NUUO NDVR Specification

NUUO DVR Card	SCB 8000 series	SCB 7100 series		SCB 7000S series			SCB 6000S series			SCB 3000 series			SCB 1000 series	
Model	**8004HD**	**7108**	**7116**	**7004S**	**7008S**	**7016S**	**6004S**	**6008S**	**6016S**	**3004**	**3008**	**3016**	**1004**	**1008**
Video Input	4	8	16	4	8	16	4	8	16	4	8	16	4	8
Audio Input	0	8	16	4	8	16	4	8	16	4			1	
Maximum Cards	2 Cards	1 Card	1 Card	4 Cards	4 Cards	4 Cards	4 Cards	4 Cards	4 Cards	2 Cards**			4 Cards**	
Maximum analog input per system	8***	16***		64			64			32			32	
Display Rate (FPS)	120/100	240/200	480/400	120/100	240/200	480/400	120/100	240/200	480/400	120/100			30/25	
Recording Rate @CIF (FPS)	720p@120	240/200	480/400	120/100	240/200	480/400	120/100	240/200	480/400	120/100			30/25	
Recording Rate @D1 (FPS)	1080p@120	240/200	480/400	120/100	240/200	480/400	30/25	60/50	120/100	120/100			30/25	
Video Resolution **NTSC**	1080p, 720p	704x480; 352x240;176x120		704x480; 352x240;176x120			704x480; 352x240; 176x120			704x480; 640x480; 352x240			704x480; 640 x 480; 352x240	
PAL		704x576; 352x288; 176x144		704x576; 352x288; 176x144			704x576; 352x288; 176x144			704x576 ; 640x576; 352x288			704x576; 640 x 576; 352x288	
TV Output Rate **w/ DP*** **	N/A	RCA and DP: 10fps		N/A			N/A			N/A			N/A	
w/o DP* **	N/A	RCA: 25fps		N/A			N/A			N/A			N/A	
Only DP* **	N/A	DP: 14fps		N/A			N/A			N/A			N/A	
Compression Format	HW H.264	H/W H.264		H/W H.264			H/W H.264			S/W H.264			S/W H.264	
Interface	PCI-E x1	PCI-E x1		PCI-E x1			PCI-E x1			PCI			PCI	
Maximum I/O Card	4	2	4	4	4	4	4	4	4	4			1	
Available I/O Box	Support	Support		Support			Support			Support			Support	
Hardware Watchdog	Support	Support		Support			Support			Support			Support	
Dimension (W x H, mm)	178 x 126	216x126	216x126	188 x 121	188 x 121	188 x 121	188 x 121	188 x 121	188 x 121	200 x 120			155 x 120	
Warranty	2-year*	2-year*		2-year*			2-year*			2-year*			2-year*	
System Minimum Requirements (per card)														
OS Supported	Windows XP (32-bit) / Windows 7 (32 and 64-bit) / Windows 2008 R2 (64-bit)													
CPU	Intel Core 2 DuoE5300	Intel Core 2 QuadQ8400		Intel Core 2 DuoE5300			Intel Core 2 DuoE5300			Intel Core 2 DuoE5300			Intel Core 2 DuoE5300	
RAM	2 GB													
	Above RAM amount is recommended based on one DVR card installation. For system with multiple DVR cards, stacked 1G RAM for system under 16ch, 3G RAM for system under 32ch, and4G RAM with 64 bit OS for system with 32ch or above are recommended.													
HDD	250 GB													
Mother-board	Intel P55, H55, X58, P45, P43 chip, MB vendor ASUS, Gigabyte, or MSI with Intel Chipset recommended													
Display	ATI Radeon HD 4350 or above (ATI Driver V11-5 recommended ATI Driver V10 not support)													
Note														
Note	* The warranty in US area is 3-year. ** When installed two 3000 series cards on one desktop, the system can only support 352x240 (NTSC) 352x288 resolutions for each ***DP stands for digital output ****7100 and 8004HD cards can be installed with 6000S/7000S to have more analog inputs per system *****8004HD card support 720p25/30, 720p50/60, and 1080p25/30 transmission over at least 100m of RG59 coaxial cable. For further information please refer to http://www.highdefcctv.org/hdcctv-specification													

