# NVRmini

## Linux Embedded NVR Standalone

nuuo

The Intelligent Surveillance Solution

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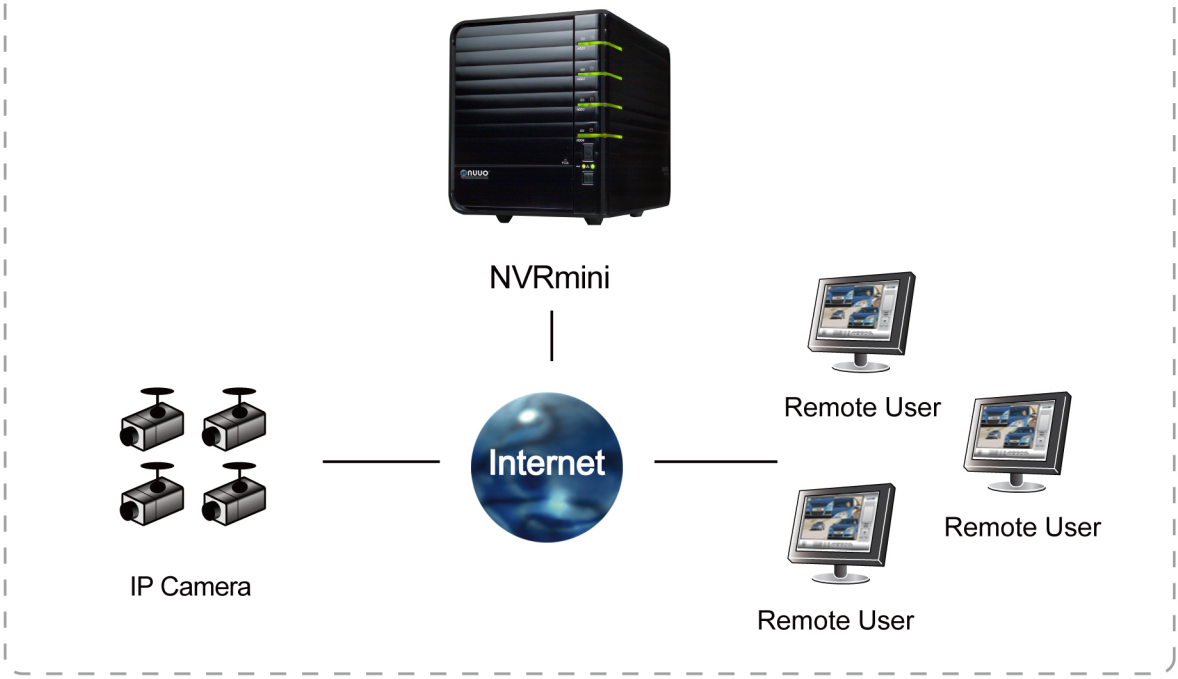
## Linux Embedded NVR Standalone


NUUO NVRmini is the world's pioneer Linux embedded NVR standalone for IP surveillance cameras (Network Cameras). With Linux embedded system, NUUO NVRmini offers the most stable, open, easy installation and free from virus attack platform for small to mid-size factories, buildings, supermarket, office, transportation system, and homes.

This unique and mini NVR-S supports 2/4 hard disks, and 4/8 IP cameras. It's an open platform, and will support more IP camera brands in the future. Applying Internet Explorer as its application, users can do the live view or playback functions everywhere through internet.

NVRmini is designed simple and can be your cost efficient solution when choosing. Utilizing NUUO specific NVR technology, it is featured with event trigger recording, online GUI recording schedule, instant playback system, intelligent search in 5 ways, real-time AV viewer, and I/O device integration. Initiative of NVRmini technologies, NUUO sets the bar of IVS industry.

