

Rugged Embedded



Nuvo-7501 Series

Intel® 8th/ 9th -Gen Core" i7/ i5/ i3 Compact Fanless Computer with 2x GbE and up to 6x COM



Introduction

Nuvo-7501 series is a cost-effective, compact and yet powerful fanless embedded computer with a 255 x 173 x 76 mm footprint. Powered by an Intel[®] 8th/ 9th-Gen Core[™] hexa/ octa core CPU, it offers more than 50% computation performance improvement over the previous generation. Nuvo-7501 series is designed to be simple and compact while retaining essential elements of a rugged embedded fanless solution. It features I/Os such as 2x GbE, 4x USB3.0 and 6x COM ports for common industrial applications. In addition to the M.2 2280 SATA SSD, it can also support a 2.5″ SSD/ HDD or a 3.5″ HDD. For Nuvo-7505D, it offers isolated DIO and isolated COM, which can protect the controller against ground loops in harsh environments.

The Nuvo-7501 series is a cost-effective solution that has retained quality materials all Neousys systems utilize; and the design flow/ stringent test procedures it must endure. It is a fanless embedded platform that has hit the sweet spot in terms of cost, size and performance. Nuvo-7501 series is an ideal fanless embedded solution for various industrial applications.

	Nuvo-7501	Nuvo-7505D		Nuvo-7501	Nuvo-7505D
System Core			Internal Expan	sion Bus	
Processor	Supporting Intel [®] 8th/9th-Gen Core [™] CPU (LGA1151 socket) - Intel [®] Core [™] i7-8700 ⁺ / i7-87007/ i7-9700E ⁺ / i7-9700TE - Intel [®] Core [™] i5-8500 ⁺ / i5-85007/ i5-9500E ⁺ / i5-9500TE - Intel [®] Core [™] i3-8100 ⁺ / i3-81007/ i3-9100E ⁺ / i3-9100TE		Mini PCI-E	1x full-size mini PCI Express socket	
			M.2	1x M.2 2242 B key socket with internal SIM socket	
			– Power Supply		
Chipset			DC Input	1x 3-pin pluggable terminal block for 8~35VDC DC input	
Graphics	Integrated Intel [®]	UHD graphics 630	Remote Ctrl & 1x 10-pin (2x5) pin header for		
Memory	Up to 32 GB DDR4 2666/ 24	00 SDRAM (one SODIMM slots)	Status Output	remote on/off control and status LED output	
I/O Interface			Mechanical		
Ethernet port	2x Gigabit Ethernet	ports by I219 and I210	Dimension	255mm (W) x 173 mm (D) x 76 mm (H)	
USB .	4x USB 3.1 Ge	n1 (5 Gbps) ports	Weight	2.68 kg	
	1x VGA connector, supporting 1920 x 1200 resolution		Mounting	Wall-mount or optional DIN-Rail	
Video Port		orting 1920 x 1200 resolution	_ Environmental		
Serial Port	2x software-programmable RS-232/ 422/ 485 ports (COM1/ COM2) 2x RS-232 ports (COM3/ COM4)	2x isolated software-programmable RS-232/422/485 ports (COM1/ COM2) 2x isolated RS-232 ports (COM3/ COM4) 2x RS-232 ports (COM5/ COM6)	Operating Temperature	-25°C ~ 6	50°C **
			Storage Temperature	-40°C ~	·85°C
Audio	1x 3.5 mm jack for mic-in and speaker-out		Humidity	10%~90% , nor	n-condensing
Isolated DIO	N/A	8-CH isolated DI and 8-CH isolated DO	Vibration	Operating, MIL-STD-810G, I	Method 514.6, Category 4
Storage Interface			Shock	Operating, MIL-STD-810G, Method	516.6, Procedure I, Table 516.6-I
SATA HDD	A HDD 1x internal SATA port for 3.5" HDD or 2.5" HDD/ SSD			CE/FCC Class A, according	to EN 55032 & EN 55024
M.2	1x M.2 2280 SATA interface		- * Due to thermal limitations, 65W CPUs will be configured to operate in 35W mode by default. ** For sub-zero operatina temperature, a wide temperature HDD or Solid State Disk (SSD) is required.		

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Nuvo-7501 Series
BY-35V DC IN COM1 - COM4 UBB30 Host #4 LED Indicators Image: Comparison of the state of th
Dimensions

Ordering Information

Model No.	Draduat Deparintion
Model No.	Product Description
Nuvo-7501	Intel® 8th/ 9th-Gen Core™ i7/ i5/ i3 compact fanless embedded computer with 2x GbE and 4x COM
Nuvo-7505D	Intel [®] 8th/ 9th-Gen Core™ i7/ i5/ i3 compact fanless embedded computer with isolated DIO, isolated COM and 2x GbE

Optional Accessories

PA-120W-OW	120W AC/ DC power adapter 20V/ 6A; 18AWG/ 120cm; cord end terminals for terminal block, operating temperature : -30 to 70 °C
DINRAIL-31 DIN-rail mounting assembly for Nuvo-7501 series	

www.neousys-tech.com

All specifications and photos are subject to change without prior notice



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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