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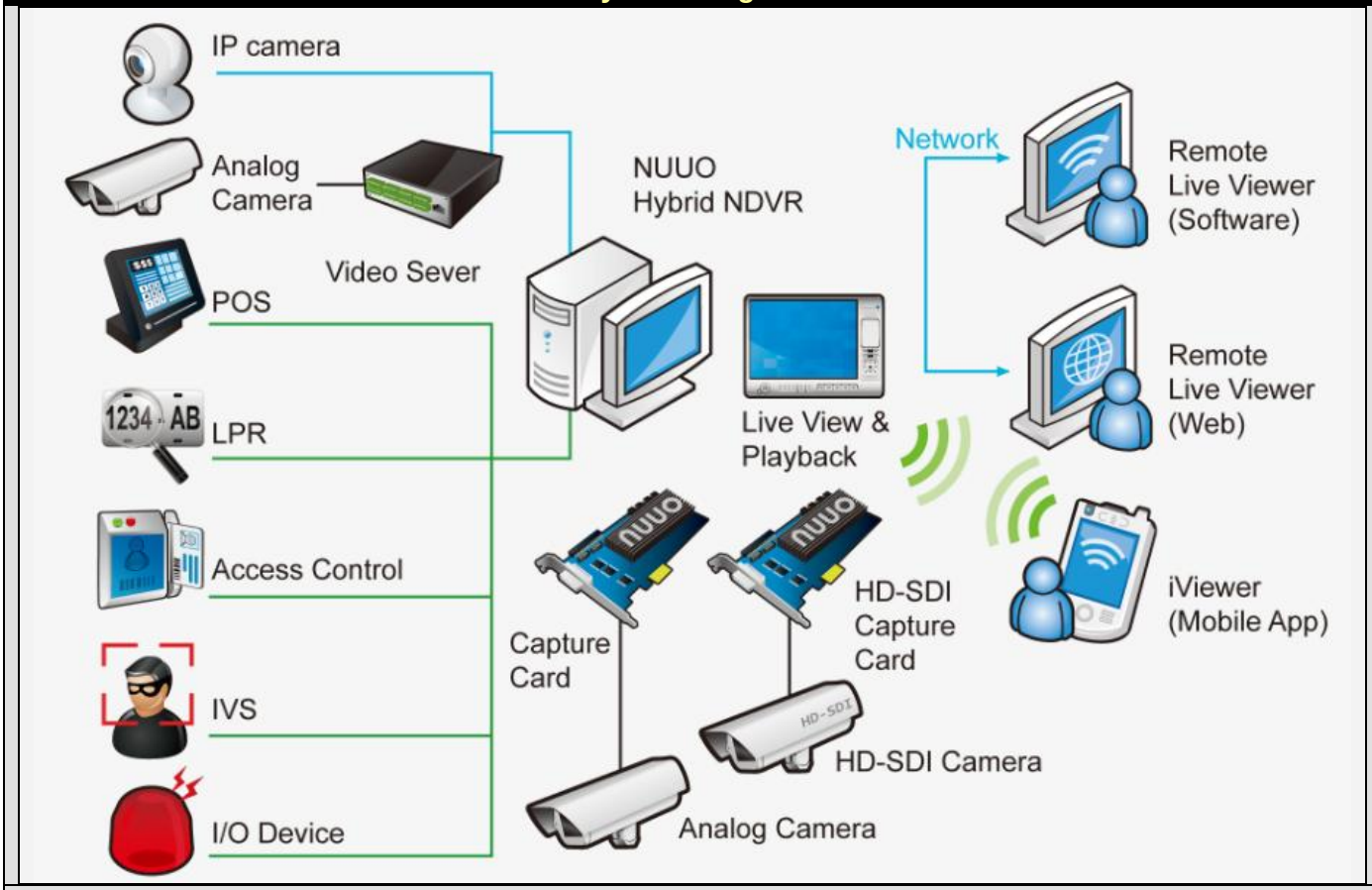
NUUO NDVR Specification

NUUO 3.5.10 version

System Diagram



NUUO Software v4.0.0

Main Features

- Supports up to 64* channels
- Supports analog, HD-SDI and IP cameras
- Supports H.264 compression format
- Triple monitor display
- Supports auto backup
- POS, I/O device, LPR and access control integration
- Windows Active Directory
- Privacy Mask
- Boosting Recording
- On the edge motion integration
- OnGuard (Software watchdog)
- Failover Recording Server
- E-map
- Instant Playback
- Two-way audio
- Unique GUI recording schedule
- Digital PTZ and multi-view
- Smart detection of 6 events with 10 instant responses
- Counting application
- Advanced Intelligent Video Surveillance with 4 types counting filter and 8 types surveillance suite
- Intelligent playback system with 5 video analytics searches
- Up to 128**CH remote live view
- Supports transcode and multiple stream profiles
- Supports digital watermark
- Remote playback, remote backup, remote I/O control and remote desktop configuration
- Supported by NUUO Central Management System
- Supports 81 brands of IP cameras and over 1754 models

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- Supports 30 languages
- Supports iPhone, iPad and Android clients

* 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://support.nuuo.com/calculator/

* *The maximum number of camera connections depends on the server's and client's hardware configuration.

