

# Nuvo-5608VR Series

Intel® 6th-Gen Core™ i7/i5 Fanless Surveillance System with 8x PoE+, DIO, CAN bus and 2x 3.5" HDD Accommodation Supporting RAID 0/1



## Key Features

- Supports Intel® 6th-Gen Core™ i7/ i5/ i3 LGA1151 socket-type processor
- 8x 802.3at PoE+ ports and 2x GbE ports
- 2x 3.5" HDD accommodation, support RAID 0/1 with over 24 TB capacity
- Dedicated HDD heat-spreader for optimized thermal performance
- 4x full-size mini-PCIe sockets with SIM support
- 4-CH isolated DI and 4-CH isolated DO
- 1x CAN 2.0 port
- 8~35V wide-range DC input with built-in ignition power control
- Patented damping brackets\* to withstand 1 Grms Vibration

\*R.O.C Patent No. M491752

## Introduction

Nuvo-5608VR is Neosys' latest fanless surveillance system designed for real-time video analysis and streaming. It incorporates 6th-Gen Core™ i CPU, IP camera connectivity and massive storage capacity for emerging intelligent surveillance/ security applications.

Featuring eight Gigabit PoE+ ports, Nuvo-5608VR provides sufficient bandwidth to collect high-definition video streams from IP cameras, while its 6th-Gen Core™ i7 CPU is capable of performing real-time video analytics. It accommodates two 3.5" hard drives with RAID 0/ 1 configuration to support more than 24 TB storage capacity for recording 8-CH, 1080p@H.264 video for over 3 months.

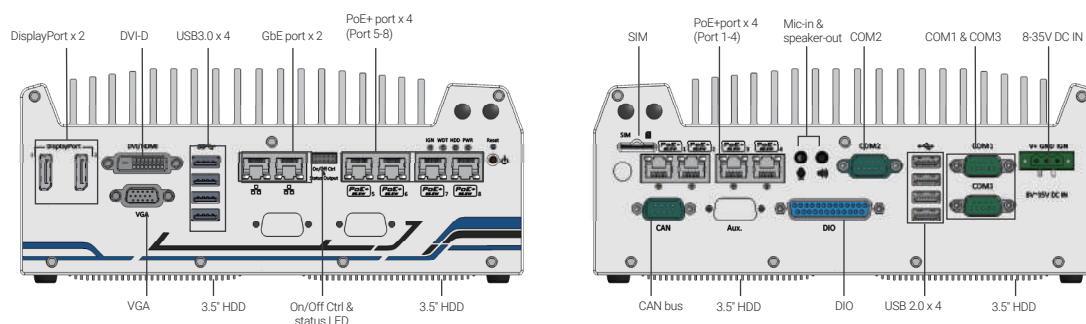
Neosys' patented damping-bracket is shipped with Nuvo-5608VR to protect the system against vibration in harsh environmental conditions.

Being a rugged surveillance platform, Nuvo-5608VR is equipped with dedicated HDD heat-spreaders to maintain adequate HDD operating temperature and along with extra features such as DIO, CAN bus and ignition control, Nuvo-5608VR is the perfect fit for both stationary and mobile surveillance applications.

