

# Trusted Video Management

The Name You Trust in Video-centric Surveillance Solution



# We are NUUO

## About NUUO

Founded in 2004, NUUO Inc. is one of the leading global surveillance solution providers known for its reliability, prompt service and innovative spirit. NUUO's VMS and NVR solutions offer comprehensive recording, monitoring, and seamless 3<sup>rd</sup> party solution integration for IP and analog cameras.

NUUO is committed to provide sophisticated yet powerful video-centric solution to its clients. With over 100,000 global installations, NUUO has a solution in place for every vertical industry including retail, education, industrial, transportation, hospitality, government and more.

NUUO headquarters in Taiwan houses over 200 talented engineers and business professionals. With an U.S. branch office and other field representatives in South Africa, India, and Europe, NUUO offers unparalleled reliable support for all global regions.

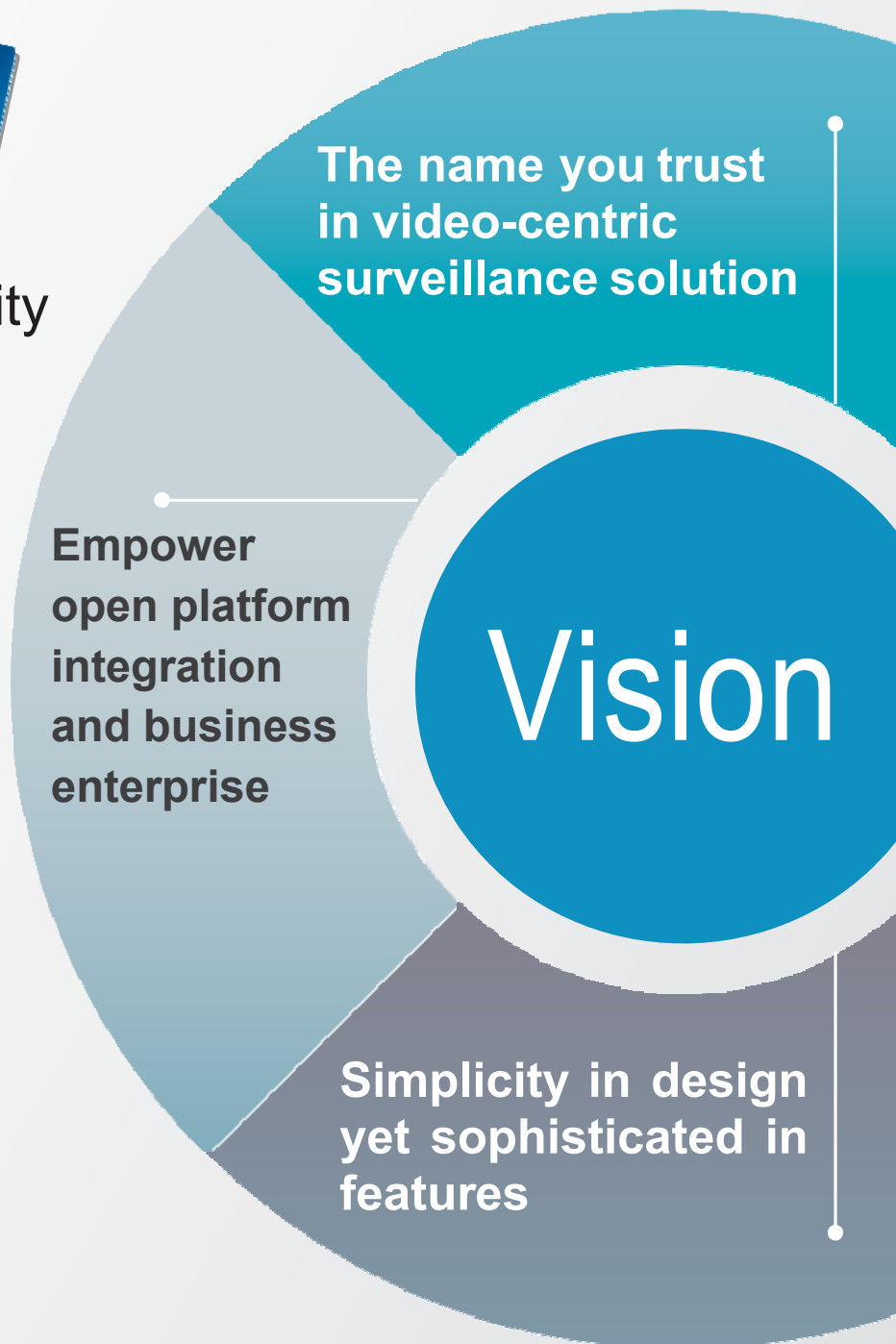


## Embarking on Diversity

2014 marks the company's 10th year anniversary. For the past 10 years NUUO has invested an incredible amount of effort making NUUO into a global brand. We now have a global branch office in the U.S. and representatives in Africa, India, Europe, and other parts of the world. NUUO is now in a position to make real impact in the industry and this translates to better products and services for our customers. In the coming years we will be diversifying our resources into other areas such as localization, marketing, and R&D powers. We invite you to share our success and joy celebrating our anniversary.

*Cardy Huang*

Cardy Huang  
CEO, NUUO Inc.

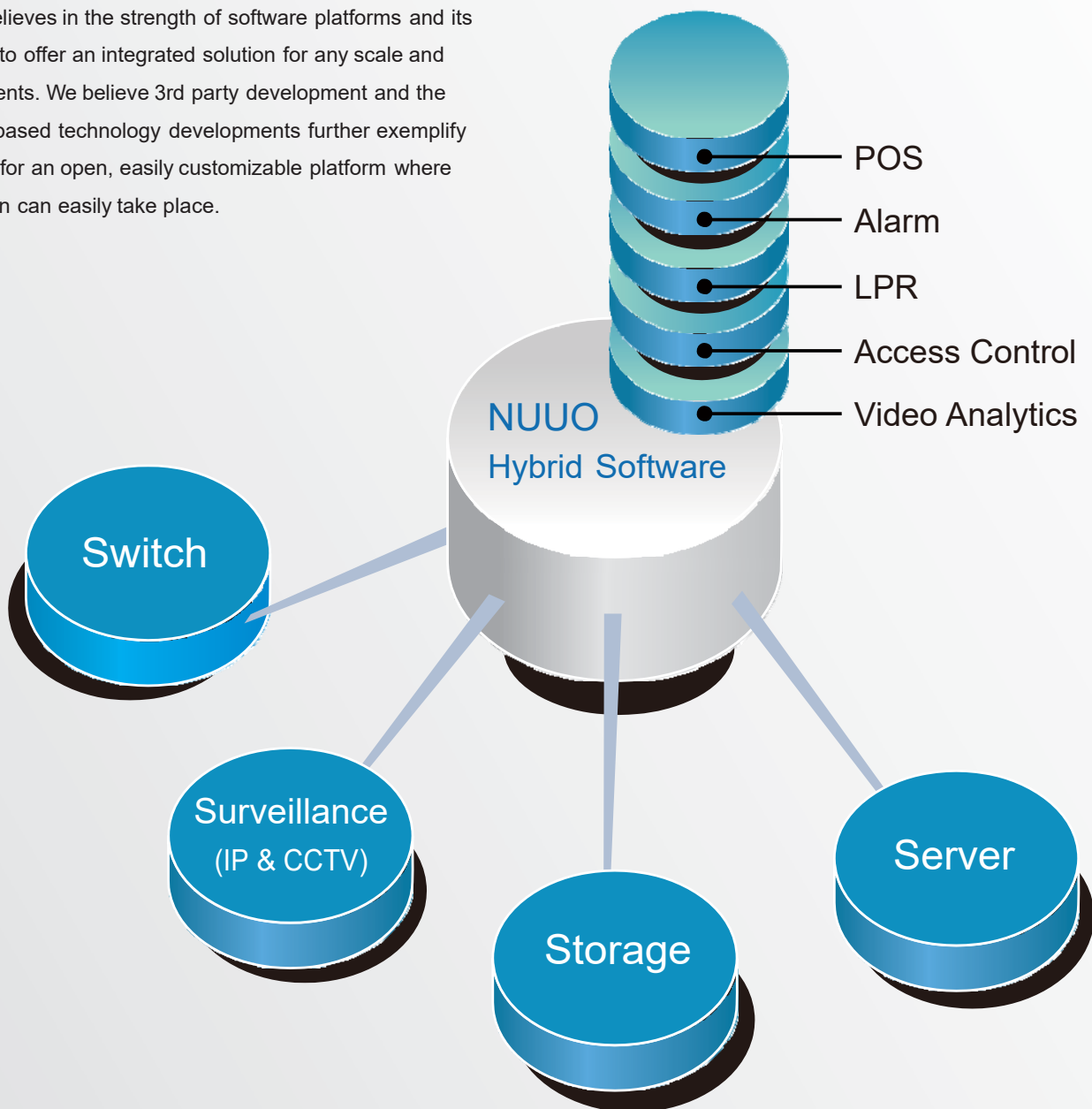


# Total Integration & Management

## PLATFORM AND BEYOND

A video surveillance ecosystem is made up of 5 different segments consisting of surveillance, switch, storage, server, and software. The market calls them the 5S of Surveillance. Within the 5 segments software usually takes up only a minor part of the entire project but plays a critical role in securing all the other components together.

NUUO believes in the strength of software platforms and its flexibility to offer an integrated solution for any scale and requirements. We believe 3rd party development and the trend IP-based technology developments further exemplify the need for an open, easily customizable platform where integration can easily take place.



## Open Platform

NUUO is committed to maintain an open platform software-centric focus on NVR and hybrid solutions to integrate products from multiple vendors. NUUO products are currently compatible with over 90 brands and 1800 IP camera models, with additional free monthly updates guaranteed to support future camera models. NUUO's open SDK policy encourages integration with other solutions such as LPR, Access Control, IVS, POS. We strive to provide our clients with best value solutions.

## The Reliable Choice

NUUO have VMS solutions that work for your needs, big or small. We offer trusted solutions through our complete portfolio that scales well from small businesses to large enterprises. We have developed solutions that offer both competitive pricing and features, and you will be pleased to find that NUUO goes the extra mile beyond the written spec sheets. Prompt customer care, periodic product updates, and continued innovation makes our product a superior choice.

## Simple User Experience

NUUO places great emphasis on user experience. We design our solutions to be sophisticated enough to solve tough problems yet simple enough to use by anyone. NUUO's NVRs are easy to install and use even for users with no IP surveillance product experience. We designed our software interface to be intuitive and easy to customize based on individual preferences. This saves time, cost, and efforts for our clients.