Specifications

System, setting, management and integration:

- **Open Platform**: Supports over 1701 models of IP cameras, megapixel cameras and video servers from 78 brands of network camera manufacturers; supports H.264, MPEG-4, MJPEG, MxPEG video formats; integrates various systems including point of sale (POS) and I/O devices, license plate recognition and access control system. SDK for access control integration available upon request.

- **Multi-site/Multi-server**: Each NVR server supports up to 64* channels, from IP cameras and video encoders with analog cameras, and can be managed by NUUO CMS or remote live view client for centralized management in multi-site projects.
  * 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://support.nuuo.com/calculator/

- **Disk Load Balance**: NUUO NVR improves recording performance to utilize several disks and dynamically distributes the video loads among the disks to improve throughput.

- **Multiple Video Clients**: NUUO NVR server can stream video to multiple Remote Live Viewers, web clients and mobile clients simultaneously.

- **Intelligent Video Analytics**: NUUO IVS supports 6 types of video analytics including general motion, missing object, camera occlusion, foreign object, focus lost and signal lost. Each IVS alarm can trigger up to 10 unique instant notifications.

- **Advanced Intelligent Video Surveillance:** NUUO support 4 types of counting filters including people counting, vehicle counting, stabilizer and tamper detect and 8 types of surveillance suite including presence, enter and exit, appear and disappear, dwell, tailgating, stopping, direction and tamper detect.

- **Intelligent PTZ**: Joystick support on PTZ cameras and software enabled digital PTZ function are both available in NUUO NVR. Preset points and patrol functions are also available on many camera models.

- **GUI Recording Schedule**: Intuitive GUI recording schedule featuring continuous recording, motion recording and the 6 unique event recording modes. Users can define the recording schedule for each camera on a day by day basis.

- **Triple Monitor:** Up to 64* channels of live view video can be displayed per monitor. Monitor 1 and monitor 2 can both display live view video or act as alarm monitor while the 3rd monitor can be used for playback
  * 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://support.nuuo.com/calculator/

- **Transcoding**: Record and display live video at different frame rate and resolution.

- **Boosting Recording:** Dynamically boost recording quality on motion and other events to optimize recording storage.

- **OnGuard (Software Watchdog):** NUUO OnGuard brings NVR Server back from the unresponsive state such as a hang and neglects restore to normal operation.

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- **Failover Recording Server:** Failover server can be on standby for a single or a group of Recording Servers. Automatic switch to on standby server upon the failure or abnormal termination of the Recording Server ensure continuous system availability.
- **Advanced E-Map:** Capability to import custom image file, place the cameras and I/O on the map to indicate where events are being triggered with a convenient video preview window.
- **User-Friendly Interface:** GUI recording schedule, camera drag and drop, I/O control menu and PTZ control menu.
- **Automatic Camera Model Detection:** automatically search for all available IP cameras within the network (camera must support UPnP protocol). For cameras that don't support UPnP, users can manually insert the IP camera. The auto detection function will help the user to find the brand and model of the camera after specifying its IP address.
- **Counting Application:** intelligent 2-way (in and out) counting of object, people and traffic.
- **User Authority Management:** Support unlimited number of users with detailed and fully customizable user privilege on each user.
- **Windows® Active Directory:** Synchronized with Windows® Active Directory server to manage user privilege and control of camera action.
- **Network Flow Monitor:** Data streaming bandwidth of each remote client connection to the NVR server can be monitored and blocked if flow rate is too high.
- **Auto Recycle:** Automatically recycle recording files when the storage is full. Separate recycle schedule between recordings and varies log files.
- **SDK Integration Support**: Open SDK for integration with third-party systems such as access control, automation, burglar alarm, video analytics and others.
- **Upgrade notification**: Automatically obtain upgrade notification from NUUO website to download the latest version.

