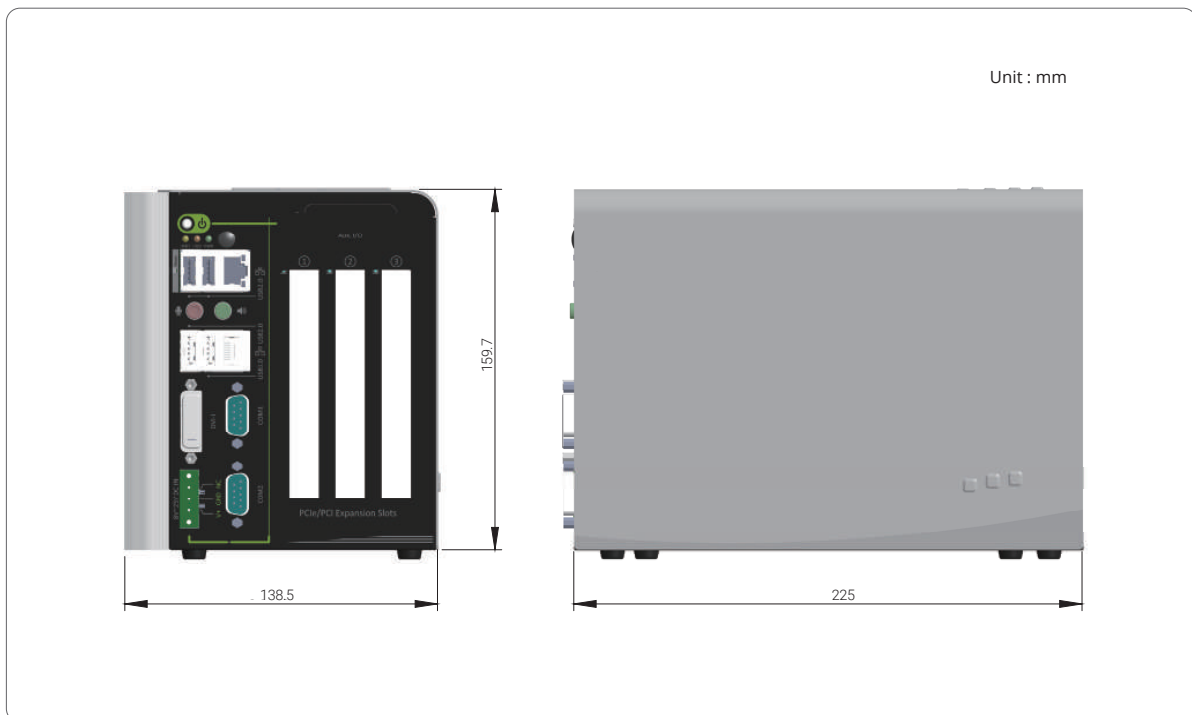
Nuvo-2400 Series



## Appearance



## Dimensions



## Ordering Information

Model No.	Product Description
<b>Nuvo-2430</b>	Intel® Bay Trail Celeron® J1900 fanless shoe-box IPC with dual display, dual GbE and 3x PCI slots
<b>Nuvo-2421</b>	Intel® Bay Trail Celeron® J1900 fanless shoe-box IPC with dual display, dual GbE , 2x PCI slots and one PCIe x4 slot
<b>Optional isolated DIO (8 DI + 8 DO)</b>	

## Optional Accessories

<b>Panel/ cable kit for 2x COM ports</b>	
<b>Panel/ cable kit for 1x COM + 1x LPT ports</b>	
<b>Fankit-80</b>	Fan assembly for Nuvo-2400 series, 80x80x15 mm
<b>DINRAIL-E</b>	DIN-rail mount assembly for Nuvo-2400 series
<b>PA-60W-OW</b>	60W AC/DC power adapter with 12V, 5A DC output, cord end terminals for terminal block. operating temperature : -30 to 60 °C

## 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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