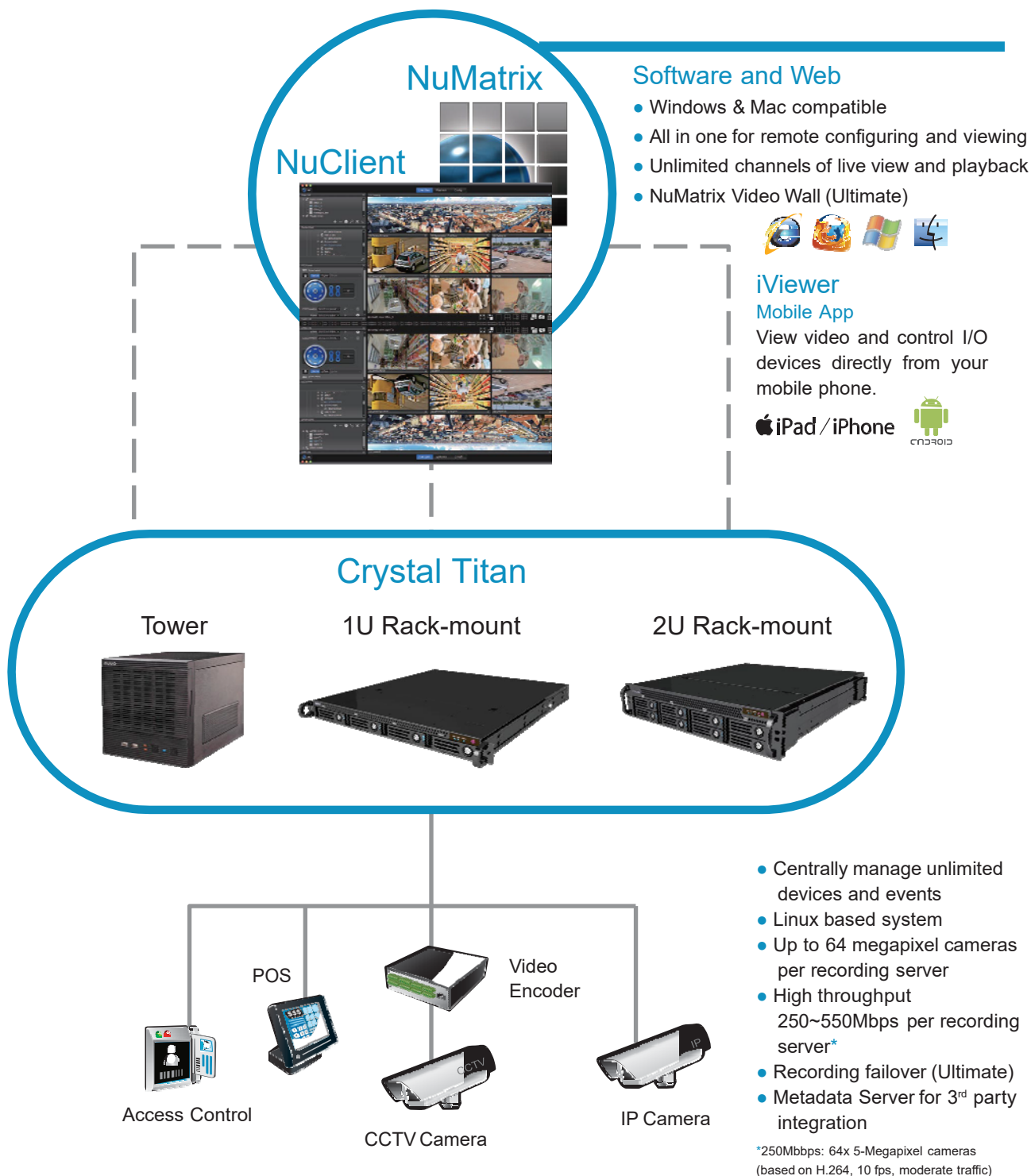
## Associations



# NUUO Solutions

## CRYSTAL FAMILY

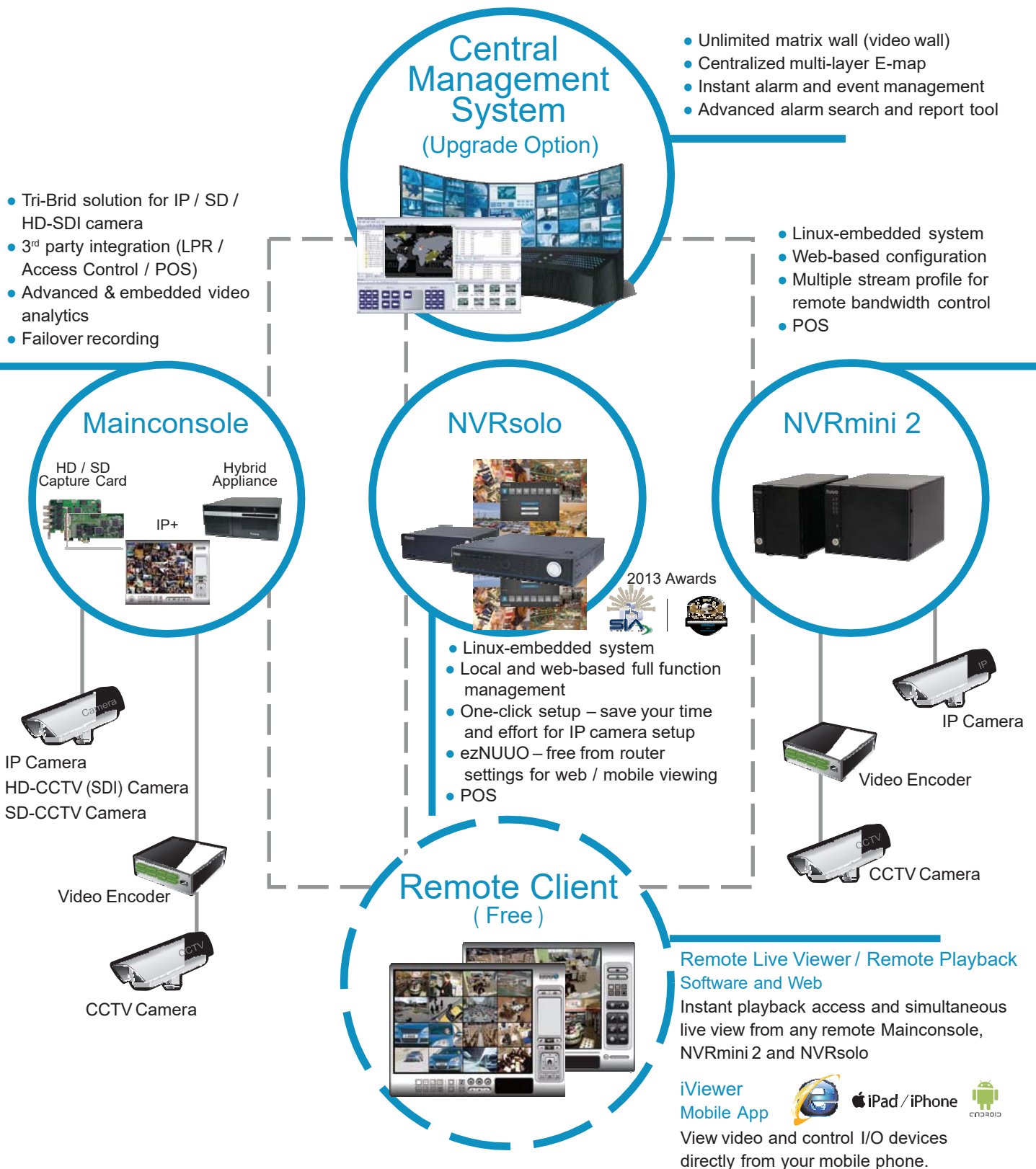
NUUO Crystal Family solutions provide high efficiency megapixel recording and management platform. It utilizes NuClient which is a simple to operate yet powerful remote client that is compatible with both Mac and Windows operating systems.





# MAINCONSOLE FAMILY

NUUO Mainconsole Family is a truly complete Tri-Brid recording and management platform (IP, HD-SDI, SD-CCTV). It offers unparalleled freedom in system design and advanced feature sets to satisfy diverse project requirements.



# Vertical Solutions

## COMPREHENSIVE SOLUTIONS YOU CAN TRUST

NUUO understands the unique needs and challenges of your industry. We don't engineer one-size-fits-all solutions but rather uniquely tailor made to best accommodate your needs. NUUO vertical solutions are streamlined and simple to implement yet yields powerful results.

NUUO offers advanced retail solution with POS integration that also utilizes advanced video analytic solutions to complete a total solution compassing all aspects of retail monitoring, recording, and profit shrink prevention. Our ever advancing innovation can also bring immense benefits to other vertical markets such as industrial or education to reduce crime and raise productivity. Choose NUUO and experience how our advanced solutions can benefit your business.

A photograph of a grand, classical government building with a large dome and many columns.

### Government

A photograph of a modern, curved building with a glass facade, reflecting the sky and surrounding environment.

### Hospitality

A close-up photograph of a hand inserting a credit card into a banking machine.

### Banking

A photograph of a modern, multi-story residential building with balconies, situated next to a canal with several boats.

### Residential


A photograph of a high-speed train with a red and white livery, stopped at a train station platform.

### Transportation




## Retail Solution

NUUO has a total solution in place to prevent retail loss. Our highly integrated video solution is designed to reduce profit shrinks and increase store profitability. Top international superstores to convenient stores and restaurants can all benefit from NUUO Retail Solution. With the most important business impacting features in mind, we packed features that will jump start your revenue

Top Retail Surveillance	NUUO Retail Solution	
Internal Theft	POS Fraud Detection System	
Intrusion / Break-in	Virtual Tripwire (Outdoor / Indoor, thermal, IR) Loitering Deterrence	
Gas Drive-offs	LPR Integration	
Customer Conversion Rate	Adv. People Counting and Report System	
Video Coverage and Image Detail	Megapixel Fisheye Dewrapping Arecont SurroundVideo Immervision Panomorph	


## Education Solution

Safety and security remains the highest concern for students, parents, and educators alike. School administration is charged with the responsibility of ensuring safety of their students and staff. NUUO solution is easy to set up and flexible enough for each individual campuses. Our solution can prevent vandalism, petty theft, and even spot dangerous items or criminal activities on campus. Choose NUUO Education Solution and know that your campus is safe.