Live Display:

- **Multi-view**: NUUO NVR can duplicate the same live view video onto multiple channels and digitally zone in to see the details of different spots on cloned channels without losing the original live view video.
- **Intelligent PTZ**: Joystick support on PTZ cameras and software enabled digital PTZ function are both available in NUUO NVR. Preset points and patrol functions are also available on many camera models.
- **Monitor Resolution**: Supports 1024x768, 1200x900, 1280x1024, 1440x900, 1600x1200, 1680x1050, 1920x1080, 1920x1200 screen resolutions
- **Advanced E-Map**: Freedom to import custom image file, place the cameras and I/O on the map to indicate where events are getting triggered with a convenient video preview window.
- **Bandwidth Monitor**: Monitor and display the bandwidth usage of individual cameras and remote viewing clients.
- **Two-way Audio**: Listen and record audio from camera's microphone. Talk to IP camera's speaker.
- **Instant Playback:** Allow to play the last few minutes of any live video channel on MainConsole and Remote Live View
- **Privacy Mask**: Protect privacy of the sensitive image by blocking out sensitive areas from view and covering the

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areas with black boxes in live, playback and exported video.

Playback, Search, Export and Secure data:

- **Post-Recording Processing:** Search for 5 types of different analytics events, digital PTZ and video enhancement tool are all available in playback.
- **Multi-Channel Playback**: Play up to 16 channels of recorded video simultaneously both locally and remotely. Forward playback at 1/16x, 1/8x, 1/4x, 1/2x, 1x, 2x, 4x, 8x, 16x, 32x, 64x.
- **Video Enhancement**: Fine tune the image's visibility, sharpen, brightness, contrast or even grey scale.
- **Intelligent Search**: Search for 5 different special events (general motion, missing object, foreign object, camera occlusion and signal lost) in recorded files with date, time and log file.
- **Video Export:** Take a snapshot of the recording in JPEG/BMP format or export a section of the video in "AVI" and "ASF" format.
- **Auto and Manual Backup**: Schedule or manual backup the recording for archiving purposes or backup the recording with an embedded player to watch at a separate location. NVR supports both local and remote backup to local HD, CD, and DVD.
- **Log data**: Unusual event, system log, counting application, POS log and export and backup can export to "xls" or "txt" file
- **Watermark**: Protect for original recording from alternation with our watermark verification tool.
- **DBTool**: Reconstruct, repair or relocate the recordings in local drive, or external drive.

Remote operations:

- **Multiple Live View Display**: Streaming live video from multiple NUUO servers (NVR, DVR, and NDVR) simultaneously. Dual monitors support with up to 128 channels per monitor (64* channels per monitor).
  * 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://support.nuuo.com/calculator/
- **Multi Playback Channels Display:** Remote playback of 16 channels recording from any one of the NUUO servers (NVR, DVR, and NDVR).
- **Intelligent PTZ**: Joystick support on PTZ cameras and software enabled digital PTZ function are both available in NUUO NVR. Preset points and patrol functions are also available on many camera models.
- **I/O Event Control**: Easy to use input and output control panel to remotely trigger digital outputs and monitor input status.
- **E-Map**: A map view of where each camera and I/O devices are located with a convenient preview window.
- **Two-way Audio**: Listen and record audio from camera's microphone. Talk to IP camera's speaker.
- **Remote Backup:** Backup the video into .DAT format with a NUUO player attached for easy achieve and viewing purposes.
- **Web-browser (client)**: Display up to 64 channels of live video stream or 16 channels of playback in I.E. from any

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single NUUO server. Support direct login information (user/pass) in a URL address

- **Mobile Client**: Support iPhone, iPad and Android application client to live view video and control PTZ functions.

Extension Service

- **Central Management System:** Ultimate central monitoring solution for grand scale projects and projects with multiple sites. Fully compatible with all NUUO servers (NVR, DVR, NDVR and NVRmini).
  *****Advanced Intelligent Video Surveillance will support on CMS v 1.7

- **Remote Desktop Service**: Embedded remote desktop server that will host for any NUUO remote desktop clients to remotely configure the NVR software (remote desktop client is installed separately).

External Device

- **Point of Sale (POS)**: NUUO Point of Sales system works on NUUO NVR by overlaying the transaction text from cash register onto live video channels. All POS recordings are searchable.

- **External I/O Capacity:** Please refer to our I/O box section: C24/C26/C28 for more details.

- **Panomorph PTZ Camera (360°):** Integrates ImmerVision Lens (IMV1-1/3 Lens supported) to view Live, record and playback the complete 360x180 FOV. Users can easy to detect, track and analyze throughout the entire area.

- **Vivotek Fisheye Camera:** Integrates Vivotek fisheye camera FE8171V equipped with a fisheye lens for 180° panoramic view (wall mount) or 360° surround view(ceiling/floor/table mount) without blind spots.

- **3rd Party Integration**: Metadata Plugin technology support 3rd party software including license plate recognition, access control and so on. Though Metadata Plugin, users can manage metadata by recording real time information in databases which can describe events that link to video and audio. The system provides smart search tool to retrieve information and recorded video.
  *****V4.0 will support VIT(LPR), Soyal and Falco (access control) and Dsotre (POS).

