

# NUUO Titan NVR

*Power. Speed. Redefined*

Enterprise Linux Recording Solution

Revolutionary High Megapixel Recording and Management System



Linux-embedded



F.R. Mega Optimized



250Mbps throughput



RAID 0,1,5,1+0



Command Chain



Dual Gigaports



Centralized E-Map



Event Respond



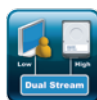
400 ch (live)  
100 ch (playback)



Image Fusion



Twin Client



Bandwidth control

Win / Mac Client



Browser



Windows Only

Mobile Apps

iPad / iPhone  
BlackBerry



android

Technology Partners

ONVIF

ImmerVision  
Enables 360°

## Camera Support



C Block, 18 Sihyuan st., Jhongheng District, Taipei, Taiwan. 10087  
Tel: +886-2-2362-2260 Fax: +886-2-2362-2296

5874 Greenwood Road, Shreveport, LA, USA. 71119  
Tel: +1-877-241-7035 Fax: +1-318-631-3004

 **NUUO**  
The Intelligent Surveillance Solution

## Design Highlights

### Megapixel Recording Powerhouse



NUUO Titan NVR utilizes a redefined recording engine named File Ring. File Ring is engineered from scratch to handle high megapixel recordings by changing how hard drives store and retrieve video data. It can process large amount of data throughput boosting Titan's recording performance to 64 2 - Megapixel cameras (H.264, 15 fps, moderate traffic).

No.	Name	Address	Conn. Status	Rec. Status	Framerate	Bitrate
45	Field Cam 45	192.168.0.159	OK	ON	8.0 fps	3200.0 Kbps
46	Field Cam 46	192.168.2.168	OK	ON	10.0 fps	3800.2 Kbps
47	Field Cam 47	192.168.1.128	OK	ON	9.0 fps	3350.8 Kbps
48	Field Cam 48	192.168.0.235	OK	ON	7.0 fps	3546.0 Kbps
49	Field Cam 49	192.168.1.240	OK	ON	8.0 fps	3500.0 Kbps
50	Field Cam 50	192.168.0.158	OK	ON	10.0 fps	3876.0 Kbps
51	Field Cam 51	192.168.0.160	OK	ON	9.0 fps	3200.0 Kbps
52	Field Cam 52	192.168.0.161	OK	ON	8.0 fps	3800.2 Kbps
53	Field Cam 53	192.168.1.162	OK	ON	10.0 fps	3350.8 Kbps
54	Field Cam 54	192.168.1.163	OK	ON	9.0 fps	3546.0 Kbps
55	Field Cam 55	192.168.0.164	OK	ON	7.0 fps	3500.0 Kbps
56	Field Cam 56	192.168.1.165	OK	ON	8.0 fps	3876.0 Kbps
57	Field Cam 57	192.168.2.166	OK	ON	10.0 fps	3200.0 Kbps
58	Field Cam 58	192.168.1.167	OK	ON	9.0 fps	3800.2 Kbps
59	Field Cam 59	192.168.0.168	OK	ON	8.0 fps	3350.8 Kbps
60	Field Cam 60	192.168.1.170	OK	ON	10.0 fps	3546.0 Kbps
61	Field Cam 61	192.168.0.171	OK	ON	9.0 fps	3500.0 Kbps

64x 5-Megapixel recording utilizing F.R. Mega Optimized recording engine

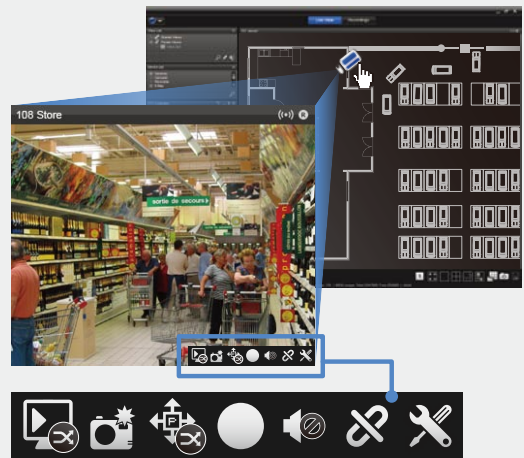
### Central Remote Management



Titan NVR is built with highly efficient data and event management architecture. User can select smaller bandwidth profile for remote viewing to eliminate internet bottlenecks without affecting the recorded videos.



In addition, Titan is equipped with NUUO Command Chain Technology which can synchronize user accounts and critical events across 100 servers, 400 channel live views and 100 channel playback simultaneously.



Centralized E-Map with video popup and tool bar for users to quickly access commonly used functions

### Turn, Scale and Stitch Cameras Together



Experience a world without camera dead angles and narrow hallway views. NUUO Image Fusion Technology can manipulate camera views by changing its viewing angle and image size make viewing easier in both live view and playback. Moreover, users can stitch multiple cameras together to form a unified single view from up to 10 different cameras.