Top Education Surveillance	NUUO Education Solution	
Common Petty Theft	Object appear and disappear function	
Intrusion / Break-in	Virtual Tripwire (Outdoor / Indoor, thermal, IR)	
Suspicious Vehicles on Campus	LPR Integration	
Student Body Safety	Adv. People Counting and Report System	
Gang Activity	Loitering, people counting functions	

## Industrial Solution

Industrial sites present a security challenge for all surveillance parties involved. Any industrial sites could contain expensive equipments, commercially sensitive information, or valuable materials that require the highest grade of security. NUUO Industrial Solution utilizes the latest cutting edge video analytics to achieve superior protect for your business.

Top Industrial Surveillance	NUUO Industrial Solution	
Equipment Safety	Tripwire, presence functions	
Intrusion / Break-in	Virtual Tripwire (Outdoor / Indoor, thermal, IR) Loitering Deterrence	
Valuable Materials	Object appear and disappear function	
Premise Safety	Zoning & Hot Zone functions	
Suspicious Activity	Loitering	

# Crystal

SECURE • POWERFUL • OPEN



Crystal is the product that represents the next stage in VMS evolution. Rock solid, easily manageable, with powerful recording and viewing options available. Featuring revolutionary modular system structure that is made to handle large project size, Crystal is the ideal choice for your enterprise. Featuring technology that focuses on delivering stable video recording performance, recording failover, and 3<sup>rd</sup> party integration choice, you will be impressed with the stability and flexible options with Crystal.

Windows/ Mac Client



Browser



Mobile Apps



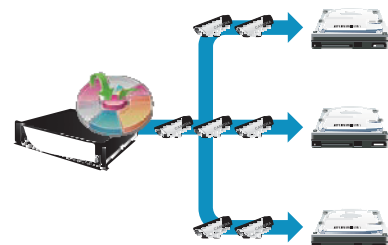
## Centralized Management

Crystal features support for unlimited numbers of cameras, 3<sup>rd</sup> party access control systems, POS, and I/O devices. Any number of users and user groups may be assigned for different levels of management rights, monitoring points, and event processing. Combined with the intuitive NuClient software to provide centralized live view and playback video stream, Crystal provides user with total control over the entire system at their finger tips. Crystal also comes with failover function to safeguard server uptime and performance consistency. A cornerstone of any enterprise level solution, Crystal's N + M failover mechanism allows for servers to be assigned and managed as clusters, so recording can be further protected efficiently.



## Megapixel Recording Powerhouse

Utilizing custom recording technology known as File Ring, Crystal is able to handle high megapixel recordings by redefining how hard drives store and retrieve video data. File Ring is a custom technology built from the ground up. Able to maintain data throughput up to 250 Mbps for a single volume, 400 Mbps for two volumes, and 500 Mbps for three volumes, Crystal is a true recording powerhouse.



## Cutting Edge Video Technology

Crystal supports an unlimited number of video wall displays up to 100 channels per monitor. With built-in View Wizard, changing view configuration is as easy as dragging and dropping different view grids. Crystal also features Image Fusion to stitch multiple views into one single picture. Combined with PTZ joystick control, Fisheye Dewarp algorithm, and video tour modes, reviewing and monitoring just became simpler than ever.



# Feature Highlights

## Server Highlights

- Centralized management to manage unlimited devices and events on unified NuClient.
- Linux based system
- Records up to 64 megapixel cameras per recording server
- High throughput (250~550Mbps) supporting up to 64 channels of 5-Megapixel cameras<sup>\*2</sup>
- Recording failover (Ultimate, v2.1 and later)
- Metadata Server for 3<sup>rd</sup> party integration - POS, Access Control<sup>\*1</sup>
- Supports over 2000 camera models from more than 80 brands, and RTSP video stream<sup>\*1</sup>

Enterprise Management	<ul style="list-style-type: none"> <li>• Built-in Management Server, Recording Server and Metadata Server in one Crystal Titan</li> <li>• Centralized I/O and event respond systems</li> <li>• Support NTP; Management Server can be a time server to make all system time consistent</li> <li>• Volume group to distribute cameras to assigned volumes</li> <li>• Individual Retention Condition (IRC) per device</li> <li>• PTZ control priority</li> <li>• Powerful authorization for device permission and function privilege</li> </ul>
Stability	<ul style="list-style-type: none"> <li>• Support RAID 0,1, 5, and 10</li> <li>• Support redundant power (CT-8000RP)</li> <li>• Support hardware watchdog (CT-8000R and CT-8000RP) and software watchdog</li> </ul>
Open Platform	<ul style="list-style-type: none"> <li>• Onvif Profile compatible</li> <li>• Camera multiple stream support<sup>*1</sup></li> <li>• Multiple codec support : H.264,MJPEG, MPEG4 and MxPEG</li> </ul>
Value-added Benefits	<ul style="list-style-type: none"> <li>• Synchronized audio and video recording</li> <li>• Stream up to 256ch live viewing connections per server to multiple clients simultaneously</li> <li>• Camera edge motion detection</li> <li>• Support continuous, scheduled, event based and I/O based recording</li> <li>• Schedule-based and input-triggered boosting record</li> <li>• Schedule-based user management</li> <li>• Scheduled Backup video to FTP location</li> <li>• Watermark for video verification</li> <li>• Dual gigabit Ethernet ports</li> </ul>

## Client Highlights

- Cross platform for Windows and Mac
- All in one NuClient for remote configuring and viewing
- Unlimited channels of live view and playback
- Unlimited channels of NuMatrix Video Wall (Ultimate)

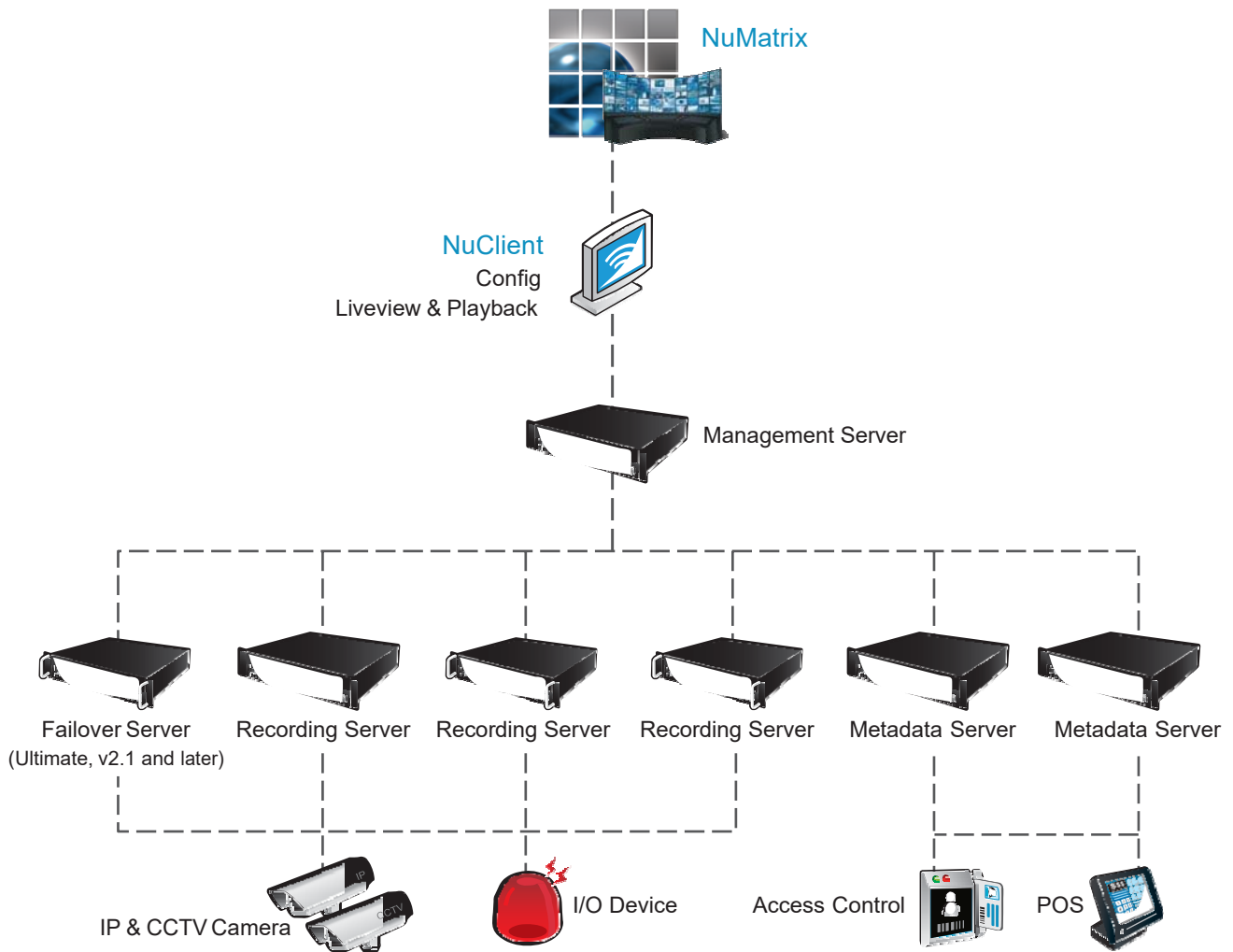
Enterprise Management	<ul style="list-style-type: none"> <li>• Centralized E-map</li> <li>• Centralized I/O Panel and Event Panel</li> <li>• Public and Private View/View profile for each user</li> <li>• View Tour to loop through selected Views</li> </ul>
Open Platform	<ul style="list-style-type: none"> <li>• Export video with 3<sup>rd</sup> part data overlay</li> <li>• Generic Fisheye Dewarp technology for all fisheye cameras</li> <li>• Panorama 360° PTZ — Immervision and VIVOTEK fisheye camera</li> <li>• Support multiple stream profile</li> <li>• Auto and simultaneously switch stream profile</li> </ul>
Value-added Benefits	<ul style="list-style-type: none"> <li>• Support mobile client for iPhone / iPad / Android</li> <li>• NUUO Image Fusion Technology —stitch up to 10 cameras together</li> <li>• Layout Wizard - customized layout for viewing</li> <li>• Instant Playback on live view, e-map and event list</li> <li>• Twin Clients to support identical, full featured software client and web client</li> <li>• Support digital and optical PTZ</li> <li>• Support preset and patrol</li> <li>• Save video clips into AVI, ASF and MOV</li> <li>• Intelligent Search in playback</li> </ul>

## External Supports

- External storage through 3<sup>rd</sup> party DAS, iSCSI<sup>\*1</sup>
- Support third party POS and Access control<sup>\*1</sup>
- Support up to 256 NUUO I/O boxes per server
- Support APC Uninterrupted Power Supply

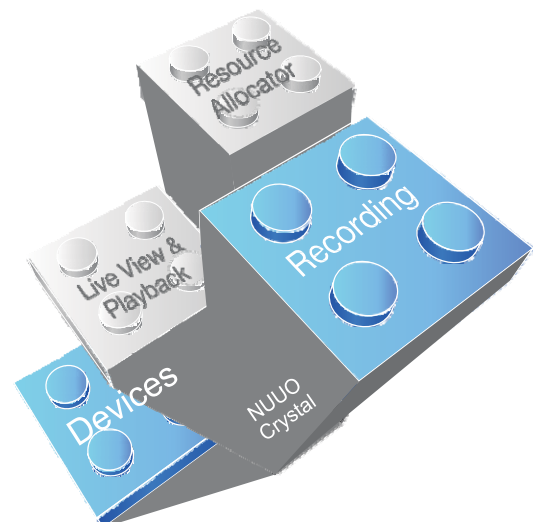
<sup>\*1</sup>. Please refer to <http://www.nuuo.com/wiki.php> for details.