## System Structure




## Features

- Support Megapixel cameras
- Open platform for 14 brands IP cameras
- Support D1, real-time recording
- Linux based NVR standalone
- Web-based network architecture
- Recording without PC turning on
- H.264 compression format
- Intelligent search in 5 ways
- Multi-channels playback
- I/O device integration
- Online GUI recording schedule
- Supported by NUUO CMS

## Application

- Supermarket
- Chain Store
- Transport
- ATM
- VRS
- E-home

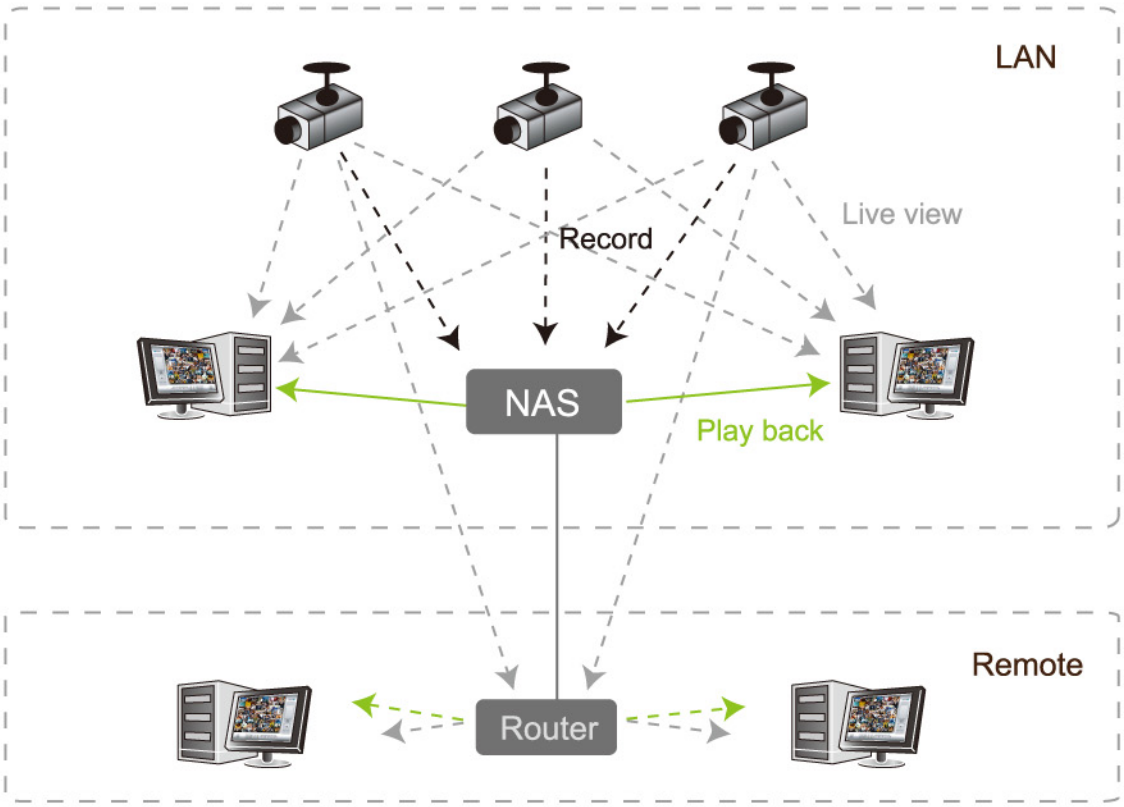
## Support Brands

ACTi Connecting Vision, AXIS Communications, Arecont Vision, Cisco, D-Link, IQinvision, level one, LINKSYS A Division of Cisco Systems, Inc., Lumenera corporation, MOBOTIX, Panasonic, SONY, VIVOTEK, ZAVIO

# Compare Nuuo NAS Structure with Other Brands'

When choosing NAS type NVR standalone, most people compare the number of channels and recording frame rates first. However, the structure of live view is more important when applying remote side live view.