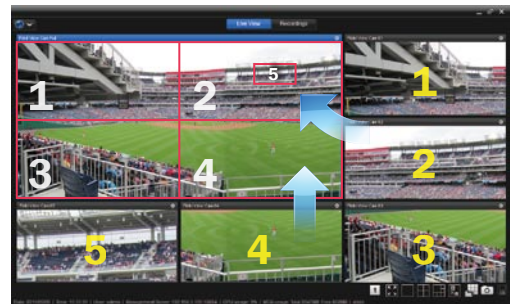


Image Fusion combines camera 1 to 5 into a single view for easier viewing

## Success Stories

#### Industrial



LG Powercom  
356CH (Korea)

#### Hospital



El Zeraayeen Hospital  
560CH (Egypt)

#### Retail



Macanna Inc.  
400CH (Taiwan)

#### Education



Fujian Exam Center  
18,000CH (China)

#### Transportation



RapidKL  
670CH (Malaysia)

#### Government



TRE Parana  
970CH (Brazil)

#### Hotel



Cristal Hotel  
100CH (USA)

## System Architecture



## Server Highlights

- Linux embedded
- Support 41 brands of IP manufacturers and over 1125 camera models ([Http://support.nuuo.com](http://support.nuuo.com) for details)
- Onvif compatible
- Record up to 64 megapixel cameras (through license upgrade)
- High throughput (250Mbps)\*
- NUUO Command Chain Technology – Synchronize user accounts across 100 servers through a single server instantly
- Remote server configuration
- Recording in external storage (DAS, iSCSI)
- Centralized I/O and event response systems
- Dual gigabit Ethernet ports
- Camera Dual (2nd) Stream support ([Http://support.nuuo.com](http://support.nuuo.com) for details)
- Backup to FTP
- Support continuous, scheduled, event based and I/O based recording
- Synchronized audio and video recording
- Support full SDK

## Client Highlights



- Windows and Mac compatible
- Manage up to 100 servers, 400 channels live view and 100 channels playback simultaneously.
- NUUO Image Fusion Technology – stitch up to 10 cameras together to form a consecutive single view for easier viewing
- Immersion Enabled 360° PTZ
- Support Stream Profile for remote live view bandwidth control (Original / 300 kbps / 100 kbps)
- Digital and Optical PTZ
- Popup event playback
- Centralized E-map
- Centralized I/O Panel and Event Panel
- Public View and Private View for each user
- View Tour to loop through selected Views
- Instant Playback
- Save video clips into AVI or ASF format
- Intelligent Search in playback to quickly find the subject of interest
- Twin Clients to support identical, full featured software client and web client
- Joystick

## External Supports

- External storage support through 3rd party DAS, iSCSI ([Http://support.nuuo.com](http://support.nuuo.com) for details)
- Support up to 256 NUUO I/O boxes (SCB-C24/C26/C28)
- Support APC Uninterrupted Power Supply (Smart-UPS 750 VA / APC Back-UPS 500 ES / APC Smart UPS 1500 / APC Smart UPS 3000)




\*Max recording throughput (250 Mbps): Approx. 64ch 5-Megapixel H.264 cameras at 10 fps when server is streaming out 16 channels of live video without playback.  
Optimal recording throughput (150 Mbps): Approx. 64ch 2-Megapixel H.264 cameras at 15 fps when server is streaming out 128 channels of live video and 16 channel playback.

## Specification

Model		Titan NVR	
Product Image		 <b>Tower</b>	 <b>Rack-mount 1U</b>
Part Number	Server	NT- 4040	NT- 4040R
	IP License	NT-TITAN-UP-01 / NT-TITAN-UP-04 / NT-TITAN-UP-08 / NT-TITAN-UP-12 / NT-TITAN-UP-16	
Max IP License (through upgrade)		64	
Base IP License (included in server)		4	
Server O/S		Embedded Linux	
Video Compression		H.264, MPEG4, MJPEG	
Recording Performance		250 Mbps (MAX), 150 Mbps (OPTIMAL) *	
Removable HDD Trays		4x SATA II	
HDD Support		3TB per drive (Max 4 drives)	
RAID		0, 1, 5, 10	
External Storage		DAS (AXUS FiT 300, AXUS FiT 500, PROWARE EP-2123-UA), iSCSI (Promise SmartStor NS4600, Proware EN-3166JS6H-NQ)	
External Ports		6x USB 2.0 (for mouse, UPS); 1x eSATA (for DAS)	
Ethernet (NIC)		2x Gigabits Ports	
Voltage		100 - 240V	
Power Consumption		200W	
Dimensions (H x W x D)		210 x 200 x 320 mm	44.5 x 441 x 428.8 mm
Weight (without HDD)		5.5 kg (12.13lbs)	6.235 kg (13.75lbs)
Temperature		0°C ~ 40°C (32°F ~ 104°F)	
Humidity		5 ~ 95 RH	
Supported Language		Chinese (Simplified), Chinese (Traditional), Czech, Dutch, English, Finnish, French, German, Hungarian, Italian, Japanese, Korean, Polish, Portuguese (Brazil), Russian, Serbian, Spanish, Swedish	

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### Client System Minimum Requirement

Part Number	NT- 4040	NT- 4040R
OS	Windows XP (32-bit) / Win7 (32 and 64-bit) / Mac OS X v10.6, 10.7	
CPU	Intel Core 2 Duo, 2.6GHz	
RAM	1GB	
LAN Transmission Speed	10/100/1000 Mbps (RJ45)	
Remote Client	NuClient (Software), NuClient (Web), iViewer (Mobile App)	
Mobile iViewer Platform	 iPad / iPhone  	

## About NUUO

Our core value is to help improve your overall experience in integrating, installing, serving and educating your customers. NUUO is one of the very first pure CCTV manufacturer specializing in development of hybrid and IP recording technologies. There are currently over 97,000 installations worldwide that are secured by our IP and hybrid systems. We promise to continue bring reliability, innovation and excitement to you through passion and dedication.



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www.nuuo.com sales@nuuo.com

Made in Taiwan  
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