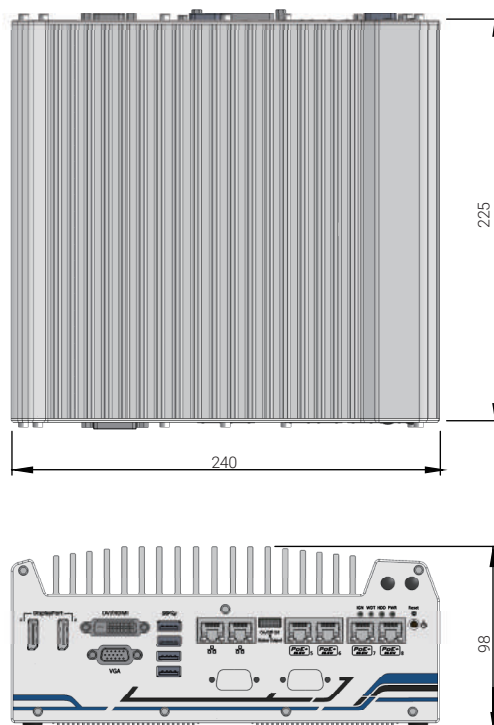
## Specifications

System Core		Expansion Bus	
Processor	Supports 6th-Gen Intel® Core™ i7/ i5/ i3 LGA1151 CPU Intel® Core™ i7-6700 (8M Cache, 3.4/ 4.0 GHz, 65W TDP) Intel® Core™ i5-6500 (6M Cache, 3.2/ 3.6 GHz, 65W TDP) Intel® Core™ i3-6100 (3M Cache, 3.7 GHz, 51W TDP) Intel® Core™ i7-6700TE (8M Cache, 2.4/ 3.4 GHz, 35W TDP) Intel® Core™ i5-6500TE (6M Cache, 2.3/ 3.3 GHz, 35W TDP) Intel® Core™ i3-6100TE (4M Cache, 2.7 GHz, 35W TDP)	mini-PCIe	1x full-size mini-PCIe socket with panel-accessible SIM socket 1x full-size mini-PCIe socket with internal SIM socket (mux with mSATA) 2x full-size mini-PCIe sockets (USB signals only) with internal SIM sockets
Chipset	Intel® Q170 platform controller hub	Power Supply	
Graphics	Integrated Intel® HD graphics 530	DC Input	1x 3-pin pluggable terminal block for 8~35VDC DC input (IGN/GND/V+)
Memory	Up to 32 GB DDR4-2133 SDRAM (two SO-DIMM slots)	Remote Ctrl. & Status Output	1x 10-pin (2x5) wafer connector for remote on/off control and status LED output
AMT	Supports AMT 11.0	Mechanical	
TPM	Supports TPM 2.0	Dimension	240 mm (W) x 225 mm (D) x 98 mm (H)
I/O Interface		Weight	3.5 kg
Ethernet port	2x Gigabit Ethernet ports by Intel® I219 and I210	Mounting	Neosys' patented damping bracket
PoE+	8x IEEE 802.3at (25.5W) Gigabit PoE+ ports by Intel® I210, 120W total power budget*	Environmental	
USB	4x USB3.0 ports via native XHCI controller 4x USB 2.0 ports	Operating Temperature	with 35W CPU -25°C ~ 70°C (with mSATA/SSD) ** -10°C ~ 60°C (with 3.5" HDD) **/** with 65W CPU -25°C ~ 50°C (with mSATA/SSD) ** -10°C ~ 60°C (with 3.5" HDD) **/**
Video Port	1x stacked VGA + DVI-D connector 2x DisplayPort connectors, supporting 4K2K resolution	Storage Temperature	-40°C ~ 85°C
Serial Port	2x software-programmable RS-232/ 422/ 485 ports (COM1 & COM3) 1x RS-232 port (COM2)	Humidity	10%~90% , non-condensing
Isolated DIO	4x isolated DI and 4x isolated DO	Vibration	Operating, 1 Grms, 5-500 Hz, 3 Axes (w/ HDD and damping bracket installed, according to IEC60068-2-64)
CAN	1x CAN 2.0 port	Shock	Operating, 30 Grms, Half-sine 11 ms Duration (w/ HDD and damping bracket installed, according to IEC60068-2-27)
Audio	1x Mic-in and 1x speaker-out	EMC	CE/ FCC Class A, according to EN 55032 & EN 55024
Storage Interface		<p>* The total power budget for Nuvo-5608VR is related to input voltage. 120W total budget is available with 24 VDC input. When 12 VDC input is applied, the total power budget is limited to 100W.</p> <p>** Operating temperature is verified with 100% CPU loading and 100% HDD loading applied using Passmark® BurnInTest 8.0. For detail testing criteria, please contact Neosys Technology.</p> <p>*** Depending on the HDD selected, users may encounter performance degradation in sequential disk write at low/high ambient temperature. No data integrity issue was observed in -10°C ~ 60°C operating temperature range.</p>	
SATA HDD	2x internal SATA port for 3.5" HDD installation, supporting RAID 0/ 1		
mSATA	1x full-size mSATA port (mux with mini-PCIe)		

## Appearance



## Dimensions



## Ordering Information

Model No.	Product Description
Nuvo-5608VR	Intel® 6th-Gen Core™ fanless surveillance system with 8x PoE+ Ports, DIO, CAN bus and 2x 3.5" HDD RAID

## Optional Accessories

PA-160W-OW	160W AC/DC power adapter 20V/8A;18AWGx4C/120cm; cord end terminals for terminal block, operating temperature : -30 to 70 °C.
PA-280W-ET2	280W AC/DC power adapter 24V/11.67A;16AWG/100cm; cord end terminals for terminal block, operating temperature : -30 to 60 °C.