

Nuvo-9501 series

Compact & fanless Box PC with Intel® 13th/12th-Gen Core

Features

- › Intel® 13th/12th-Gen Core® 35W/65W LGA 1700 CPU
- › Up to 32GB DDR4 3200 SODIMM
- › 212 x 165 x 80mm low-profile design
- › 2x 2.5GbE and 4x USB3.2 Gen 1 with screw-lock
- › Supports 1x M.2 2280 Gen4 x4 NVMe and 1x 3.5"/2.5" SATA HDD/SSD storage
- › Wide temperature operation (-25°C to 60°C)

BRANDNEW



VGA + DP dual display outputs



4-CH isolated DI and 4-CH isolated DO (Nuvo-9505D)



Rugged and fanless operation

Rich I/O option & outstanding performance

Nuvo-9501 is a cost-effective compact fanless embedded computer based on the Intel® 13th/12th-Gen platform. Built on the advanced Intel® 7 process, Intel® 13th Gen processors offer up to 24 cores/ 32 threads to deliver up to 2x the performance when compared to previous Intel® 10th or 11th-Gen platforms. Nuvo-9501 is a cost-effective, compact and yet powerful fanless embedded computer that offers the ultimate computing for various industrial applications.

Nuvo-9501 offers essential I/O functions for general industrial needs including dual 2.5GbE ports, dual display ports and four USB3.2 ports. In addition, it features a Gen4 x4 M.2 NVMe slot for the latest NVMe SSD with read/ write speeds up to 7000 MB/s. Also, it supports a 2.5" or 3.5" HDD for high capacity storage needs such as data collection or surveillance applications. It also offers two mPCIe and one M.2 E key slots for installing WiFi or 5G/ 4G wireless communication modules.

As a cost-effective and compact embedded computer, Nuvo-9501 delivers excellent computing performance and offers essential I/O connectivity to meet customers' needs and cost. It is suitable for a variety of industrial applications.

Nuvo-9501 series

Compact 8 fanless Box PC with Intel® 13th/12th-Gen Core

Nuvo-9501 series

SYSTEM

Processor	Supporting Intel® 13th-Gen Core™ CPU (LGA1700 socket, 65W/ 35W TDP) - Intel® Core™ i9-13900E/ i9-13900TE - Intel® Core™ i7-13700E/ i7-13700TE - Intel® Core™ i5-13500E/ i5-13400E/ i5-13500TE - Intel® Core™ i3-13100E/ i3-13100TE	Support Intel® 12th-Gen Core™ CPU (LGA1700 socket, 35W/ 65W TDP) - Intel® Core™ i9-12900E/ i9-12900TE - Intel® Core™ i7-12700E/ i7-12700TE - Intel® Core™ i5-12500E/ i5-12500TE - Intel® Core™ i3-12100E/ i3-12100TE - Intel® Pentium® G7400E/ G7400TE - Intel® Celeron® G6900E/ G6900TE
-----------	--	--

Chipset Intel® H610E platform controller hub

Graphics Integrated Intel® UHD Graphics 770 (32EU) / 730 (24EU)

Memory Up to 32GB non-ECC DDR4 3200 SDRAM (one SODIMM slot)

TPM Supports fTPM 2.0

I/O

Ethernet 2x 2.5GBASE-T Ethernet ports by Intel® I226-V GbE controllers (Nuvo-9501)
2x 2.5GBASE-T Ethernet ports by Intel® I226-IT GbE controllers (Nuvo-9505D)

USB 4x USB 3.2 Gen1 (5 Gbps) ports
2x USB 2.0 ports

Video 1x VGA output, supporting 1920 x 1200 resolution
1x DisplayPort, supporting 4096 x 2304 resolution

Serial port 1x software-programmable RS-232/422/485 ports (COM1)
3x 3-wire RS-232 ports (COM2/3/4) or 1x RS-422/485 port (COM2)

Audio 1x 3.5 mm jack for mic-in and speaker-out

Isolated DIO 4-CH isolated DI and 4-CH isolated DO (Nuvo-9505D only)

EXPANSION BUS

Mini PCI Express 2x full-size mini PCI Express sockets with internal SIM sockets

M.2 1x M.2 2230 E key socket for WiFi5, WiFi6 or Google Edge TPU module

STORAGE

SATA HDD 1x internal SATA port for 3.5" HDD or 2.5" HDD/SSD

M.2 1x M.2 2280 M key socket (PCIe Gen4 x4) for NVMe SSD

MECHANICAL

DC Input 1x 3-pin pluggable terminal block for 8-35V DC input with remote on/off control

Dimensions 212mm (W) x 165 mm (D) x 80 mm (H)

Weight 2.5 kg

Mounting Wall-mount (standard) or DIN-rail mount (optional)

Operating temperature **with 35W CPU:**
-10°C ~ 60°C * (Nuvo-9501)
-25°C ~ 60°C * (Nuvo-9505D)
with 65W CPU (installation of the optional fan kit is recommended):
-10°C ~ 60°C ** (Nuvo-9501)
-25°C ~ 60°C ** (Nuvo-9505D)

