

Backplane Systems Technology Pty Ltd



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



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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-PCle 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 Neousys' 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.

Neousys' 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	
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, 2.4/ 3.4 GHz, 35W TDP) Intel® Core™ i3-6100TE (4M Cache, 2.3/ 3.3 GHz, 35W TDP) Intel® Core™ i3-6100TE (4M Cache, 2.7 GHz, 35W TDP)
Chipset	Intel [®] Q170 platform controller hub
Graphics	Integrated Intel® HD graphics 530
Memory	Up to 32 GB DDR4-2133 SDRAM (two SO-DIMM slots)
AMT	Supports AMT 11.0
TPM	Supports TPM 2.0
I/O Interface	
Ethernet port	2x Gigabit Ethernet ports by Intel® I219 and I210
PoE+	8x IEEE 802.3at (25.5W) Gigabit PoE+ ports by Intel® 1210, 120W total power budget*
USB	4x USB3.0 ports via native XHCl controller 4x USB 2.0 ports
Video Port	1x stacked VGA + DVI-D connector 2x DisplayPort connectors, supporting 4K2K resolution
Serial Port	2x software-programmable RS-232/ 422/ 485 ports (COM1 & COM3) 1x RS-232 port (COM2)
Isolated DIO	4x isolated DI and 4x isolated DO
CAN	1x CAN 2.0 port
Audio	1x Mic-in and 1x speaker-out
Storage Interf	ace
SATA HDD	2x internal SATA port for 3.5" HDD installation, supporting RAID 0/ 1
mSATA	1x full-size mSATA port (mux with mini-PCle)

Expansion Bus	
mini-PCIe	1x full-size mini-PCle socket with panel-accessible SIM socket 1x full-size mini-PCle socket with internal SIM socket (mux with mSATA) 2x full-size mini-PCle sockets (USB signals only) with internal SIM sockets
Power Supply	
DC Input	1x 3-pin pluggable terminal block for 8~35VDC DC input (IGN/GND/V+)
Remote Ctrl. & Status Output	1x 10-pin (2x5) wafer connector for remote on/off control and status LED output
Mechanical	
Dimension	240 mm (W) x 225 mm (D) x 98 mm (H)
Weight	3.5 kg
Mounting	Neousys' patented damping bracket
Environmental	
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) **/***
Storage Temperature	-40°C ~ 85°C
Humidity	10%~90%, non-condensing
Vibration	Operating, 1 Grms, 5-500 Hz, 3 Axes (w/ HDD and damping bracket installed, according to IEC60068-2-64)
Shock	Operating, 30 Grms, Half-sine 11 ms Duration (w/ HDD and damping bracket installed, according to IEC60068-2-27)
EMC	CE/ FCC Class A, according to EN 55032 & EN 55024

^{*}Operating temperature is verified with 100% CPU loading and 100% HDD loading applied using Passmark®

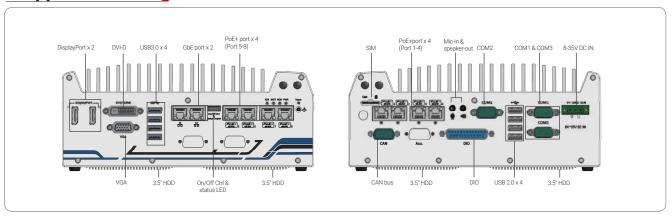
BurninTest 8.0. For detail testing criteria, please contact Neousys Technology.

**** 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

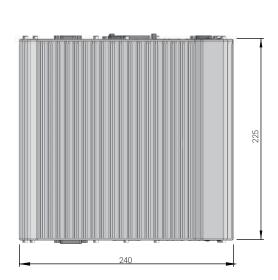




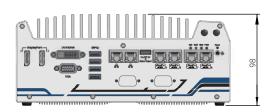
Appearance



Dimensions



Unit:mm



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.