- Other Brands' NAS structure




Cameras provide the live video streams to users directly, not through the NAS

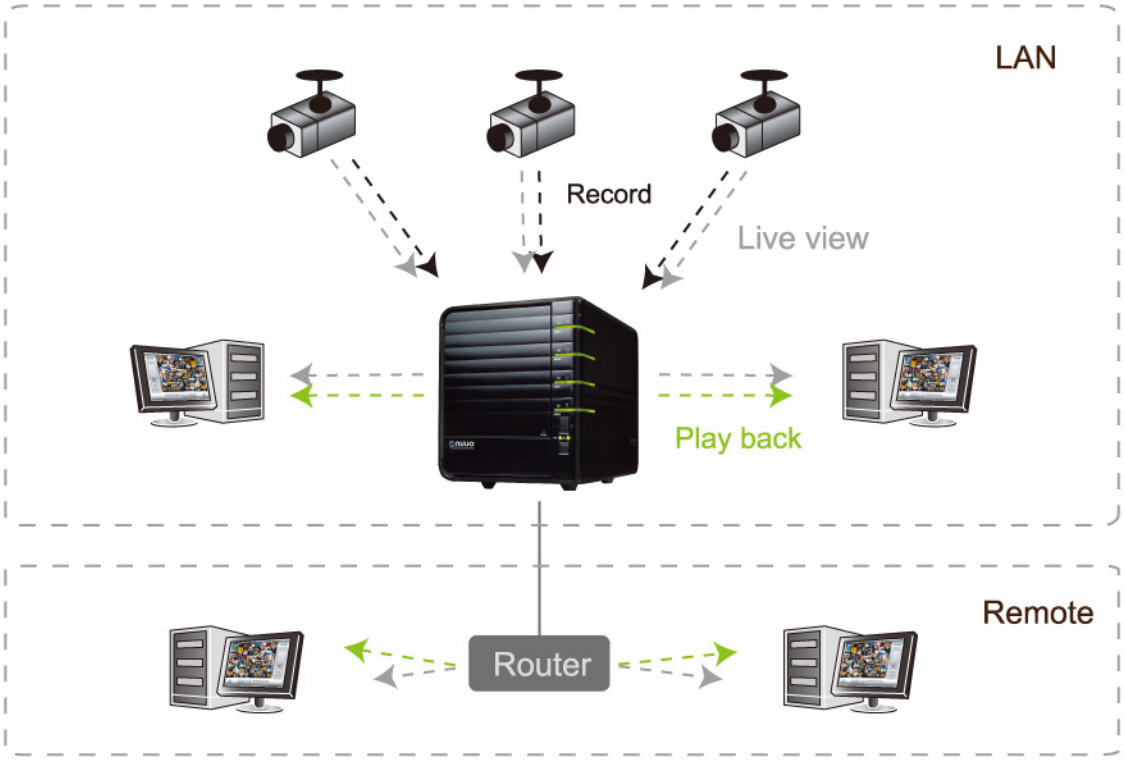
## LAN

Every user accesses to cameras for live viewing, while NAS accesses to cameras for recording. It means if there are 10 users need to do the live view, the cameras need to transfer data to 11 users in the same time (one for NAS recording). Under such heavy transference condition, it's very easy to cause cameras losing frames, which will decrease the stabilities of video recording quality.

## WAN

According to this structure, there are two ports need to be set for each camera in router when setting remote access. One port is for video and another is for audio. It means if there are 10 cameras set for remote access, users need to set 20 ports in their routers. Besides the troublesome of settings, sometimes the routers limit the number of the ports for remote access, which make users to access fewer cameras from remote side.

# NUUO NAS NVRmini Standalone




NAS directly connects to cameras. Users access NAS to receive the live streams

**LAN and WAN**

NAS asks for video and audio data from cameras then sends the data to users, no matter live view or playback. This kind of structure will occupy the resources of NAS CPU, however, the cameras don't need to transfer data to many users but NAS, which will decrease the usages of each camera and guarantee the stability of the recording quality.

## Comparison table - Nuuo NAS with Other Brands

| item / brand | NUUO | Other brands |
|---|---|---|
| The numbers of recording channels | **Less** | ★ **More** |
| Recording frame rate and live view frame rate | ★ **Stable with high recording quality** | **Unstable with lower recording quality** (Easily loss frame) |
| The number of ports need to be set in router (for remote side) | ★ **3 ports for NAS, live view and playback** | **The more cameras, the more ports should be set up.** (Need to open 2 ports (A/V) in router for each camera) |

# NAS NVRmini Detailed Features


## 1. Easy Installation Solution

Standalone system is always featured with its easy installation. Without installing surveillance software or assembling hardware, users just need to insert the disks then connect this unit to the internet. After connecting, users can find it through a specific application, and then login their units through browser. The whole installation process is simple, almost plug then play.