<sup>\*2</sup>. 250Mbps: 64x 5-Megapixel cameras (based on H.264, 10 fps, moderate traffic)



## Advanced Modular Design




Crystal features revolutionary modular system structure design. The benefits of a modular system design is that not only can it be managed centrally, down on a process level every module can also work independently of each other. So when a process fails, only that process module shuts down and the rest of the system will continue to function normally, further enhancing Crystal's system stability.





# Specification

## Crystal Titan

Product Image				
Type	Tower	Rack-mount 1U	Rack-mount 2U	Rack-mount 2U (Redundant Power)
Model Name	CT- 4000	CT- 4000R	CT- 8000R	CT- 8000RP
Max IP License	64			
License Type	Enterprise / Ultimate / Metadata License			
Server O/S	Linux based			
Video Compression	H.264, MPEG4, MJPEG, MxPEG			
Recording Performance	250 Mbps (MAX), 180 Mbps (OPTIMAL)*		250 Mbps / 1 Volume 400 Mbps / 2 Volumes 550 Mbps / 3 Volumes	
Removable HDD Trays	4x SATA II		8x SATA II	
HDD Support	4TB per drive (Max 4 drives)		4TB per drive (Max 8 drives)	
RAID	0, 1, 5, 10			
External Storage	DAS, iSCSI ( <a href="http://www.nuuo.com/wiki.php">http://www.nuuo.com/wiki.php</a> for details )			
External Ports	6 x USB 2.0 (for mouse, UPS); 1 x eSATA (for DAS)	4 x USB 2.0 (for mouse, UPS); 1 x eSATA (for DAS)	2 x USB3.0, 2 x USB2.0, 1 x eSATA (for DAS)	
Ethernet (NIC)	2 x Gigabits Ports			
Voltage	100 - 240V			
Power Consumption	200W		400W	400W (Redundant Power)
Dimensions (H x W x D)	212 x 200 x 318 mm	45 x 447 x 429 mm	88 x 447 x 583 mm	88 x 447 x 583 mm
Weight (Without HDD)	5.3 kg (11.7 lbs)	6.0 kg (13.2 lbs)	11.4 kg (25.1 lbs)	13.2 kg (29.1lbs)
Temperature (Operating with HDD)	0°C ~ 40°C (32°F ~ 104°F)			
Humidity (Operating)	5% ~ 95%			
Supported Language	Czech, Chinese (Traditional), Czech, English, Finnish, French, Japanese, Korean, Polish, Portuguese (Brazil), Russian, Spanish, Thai, Turkish			

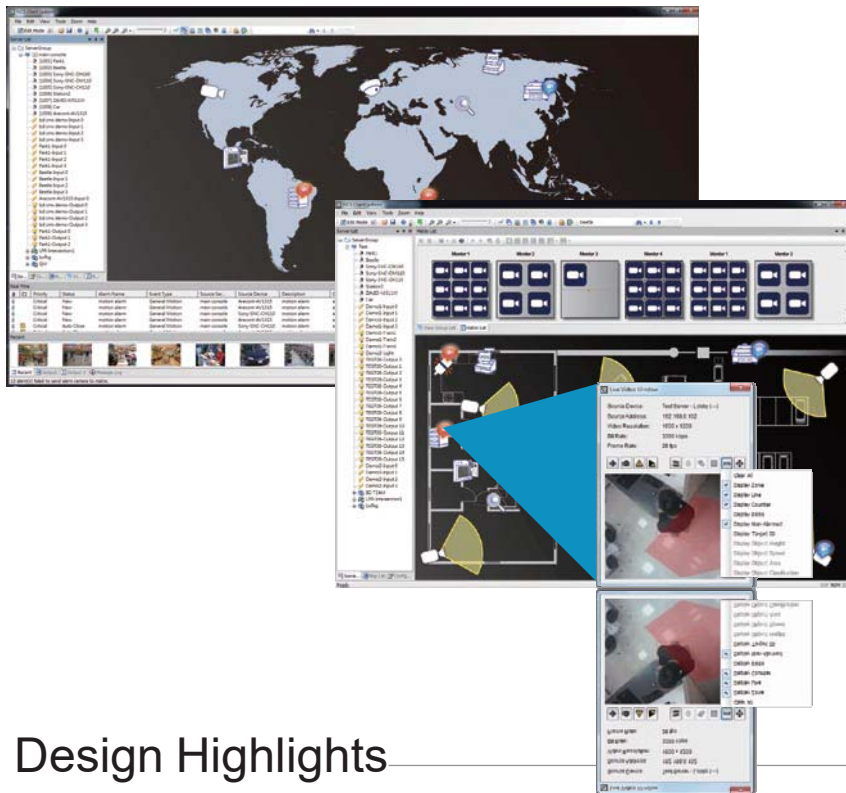
\*Max recording throughput (250 Mbps): Approx. 64ch 5-Megapixel H.264 cameras at 10 fps when server is streaming out 16 channels of live video without playback.  
Optimal recording throughput (180 Mbps): Approx. 64ch 2-Megapixel H.264 cameras at 15 fps when server is streaming out 128 channels of live video and 16 channel playback.

## License Type

License	Part Name	Description
Ultimate	CT-CAM-ENT	The most powerful control for multi-server and high channel project, featuring NuMatrix and Recording Failover .
Enterprise	CT-CAM-ULT	Efficient central management, featuring flexible 3rd party integration and volume group for higher throughput and risk management.
Upgrade	CT-CAM-UPU	Easily upgrade from Enterprise to Ultimate, without resetting the whole system.
POS	CT-POS-Generic	The generic license for POS device via TCP-IP or POS box connection.

# Central Management System

## SOPHISTICATED • RESPONSIVE • UNIFIED



NUUO central management system unifies all your products under one easy, clear management console. This is the perfect solution to manage large scale installations and the ideal way to manage alarms. Easily schedule backups, edit alarms, and monitor all locations under one central interface.

## Design Highlights

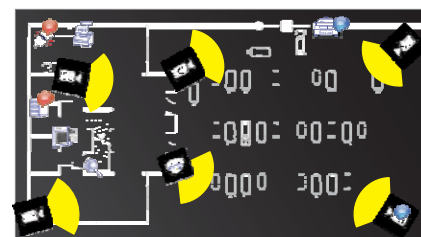
### Intuitive Operation

CMS interface has been designed to be intuitive and efficient. Quickly find and access all the essential system functions that matters to you. Uncluttered interface and layout means you can spend less time micro-managing and more time on other critical issues.



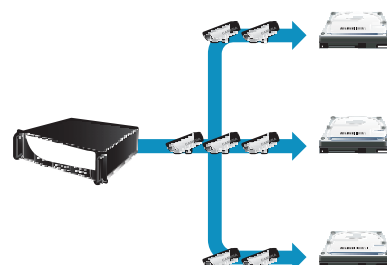
### Central Alarm Management

An indispensable tool in central monitoring and event managements, CMS alarm system supports a number of essential 3<sup>rd</sup> party functions and integrates them flawlessly. POS, LPR, and Access Control alarms are all supported. CMS alarm management also features a centralized interface so you can efficiently monitors all alarms under one unified system.

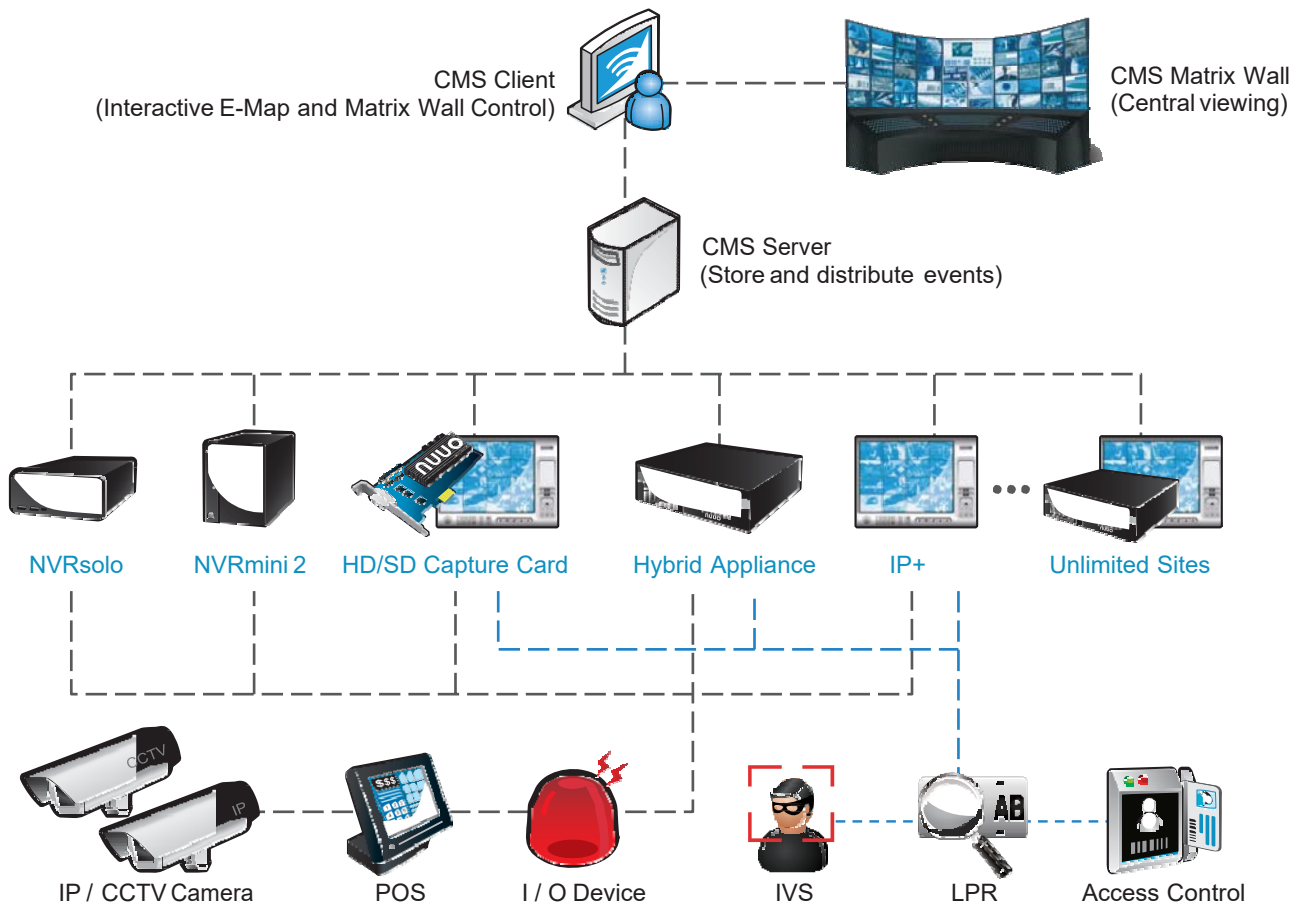


### Centralized Backup

Managing backups no longer have to be a daunting task. NUUO CMS can centrally manage all your remote backups. You can even specify back up periods and assign remote backup locations.