Smart Guard:

- **Smart detection** of 6 camera events, 14 different user-defined POS events, digital input events and 4 system events. The combination of our smart guard events is a powerful tool to combat vandalism and provide a platform for operators to monitor and respond to live events immediately.
  - Camera Events:
    - General Motion (Multiple sensitivity)
    - Edge Motion
    - Missing Object
    - Foreign Object
    - Focus Lost
    - Camera Occlusion
    - Signal Lost
  - Signal Digital Input Event
  - System Event:
    - System alarm on Disk Space Exhausted
    - System alarm on System Health Unusual (CPU temperature)
    - System alarm on Resource Depleted (CPU loading)

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- System alarm on Network Congestion

- **Instant alarm notification** is the fastest and most cost efficient way to automatically respond to any smart detection event.
  - 10 automatic instant alarm responses:
    - On Screen Display
    - Play Sound
    - Send E-mail
    - Phone Call
    - PTZ Preset Go
    - Signal Digital Output
    - Send a SMS message
    - Send to Central Server
    - Send Snapshot to FTP
    - Popup E-Map on Event
- **Schedule-based:** Users can define the smart guard schedule for each event on a day by day basis

Specifications					
Model	SCB-IP+ Series				
IP Camera Input(s)	4, 8, 12, 16, 25, 32, 36, 64*				
Version	4.0.0				
IP Camera Brand(s) Supported (with device pack v2.5.0)	ACTi	Alphatech	AMTK	Arecont	ARM
	ATLANTIS	AXIS	BASLER	Bosch	Brickcom
	Bullwark	CAMTRON	Centrix	CISCO	CNB
	CORUM	COP	CTCunion	CryptoTelecom	Dallmeier
	Duhua	Digimerge	D-Link	DYNACOLOR	ENEO
	Ernitec	Etrovision	EverFocus	EYEVIEW	FINE
	Forenix	GE	Grandstream	Grundig	Guardeon
	Guardliner	HIKVISION	HiTRON	Honeywell	iCANTEK
	IQinVision	JVC	Levelone	LG	LILIN
	LINKSYS	LOREX	Lumenera	MESSOA	Micornet
	MOBOTIX	MOXA	NetworkCamera	Onvif	Panasonic
	Pelco	PiXord	PLANET	Probe	Rover
	SAE	SAMSUNG	Shany	Santec	SANYO
	Seriim	SONY	StarDot	Techson	Telview
	TOSHIBA	TRUEN	UDP	USAG	vForge
	Videosec	Vision Hi tech	VIVOTEK	Y-CAM	ZAVIO
	3S vision				
Digital PTZ	Supported in Live view and Playback				
Multiple Show	Supported in Live view				
Triple Monitor	Enable maximum 64 channels with two screens to show live video and viewer recording video on third monitor.				
Screen Resolution	1024x768, 1200x900, 1280x1024, 1440x900 1600x1200, 1680x1050, 1920x1080, 1920x1200				
Audio & Video Recording	Synchronized audio & video recording.				
Screen Division	1/4/6/9/10/13/16/25/36/49/64 divided screen.				
Compression Format	H.264;MPEG-4;M-JPEG;MxPEG				
Recording Type	Continuous record, record by digital input, motion record, event recording, boosting recording, record by schedule, manual record				
Playback Channels	Playback Maximum 16 channels under several modes & full screen.				
Playback Control	Playback, backward playback, fast forward/backward playback.				
Auto Recycling Recording	Auto recycling when storage disk is full.				

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Available I/O Function	Supporting I/O Box
Available POS Device	SCB-C31A RS232 to Ethernet Convertor
Software Watchdog	OnGuard
Hardware Watchdog	SCB-8000, SCB7100, SCB7000S/6000S, SCB7000/6000 series
System Minimum Requirements	
OS Supported	32bits: MS Windows XP pro SP3 / Vista SP1 / Win 7 SP1 64bits: Win 7 SP1/ Win Server 2008 R2
CPU	Intel Core 2 Duo E5300
RAM	2 GB
HDD	250 GB or above
Motherboard	Intel P55, H55, X58, P45, P43 chip, MB vendor ASUS Gigabyte or MSI with Intel Chipset recommended
Display	ATI Radeon 4650 or above (ATI Driver V11-2 recommended,)
External Storage	DAS, ISCSI (http://support.nuuo.com/mediawiki/index.php/Recommended_hard_drives)
Note	
* 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://support.nuuo.com/calculator/	
Support Language	

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		

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