Storage temperature -40°C ~ 85°C

Humidity 10% ~ 90% non-condensing

Vibration MIL-STD-810H, Method 514.8, Category 4

Shock MIL-STD-810H, Method 516.8, Procedure I

Certifications CE/FCC Class A, according to EN 55032 & EN 55035

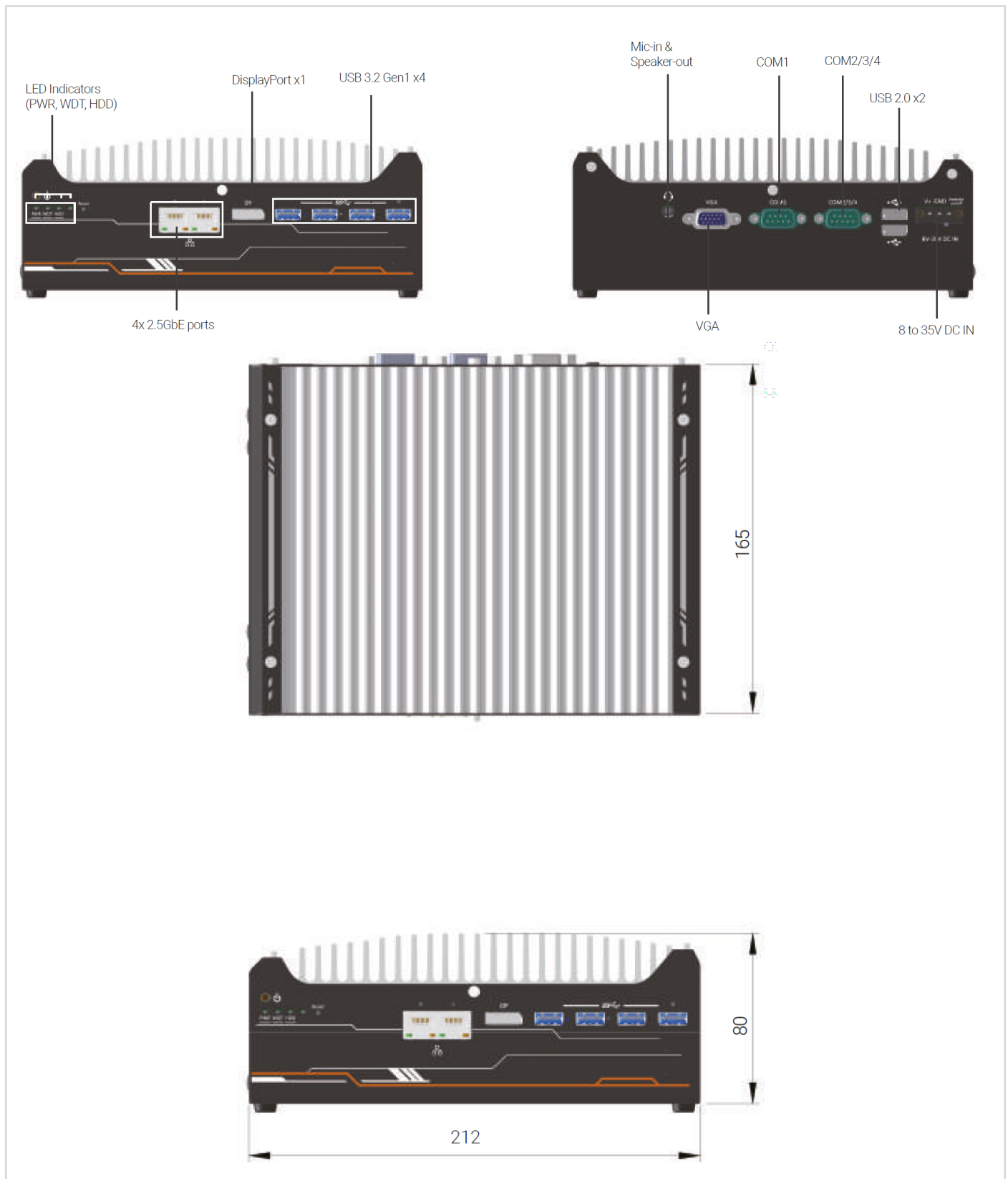
*For sub-zero and over 60°C operating temperature, a wide temperature HDD or Solid State Disk (SSD) is required.

**For 65W CPUs, the optional fan kit is recommended for operating at ambient temperatures higher than 50°C.

Nuvo-9501 series

Compact & fanless Box PC with Intel® 13th/12th-Gen Core

Appearance and dimensions (mm)



Nuvo-9501 series

Compact & fanless Box PC with Intel® 13th/12th-Gen Core

Ordering information

Nuvo-9501 series	
MODEL NO.	
Nuvo-9501	Intel® 13th/12th-Gen Core™ compact fanless computer with 2x 2.5GbE and 4x USB3.2
Nuvo-9505D	Intel® 13th/12th-Gen Core™ compact fanless computer with 2x 2.5GbE, 4x USB3.2 and 8x isolated DIO
OPTIONAL ACCESSORIES	
PA-160W-OW	160W AC-DC power adapter 20V/8A; 18AWG/120cm; cord end terminals for terminal block, operating temperature: -30°C to 70°C. (recommended for 35W CPU)
PA-280W-ET2	280W AC/DC power adapter 24V/ 11.67A ; 16AWG/100cm; cord end terminals for terminal block, operating temperature: -30°C to 60°C. (recommended for 65W CPU)
Wmkit-Nuvo9501	Wall mount assembly for Nuvo-9501 series
DINRAIL-31	DIN-rail mounting assembly for Nuvo-9501 series
AccsyBx-FAN-Nuvo9531_950	Fan kit with 92mm x 92mm fan for Nuvo-9501 series