# System Architecture



## Feature Highlights

### Centralized Server Management

- Supports over 1,000 cameras, I/O, POS, LPR and access control devices from multiple servers
- Detailed event management and report system
- Support advanced & embedded video analytics
- Generic dewarp (fisheye)
- 4 levels of alarm priorities
- Emergency recording to central control room
- Advanced data-mining and event search tool
- Build-in remote desktop tool
- Support Windows Active Directory
- Users and user groups with independent privileges
- Schedule profile (User, Event)
- Auto backup
- Two-way audio for Mainconsole (CMS 2.0 or above)

### Centralized Matrix Wall

- Unlimited Matrix Wall stations
- Display up to 64 channels per Matrix Wall monitor
- Matrix Wall control panel
- Simple drag and drop operation
- View tour and alarm tour, grid tour
- View profiles
- PTZ support

### Centralized E-Map

- Unlimited layers
- Direct control of camera and I/O devices from all Mainconsole Family recorders
- E-Map popup window for alarm, live view and playback
- Remote video backup and export
- Instant playback and event playback
- Joystick and keyboard support

## License Type

Model Name	Description	License
NCS-BASE	CMS Base license	Base includes 48 cameras + 8 I/O licenses
NCS-CN-CAM	Central Management System Connection - Camera	1 license of camera
NCS-CN-IO	Central Management System Connection - I/O	1 license of I/O connection
NCS-CN-POS	Central Management System Connection - POS	1 license per register
NCS-CN-LRP	Central Management System Connection - LPR	1 license per lane
NCS-CN-AC	Central Management System Connection - Access Control	1 license per door
NCS-CN-IVS	Central Management System Connection - IVS	1 license of IVS

# Mainconsole

FLEXIBLE • INTELLIGENT • POWERFUL



NUUO Mainconsole is the best choice when you have existing older analog systems but wants to upgrade to IP cams. It provides seamless integration between older and newer types of cameras. Mainconsole is also flexible. Choose from software + capture card option or software + capture card + certified hybrid machines to ensure optimum performance. The configuration option is limitless.

Windows Client



Browser



Mobile Apps

Apple iPad / iPhone



## Design Highlights

### Analog & IP Cam Compatible

With video capture cards that allow connection using Ethernet or coaxial cables to connect, NUUO Mainconsole is able to handle inputs from different types of cameras regardless of their type.



### Advanced Video Analytics

NUUO Mainconsole comes with built in video analytics (IVS) function. This means as long as you connect a supported camera, you can enjoy the benefits of IVS even if the camera itself does not have such functions included!



NUUO IVS in Retail solution: Virtual tripwire – detect perimeter intrusion, unauthorized access to counter or secure zones; monitor instantaneous customer volume...and more other functions.

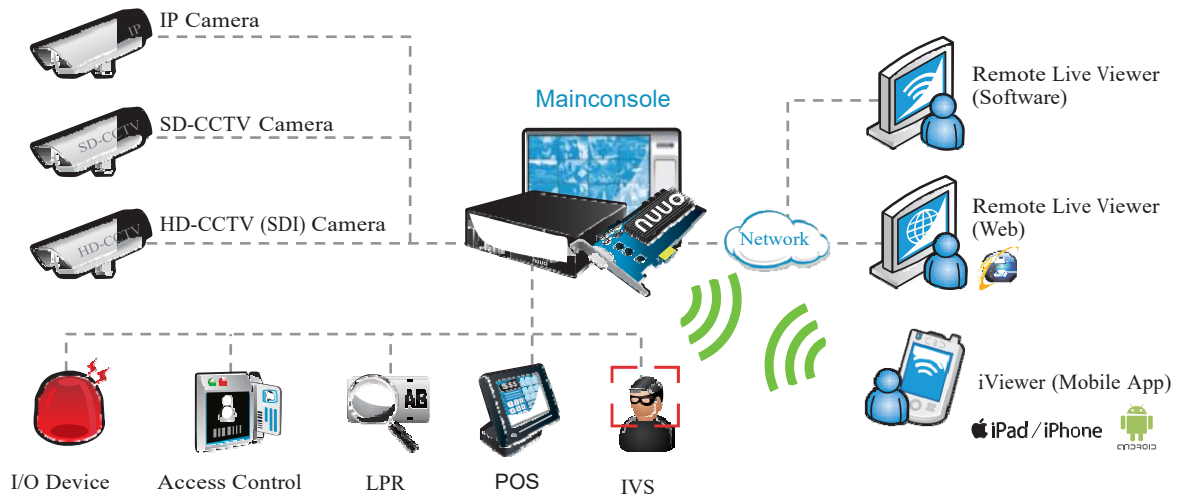
### Seamless 3<sup>rd</sup> Party Integration

Mainconsole can be a solution platform that allows easy 3<sup>rd</sup> party integration such as IVS, POS, Access control, and LPR. With a plethora of connection choices and metadata applications, Mainconsole is your best choice for seamless integration.





## System Architecture

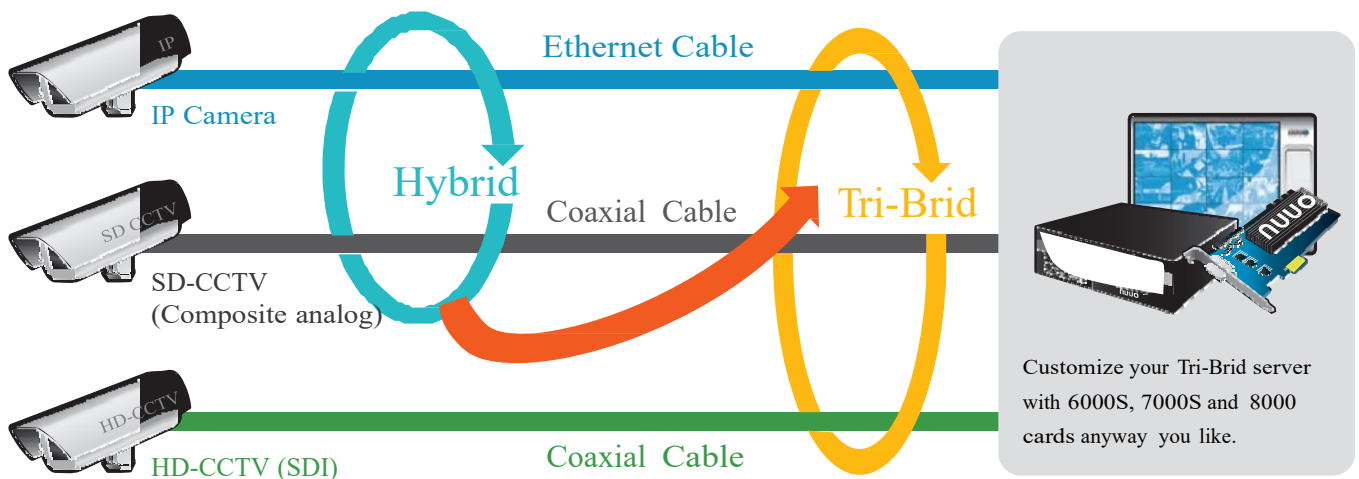


## Feature Highlights

- POS , I/O device , LPR and access control integration
- Advanced & embedded video analytics
- Smart Guard detection of 6 events with 11 instant responses
- Supports camera multi-stream function in both live view and playback
- Counting application
- Supports dual recording
- Playback intelligent search
- Windows active directory
- Privacy mask
- iPhone, iPad, Android ( Liveview, 1CH playback and push notification)
- E-map
- Digital watermark
- Boost recording
- Dual password validation
- Edge motion detection from network camera <sup>\*1</sup>
- OnGuard (software watchdog)
- Failover recording server
- Auto backup
- Flexible video recycle management options
- Digital PTZ and camera multi-view
- Friendly GUI recording schedule
- Two-way audio


<sup>\*1</sup> Check [http://www.nuuo.com/SupportCamera.php?node\\_id=4#3](http://www.nuuo.com/SupportCamera.php?node_id=4#3) for Mainconsole camera support list

## Tri-Brid Solution




# Specification

## IP+ NVR

Product Image									
Model Name	SCB-IP+01	SCB-IP+04	SCB-IP+08	SCB-IP+12	SCB-IP+16	SCB-IP+25	SCB-IP+32	SCB-IP+36	SCB-IP+64
IP License	1	4	8	12	16	25	32	36	64 <sup>*1</sup>

\*1. The maximum number of camera connections depends on the server's hardware configuration and the total bit rate of the IP cameras. Please check NUUO Calculator on <http://www.nuuo.com/wiki.php>