## 2. Web-based architecture

After installation, users can do their settings through the browser. Browser-based architecture let users access their units everywhere and anytime. In addition, some surveillance systems apply AJAX (Asynchronous JavaScript and XML). With this technology, web pages Don't need to be refreshed all the times when adjusting the settings on the page, therefore, web page can respond to users quickly, and users get information instantly.

## 3. Open Platform

When applying IP cameras, open platform is a very important factor to all users. An open platform can support more brands of IP cameras, which provides more extensibilities and flexibilities for users.

## 4. Linux Embedded System

The crash and virus issues of Windows platform always frustrate many users because of loosing recorded data. Linux system is featured with its stability and free from virus attack, which will provide users a reliable platform to record in faith.PC based solution to users who don't always view the image from cameras.which let users quickly find out what they really want.

## 5. High performance (D1, real-time)

With D1 and real-time recording, it's easy to provide high performance video. The recording resolution and frames per second become more important than PC based solution to users who don't always view the image from cameras.

## 6. Multi-channel Playback and Smart Search

Multi-channel playback let users compare image from different cameras simultaneously. With this function, users can easily track any objects from one camera to another. Search tool becomes more and more important in current surveillance system. Intelligent search tool includes motion detection, foreign object detection, missing object detection, lose focus, camera occlusion, etc, which let users quickly find out what they really want.

## 7. RAID System

Since this kind of surveillance system is recording always, the protection of the recorded video will become more and more important. RAID system provides surveillance system users a new solution for data protection. With its various storage types, users can choose the most suitable type to avoid data lost.

## NAS Specification

| Model | NV-2040 | NV-4080 |
|---|---|---|
| Recording Camera | 1-4 | 1-8 |
| Number of Drives | 2xSATA II | 4xSATA II * |
| RAID Level | RAID 0,1 | RAID 0, 1, 5, 10 |
| I/O Interface | 1xUSB 2.0 (for UPS) | 2xUSB 2.0 (for UPS) |
| LAN Transmission Speed | 10/100/1000 Mbps (RJ45) | 10/100/1000 Mbps (RJ45) |
| Dimension | 86.1 x 145.9 x 211.6 mm | 188.2 x 152.5 x 229.6 mm |
| Temperature | Operating: 5°C to 35°C | |
| Humidity | Operating: 10%-85% | |
| Compression Format | MPEG-4, M-JPEG (Depend on IP cam) | |
| Recording Performance | Up to 120 fps (NTSC) / 100 fps (PAL) at D1 | Up to 240 fps (NTSC) / 200 fps (PAL) at D1 |
| Remote PC CPU | Pentium 4 – 2.4 GHz | Pentium 4 – 2.8 GHz |
| Remote PC RAM | 512 MB | |
| User Interface | HTTP Web browser - Internet Explorer 6 or later/ NUUO Client Application Program | |
| Recording Type | Continuous record, Record by schedule, Manual record, Event trigger record, Digital input trigger record | |
| Remote Live View Control | Live view, preset/go, PTZ functions, remote I/O, snapshot | |
| Audio & Video Recording | Audio & video recording in synchronization | |
| Smart Search | General motion, Missing object, Foreign object, Focus lost, Camera occlusion | |
| OS Supported | Windows 2000/ XP/ 2003/ Vista | |
| Remote Live View channel | Live view maximum 16 channels at the same time | |
| IP Camera Brand Supportl | ACTi, Arecont, Axis, Cisco, D-Link, IQinvision, Levelone, Linksys, Lumenera, Mobotix ,Panasonic, Sony, Vivotek, Zavio | |

## about NUUO

The Intelligent Surveillance Solution enhanced surveillance cameras with advanced technologies. Its NVR / NDVR Hybrid technologies were formed by the RD team, client-care services, and multicultural sales.  NUUO is well known in the field of security and its software has been installed in over 30 countries with partners representing diverse industries.