## Hybrid Appliance

Product Image			
Model Name	NH-4500-PRO		NH-4500-ENT
CPU Model	Intel Haswell i5-4570S, 2.9GHz		Intel Haswell i7-4770S, 3.1GHz
Maximum Channel	64		
Capture Card	SCB-6000S, SCB-7000S, SCB-7100, SCB-8000 Series		
Recording Performance	Please use our online calculator tool for estimation: <a href="http://www.nuuo.com/calculator/">http://www.nuuo.com/calculator/</a>		
Operating System	Windows 7 Professional 64 bit / Windows 7 Ultimate 64 bit		
Compression	H.264, MPEG-4, MJPEG, MxPEG (depends on IP camera)		
Remote Client	Remote Live Viewer (Software), Remote Live Viewer ( Web), IViewer (Mobile App)		
Remote Client OS	Windows 2008, Windows XP (32-bit), Vista (32-bit), Win7, Win8, Win8.1 (32 and 64-bit)		
Mobile Client Platform	iPhone, iPad, Android		
HDD Bays	4 bays	6 bays	8 bays
External Storage	iSCSI		
Ethernet Port	2 x Gigabit Ports, RJ45		
External Ports	2x USB 3.0, 4x USB 2.0	2x USB 3.0, 4x USB 2.0	2x USB 3.0, 6x USB 2.0
Audio	Two - way		
Voltage	100 - 240V		
Power Consumption	400w	400w	700w
Dimensions (H x W x D)	177 x 482 x 502 mm	177 x 482 x 502 mm	177 x 482 x 600 mm
Weight (without HDD)	17.6 kg (38.8lbs)	17.6 kg (38.8lbs)	21 kg (46.2 lbs)
Temperature (Operating with HDD)	0° C ~ 40° C (32° F ~ 104° F)		
Humidity (Operating)	5% ~ 95%		
Supported Languages	Albania, Bulgarian, Chinese (Simplified), Chinese (Traditional), Croatian, Czech, Danish, Dutch, English, Farsi, Finnish, French, German, Hebrew, Hungarian, Italian, Japanese, Korean, Norway, Polish, Portuguese (Brazil), Portuguese (Portugal), Romanian, Russian, Serbian, Slovak, Slovenian, Spanish, Swedish, Thai, Turkish		



# Specification

## Capture Cards




### HD SDI H.264 Hardware Compression Capture Card SCB 8000 Series

Model Name	SCB-8004HD
Video Inputs	4
Max. Cards Per Server	4 (can be with 6000S/7000S series for more channels)
Display Rate (NTSC/PAL)	120 fps @ 1080p / 100 fps @ 1080p
Recording Rate	120 fps @ 1080p
Power Consumption	20W
Video Resolution	1080p, 720p
Dimensions (W x H)	178 x 126 mm
Product Image	




### H.264 Hardware Compression Capture Card SCB 7100 Series

Model Name	SCB-7108	SCB-7116
Video/Audio Inputs	8 / 8	16 / 16
Max. Cards Per Server	1 (can be with 6000 / 6000S / 7000 / 7000S series for more channels)	
Display Rate (NTSC/PAL)	240 / 200 fps	480 / 400 fps
Recording Rate [D1] (NTSC/PAL)	240 / 200 fps	480 / 400 fps
Power Consumption	8W	9W
TV Output Rate	25fps (RCA only), 14fps (Digital Port only), 10fps (RCA & Digital Port)	
TV Output	RCA connector x2, Digital Port connector x1	
Video Resolution	NTSC : 176 x120, 352 x 240, 704 x 480, PAL : 176 x 144, 352 x 288, 704 x 576	
Dimensions (W x H)	216 x 126 mm	
Product Image		

### H.264 Hardware Compression Capture Card SCB 7000S Series

Model Name	SCB-7004S	SCB-7008S	SCB-7016S
Video/Audio Inputs	4 / 4	8 / 8	16 / 16
Max. Cards Per Server	4	4	4
Display Rate (NTSC/PAL)	120 / 100 fps	240 / 200 fps	480 / 400 fps
Recording Rate [D1] (NTSC/PAL)	120 / 100 fps	240 / 200 fps	480 / 400 fps
Power Consumption	7W	8W	9W
Video Resolution	NTSC : 176 x120, 352 x 240, 704 x 480, PAL : 176 x 144, 352 x 288, 704 x 576		
Dimensions (W x H)	188 x 121 mm		
Product Image			

### H.264 Hardware Compression Capture Card SCB 6000S Series

Model Name	SCB-6004S	SCB-6008S	SCB-6016S
Video/Audio Inputs	4 / 4	8 / 8	16 / 16
Max. Cards Per Server	4	4	4
Display Rate (NTSC/PAL)	120 / 100 fps	240 / 200 fps	480 / 400 fps
Recording Rate [CIF] (NTSC/PAL)	120 / 100 fps	240 / 200 fps	480 / 400 fps
Recording Rate [D1] (NTSC/PAL)	30 / 25 fps	60 / 50 fps	120 / 100 fps
Power Consumption	7W	8W	9W
Video Resolution	NTSC : 176 x120, 352 x 240, 704 x 480, PAL: 176 x 144, 352 x 288, 704 x 576		
Dimensions (W x H)	188 x 121 mm		
Product Image			

# NVRsolo

SIMPLE • QUICK • EFFICIENT



NVRsolo NS-1040 is NUUO's answer to hassle free, lightweight NVR system. It is small in size yet able to handle heavy duty tasks. With local HDMI/VGA display and keyboard/mouse input built right into the unit, configuring NVRsolo is easy and simple. Built on solid Linux foundation, we sacrificed nothing except unnecessary bulk to make NVRsolo the award winning standalone NVR solution you have been looking for. NVRsolo's flexibility doesn't end there. For those needing more storage options, we offer 8 bay versions to meet your needs.

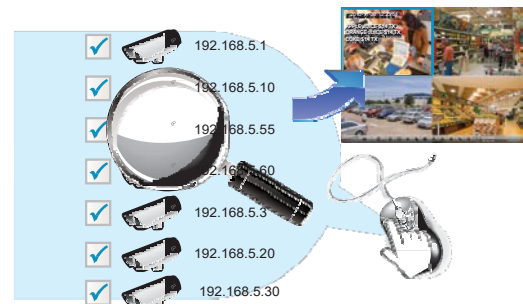
2013 Award



## Design Highlights

### One Click Setup

NVRsolo features simple, one click setup process. You can set up NVRsolo in as little as 7 minutes. NVRsolo will auto find and add selected cameras to live view and recording channels with one simple click of a button.



### Router Free Setting

No need to work with complicated router setting. No proxy and no firewall bypass. Plug in NVRsolo. It just works.



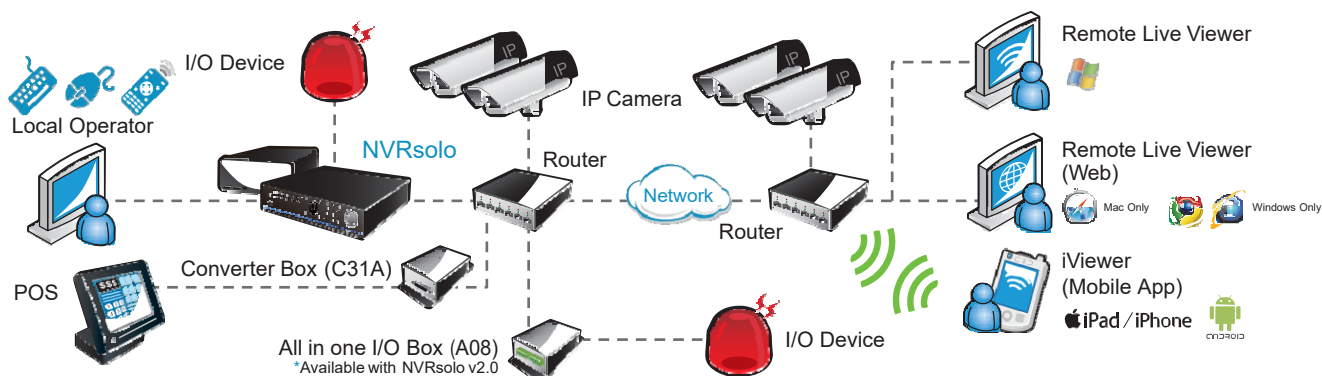
### POS Integration

With support for 3<sup>rd</sup> party plugin, easily integration existing POS solution and experience hassle free metadata feature on dedicated camera channels in live view. All transaction data is stored in SQLite format for business analysis later.





# System Architecture



## Feature Highlights

### Local

- Linux embedded – safer solution against PC crashes and virus
- One-click setup for more than 80 brands of IP cameras
- Supports camera multi-stream setting
- ezNUUO – free from router settings for web/mobile viewing
- Point of Sale (POS) <sup>\*1</sup>
- Alarm source for NUUO Central Management System
- RAID 0,1 for maximum capacity or data protection
- Supports megapixel cameras and H.264 compression format
- Camera I/O integration
- Real-time digital output, email alert and push notification on mobile
- NTP server synchronization
- Compatible with touch panel <sup>\*2</sup>
- Support 100 brands of IP cameras and 2300 models <sup>\*3</sup> (with free monthly update)
- Supports camera snapshot
- Supports camera two-way audio
- Supports hard disk S.M.A.R.T test



### Remote

- Supports Stream Profile for remote live view bandwidth control (Original / 500 kbps<sup>\*4</sup> / 100 kbps)
- Supports mobile client for iPhone / iPad / Android <sup>\*5</sup>
- Up to 128 CH remote live view with multiple monitors

### Web

- Web-based configuration, live viewer, playback (recommend on IE 8, 9, 10)
- Online GUI recording schedule
- Panorama 360° PTZ (ImmerVision and VIVOTEK fisheye)
- Generic dewarp (fisheye)
- Digital PTZ and multi-view
- Support joystick for easier camera control
- Playback with 5 types of intelligent event search
- E-map with indicator
- Digital watermark

## Specification

Product Image				
Type	1-bay		8-bay	
Model Name	NS-1040	NS-1080	NS-8060	NS-8065
Maximum Number of Licenses	8	8	16	
Base License	4	8	6	
Video Output	HDMI or VGA			
Output Resolution	1920x1080, 1280x1024, 1280x720, 1024x768			
Decoding Capacity	120fps @1080p or 240fps @720p (H.264/MPEG4; MJPEG/MxPEG is with limited support)			
Recording Performance	60 Mbps		80 Mbps	
Operating System	Embedded Linux			
Compression	H.264, MPEG4, MJPEG, MxPEG (depends on IP camera)			
HDD Bays	1 x 3.5" or 2 x 2.5"		8 x 3.5"	
RAID Level	0, 1		Single	0, 1, 5, 10
External Storage	DAS			
Ethernet Port	2 x Gigabit Port, RJ-45			
External Ports	5 x USB 2.0		4 x USB 2.0	
On-Box I/O	0/0		16/4	
Audio	Two - way			
Voltage	DC 12V 4A		AC 100V~240V, 3.5A~1.5A, 60-50Hz	
Power Consumption	Full loading: 20W, Max: 48W		Full loading: 80W, Max: 250W	
Dimensions (H x W x D)	70.5 x 215 x 220 mm		88.5 x 438 x 442 mm	
Weight (without HDD)	2.5 kg (5.51 lbs)		9 kg (19.84 lbs)	
Temperature (Operating with HDD)	0° C ~ 40°C (32°F ~ 104°F)			
Humidity (Operating)	5% ~ 95%			
Remote Client	Remote Live Viewer (Software), Remote Live Viewer (Web), iViewer (Mobile App)			
Remote Client OS	Windows XP (32-bit), Win7 (32 and 64-bit), Win8 (32 and 64-bit)			
Mobile Client Platform	iPhone, iPad, Android			
Supported Languages	Chinese (Simplified), Chinese (Traditional), Croatian, Czech, English, Finnish, French, German, Hebrew, Italian, Japanese, Korean, Polish, Portuguese (Brazil) , Russian, Spanish, Swedish, Thai, Turkish			

<sup>\*1</sup>. POS device configuration is only available in web.

<sup>\*2</sup>. Acer T232HL and ViewSonic TD2220

<sup>\*3</sup>. The data is updated for DP 2.20

<sup>\*4</sup>. Minimum server FW v1.7.0 (with DP upgrade)

# NVRmini 2

## SECURE • SIMPLE • SMART



NVRmini 2 is the lightweight, portable NVR solution with NAS functionality. Setup is simple and easy, with automatic port forwarding settings built in. NVRmini 2 supports POS integration, making this the perfect solution for small retail chain stores. NVRmini 2 also comes full equipped as a NAS, so you can enjoy the full storage benefits like easy hard drive hot-swapping and RAID functions for data protection. Choose NVR and know that your valuable video data is safe, always.

Windows Client



Browser



MAC Only

Windows Only

Mobile Apps

Apple iPad / iPhone



## Design Highlights

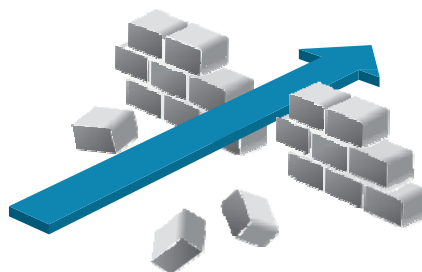
### POS Support

Enjoy direct POS transaction text overlay on both live view and playback mode. Advanced search of any text in the metadata is available. All transaction metadata is stored in SQLite format for easy business analysis.



### Easy Network Configuration

If you have an UPnP enabled router, configuring port forwarding requires zero effort on your part. NVRmini 2 will automatically configure port forwarding on your router for easy remote viewing and playback. No more fussing over router settings!

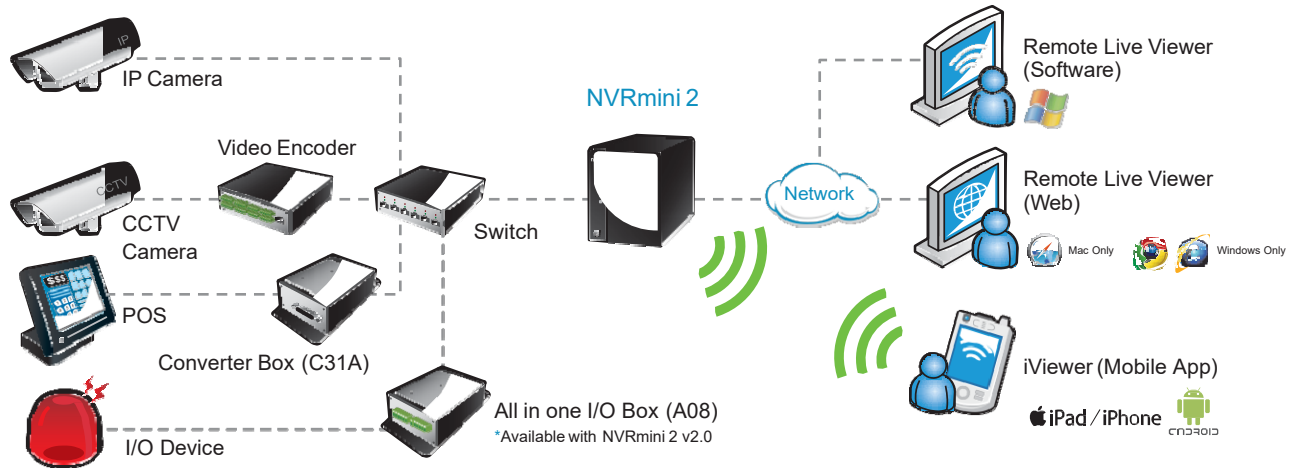


### Full NAS Functionality

NVRmini 2 is built with NAS functionality. It comes with easy, hot swappable HDD trays and full support for RAID 0, 1, 5, 10, NVRmini 2 not only brings security for your premises, but also guarantees the valuable data recorded within will be safe and easily restorable.





# System Architecture



## Feature Highlights

- Support Stream Profile for remote live view bandwidth control (Original / 500 kbps<sup>\*1</sup> / 100 kbps)
- Support mobile client for iPhone / iPad / Android
- Supports camera multi-stream setting
- Supports camera snapshot
- Supports camera two-way audio
- Supports hard disk S.M.A.R.T test
- Panorama 360° PTZ (ImmerVision and VIVOTEK fisheye)
- Generic dewarp (fisheye)<sup>\*1</sup>
- Web-based configuration, live viewer, playback
- Online GUI recording schedule
- Digital PTZ and multi-view
- Real-time digital output, email alert and push notification on mobile
- Up to 128 CH remote live view with multiple monitors
- Playback with 5 types of intelligent event search
- Point of Sale (POS)
- E-map with indicator
- Auto port-forwarding
- NTP server synchronization

## Specification



Product Image				
Type	2-bay Tower		4-bay Tower	
Model Name	NE-2020	NE-2040	NE-4080	NE-4160
Maximum Number of Licenses	4	4	16	16
Base License	2	4	8	16
Recording Performance	40 Mbps		80 Mbps	
Operating System	Embedded Linux			
Compression	H.264, MPEG4, MJPEG, MxPEG (depends on IP camera)			
Remote Client	Remote Live Viewer (Software), Remote Live Viewer (Web), iViewer (Mobile App)			
Remote Client OS	Windows XP (32-bit), Win7 (32 and 64-bit), win8 (32 and 64-bit)			
Mobile Client Platform	iPhone, iPad, Android			
HDD Bays	2		4	
RAID Level	0,1		0,1,5,10	
External Storage	N/A		DAS	
Ethernet Port	1 x Gigabit Port, RJ-45		2 x Gigabit Port, RJ-45	
External Ports	2 x USB 2.0		2 x USB 2.0, 1 x eSATA	
Audio	Two- way			
Voltage	100-240V			
Power Consumption	40W		90W	
Dimensions (H x W x D)	140.0 x 109.8 x 219.0 mm		140.0 x 183.4 x 219.0 mm	
Weight (without HDD)	2.12 kg (4.67lbs)		2.97 kg (6.55lbs)	
Temperature (Operating with HDD)	0° C ~ 40°C (32°F ~ 104°F)			
Humidity (Operating)	5% ~ 95%			
Supported Languages	Chinese (Simplified), Chinese (Traditional), Croatian, Czech, Dutch, English, Finnish, French, German, Hebrew, Hungarian, Italian, Japanese, Korean, Polish, Portuguese (Brazil), Russian, Serbian, Spanish, Swedish, Thai, Turkish			

<sup>\*1</sup> Minimum server FW v1.7.0 ( with DP upgrade)

# Accessories

## All in one I/O Box



### A08 • Ethernet to I/O Box

Product Image		
Model Name	SCB-A08	
Input	8	
Input Signal	Dry Contact or Wet Contact (-30 ~ -3, 3~30 VDC)	
Output	8	
Output Signal	Relay	
DC in	12-30 V	
Power Consumption	500 mA	
Baud Rate	Serial port 1: 9600, Serial port 2: 115200	
Date Bits	5, 6, 7 or 8	
Stop Bits	1, 1.5 or 2	
Parity	None, Even, Odd, Mark, Space	
Dimension (W x H x D)	80 x 23 x 115mm	

\*Available with NVRmini 2 v2.0, NVRsolo v2.0 and Crystal v2.1


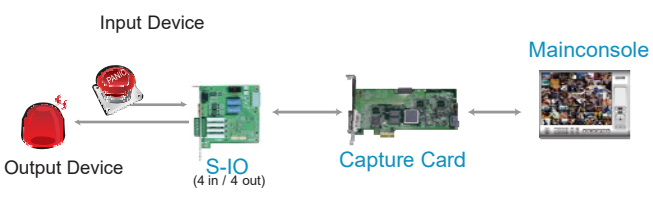
## Converter Box

### C31A • RS232 to TCP/IP Converter

Product Image		
Model Name	SCB-C31A	
Input	RS232	
Output	Ethernet	
DC In	DC +9V to +24V	
Power Consumption	500 mA	
Operating Temp.	-20°C to 65°C	
Operating Humidity	0-90% Non-Condensing	
Baud Rate	110 bps to 230.4 kbps	
Data Bits	5, 6, 7 or 8	
Stop Bits	1, 1.5 or 2	
Parity	None, Even, Odd, Mark, Space	
Flow Control	None, RTX/CTS, XON/XOFF, DTR/DSR	
Dimensions (W x H x D)	143 x 28x 114 mm	

## I/O Card

### S-IO • 4CH Isolated Digital Input & 4CH Power Relay Output with RS232 to RS485 Converter

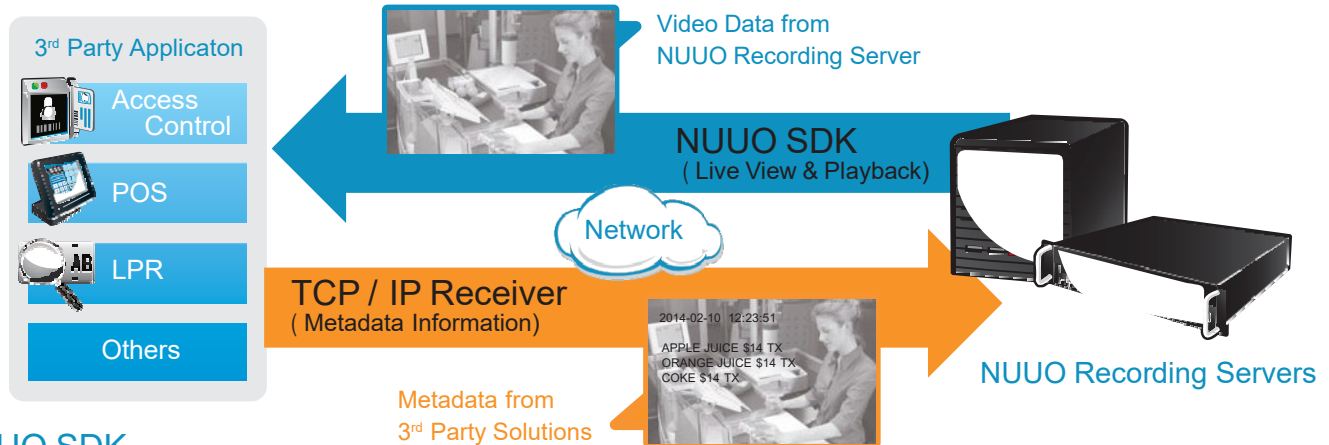
Product Image		
Model Name	SCB-S-IO	
Input Channel	4 digital input channel	
Output Channel	4 digital output channel	
Communication Interface	RS-232 differential with RJ-11	
Relay Type	12V, 1A	
Support Capture Card	SCB-6000(S), SCB-7000(S), SCB-7100 Series, SCB-8004HD	
Max. Cards Per Server	4 cards	
Power Consumption	Internal 12V DC	
Dimension (W x H x D)	105 x 120 mm	



# Partnership

## OPEN INNOVATION PLATFORM

NUUO thrives on innovation. By choosing an open platform to work on, NUUO hopes to create a thriving ecosystem full of integration possibilities. Towards this end, NUUO has created many tools for our partners to work with. By selecting one of the following integration options, NUUO products can be made adaptable to handle and exchange information with other existing solutions effortlessly.



### NUUO SDK

NUUO has created an SDK available upon request. By utilizing the SDK, 3rd party applications can receive live view video, recorded footage, event status, I/O status and the other information coming from NUUO recording servers.

### NUUO TCP/IP Receiver

The recommended integration choice. With TCP/IP receiver, 3rd party applications can send in metadata to any NUUO recording server and overlay the information on display, recording, and other functions. This integration option, combined with solutions such as access control, POS, or LPR, can turn NUUO recording servers into a full central information hub, where critical information and video feed are always together, readily available for monitoring and review.

## NUUO Integration Tools

### NUUO SDK

- Live view
- Playback
- Event, IO status, and more
- OCX (ActiveX) & Java (C#, C++) compatible

#### 1) Recording server

(Mainconsole, NVRmini 2, Crystal Titan or NVRsolo)

### NUUO TCP/ IP Receiver

- Overlay metadata on live view
- Record metadata with recorded video
- Combine metadata with alarm system
- Intelligent metadata search, and more VMS functionalities
- 10 user-defined metadata alarms
- 10 instant responses for each 3rd party application event

#### 1) Recording server

(Mainconsole, NVRmini 2, Crystal Titan or NVRsolo)

#### 2) Metadata license

(SCB-P-IP-POS, SCB-P-IP-Access Control or SCB-P-IP- LPR)

### Advantages

- NUUO approved software integration
- Increase different business models, ex: bundle package, for cross-country selling
- One time effort to approach Windows & Linux based projects

## Technology & Solution Partners



\* For supported IP camera partners, please visit our website [www.nuuo.com](http://www.nuuo.com)

# Success Stories

" We are testing a NUUO DVR card in my school district. The card so far is amazing. We have had DVR's in the district for approximately 13 years. We decided to look at bringing our district into the new generation by using NUUO.

James Slater  
Technical Leader  
USA

" NUUO brings us reliability and efficiency in IP video solutions.

De Troy Jean-Marie  
Video Product Manager  
France

" Our partnership of more than 4 years with NUUO as permit to VPC Diffusion to respond to a growing market of technologies in IP Video Surveillance in Switzerland, as well with stand-alone solutions as multi-sites management ones.

Pedro Basilio  
CEO – VPC Diffusion  
Switzerland

" NUUO products are very easy-to-use and user-friendly. Great design, well-organized interface and intelligent functions make NUUO products very popular in the market. It's a pleasure to offer NUUO products to our customers.

Alexei Vinokurov  
CEO - Acom-SB  
Russia

US	Pat LaFrieda Meats	IP+ NVR	Access Control Solution	27 CH
US	Gaston College	IP+ NVR		64 CH
US	Ritz hotel Denver	DVR Card / IP+ NVR		64 CH
US	Genoa-Kingston School Dist.	DVR Card / IP+ NVR		70 CH
US	Shreveport Community Church	DVR Card / IP+ NVR		86 CH
US	Asheville City Government	DVR Card / IP+ NVR		100 CH
US	Colorado Convention Center	DVR Card / IP+ NVR	Access Control Solution	200 CH

El Salvador	Customs Administration	NVRmini 2		80 CH
Mexico	Tec Monterrey	IP+ NVR		120 CH
Panama	Shopping Multicentro	DVR Card / IP+ NVR		144 CH
Chile	Gran Casino de Talca	IP+ NVR / CMS		175 CH
Dominican Republic	Punta Cana International Airport	DVR Card / IP+ NVR / CMS		226 CH
Puerto Rico	Banco Popular	DVR Card / IP+ NVR		480 CH

- Industrial
- Transportation
- Hospitality
- Retail
- Education
- Government
- Banking

" NUUO is very flexible and powerful solution and its great value is perceived by our customers.

Gustavo Rizzo  
Commercial Director  
Brasil

" With the NUUO NVRs it is possible to convince customers with easy handling and high performance at the same time. The high compatibility with our cameras is also another important reason for the NUUO products. By combining SANTEC and NUUO products it is possible to build system with very high quality.

Lars Diestel  
Germany  
CEO – SANTEC Video

Belarus	Lidskoe Pivo	Titan NVR		30 CH
Finland	Omena Hotels	IP+ NVR / CMS		67 CH
Georgia	SOCAR Georgia Petroleum	IP+ NVR		310 CH
Spain	Nuevo Los Carmenes Stadium	IP+ NVR		40 CH
Romania	Rexo Game Ltd	IP+ NVR		64 CH
Romania	Auchan Hhypermarket	DVR Card / IP+ NVR / CMS	POS Solution	1,650 CH

Russia	TsUM	Titan NVR		69 CH
Russia	TNK Gas Station	DVR Card / IP+ NVR		100 CH

Albania	Ministry of Internal Affairs	IP+ NVR		445 CH
Belgium	Delhaize Supermarket	Titan NVR		46 CH
Bulgaria	TOYOTA Show Room	IP+ NVR		50 CH
Italy	Galileo Galilei Pisa International Airport	DVR Card / IP+ NVR / CMS		200 CH
Moldova	Sheriff LTD	IP+ NVR		128 CH
Serbia	Refinery Plant	DVR Card / IP+ NVR / CMS		790 CH
Serbia	Naftna Industrija Srbije	DVR Card / IP+ NVR / CMS		972 CH

Brasil	UOL	DVR Card / IP+ NVR		80 CH
Brasil	CAESB and Central Bus Station of Brasilia	IP+ NVR / CMS		80 CH
Brasil	USP University	IP+ NVR		250 CH
Brasil	TRE Parana	DVR Card / IP+ NVR / CMS		927 CH
Ecuador	Registro Civil GYE	IP+ NVR		128 CH

Syria	Global Seed Group	DVR Card / IP+ NVR / CMS		70 CH
Syria	Tartous	IP+ NVR		128 CH
Egypt	EL Zeraayen Hospital	IP+ NVR / CMS		200 CH
Egypt	Vodafone	IP+ NVR		1,512 CH
Iran	Urmieh University	IP+ NVR		80 CH
Iran	Iran Police Station	IP+ NVR		416 CH
UAE	Christal Hotel	IP+ NVR		100 CH
Saudi Arabia	Jubail Technical Institute	IP+ NVR / CMS		105 CH
Saudi Arabia	TOYOTA	NVRmini + CMS		440 CH
China	China Southern Power Grid Co., Ltd	IP+ NVR / CMS		400 CH
Hong Kong	Electrical and Mechanical Services Department	IP+ NVR		300 CH
Hong Kong	Kiang Wu Hospital	IP+ NVR		320 CH
Taiwan	University of Tzu Chi	IP+ NVR		40 CH
Taiwan	Macanna Shop	IP+ NVR		76 CH
Taiwan	Food Republic	NVRmini 2	POS Solution	96 CH
Taiwan	Far Eastone Telecommunications Co., Ltd	IP+ NVR		128 CH
Taiwan	Taipei County Government	DVR Card / IP+ NVR / CMS		600 CH
Thailand	Seacon Bangkae Shopping Mall	TitanNVR		186 CH
India	Wintek Plant	IP+ NVR		101 CH
India	RDCC Bank	DVR Card		220 CH

" NThe world class range of surveillance solutions that NUUO provides IP Security Solutions (IPSS) in South Africa is absolutely phenomenal. The features and functionality of the products definitely meet our market requirements and we are proud to be associated with NUUO and Graham Goldridge."

Brian Wynberger  
GM - IP Security Solutions  
South Africa

" NUUO is one of the most comprehensive and cost effective solutions in the market.

Jake Park  
Director of Business Development  
Korea

" NUUO provides wide range of solution and opened platform. Corresponds to various market demands from small-scale installations to high level enterprise projects. NUUO –The simple but powerful surveillance management software. A perfect solution for Japanese market.

Yoshifumi Harikita  
CEO – NSS  
Japan

Korea	LG Powercom	IP+ NVR		1,920 CH
Korea	Hyundai Steel	IP+ NVR		250 CH
Korea	School Zone	IP+ NVR		250 CH
Korea	Suwon City Surveillance Project	IP+ NVR / CMS		172 CH

Singapore	Singapore Airlines	IP+ NVR		64 CH
Singapore	The Singapore's Ship Builder	DVR Card / IP+ NVR		96 CH
Malaysia	Queensbay Mall	DVR Card / IP+ NVR		49 CH
Malaysia	Nomad Group Bhd	IP+ NVR		68 CH
Malaysia	Carrefour	IP+ NVR		272 CH
Malaysia	Rapid KL Light Rail Transit	DVR Card / IP+ NVR / CMS		1080 CH
Indonesia	TransJakarta	IP+ NVR		207 CH
Australia	Canberra Institute of Technology	IP+ NVR		100 CH
Australia	Brisbane Market Limited	IP+ NVR		140 CH
Australia	NSW High Schools	IP+ NVR / CMS		320 CH



