NUUO Total Solution Provider











IP Camera Partners



Integration Partners



About Us

Founded in 2004, NUUO deploys advanced and comprehensive technologies to enhance the surveillance cameras to high standards demanded by our Intelligent Surveillance Solution. Combining NVR and Hybrid technologies with IVS detections guaranteed NUUO a successful entry to the market quickly.

NUUO is dedicated to offering a stable and high performance digital surveillance system for our clients. We have succeed in achieving over 21000 installations in 60 countries as well as its use by industries ranging from mass transportation to education, government projects to banks, hospitals, hotels, casinos and enterprises all prove that NUUO solutions can well satisfy the diversifying security needs from all industries.

Our headquarter locates in the Innovation Incubation Center of National Taiwan University (NTU) in Taipei. A staff of 120 professionals from a strong, cohesively operating team includes top-notch research and development, efficient client-care services, multicultural account executives, marketing and public relations. NUUO is well known in the security field for its reliable performance, prompt service, and innovative spirit.

NUUO — Your best choice

Total Solution Provider

From analogue to IP, from PC-based to Linux-embedded server, from small-scale installations to large-scale projects, NUUO's full product line provides you with comprehensive total solution.

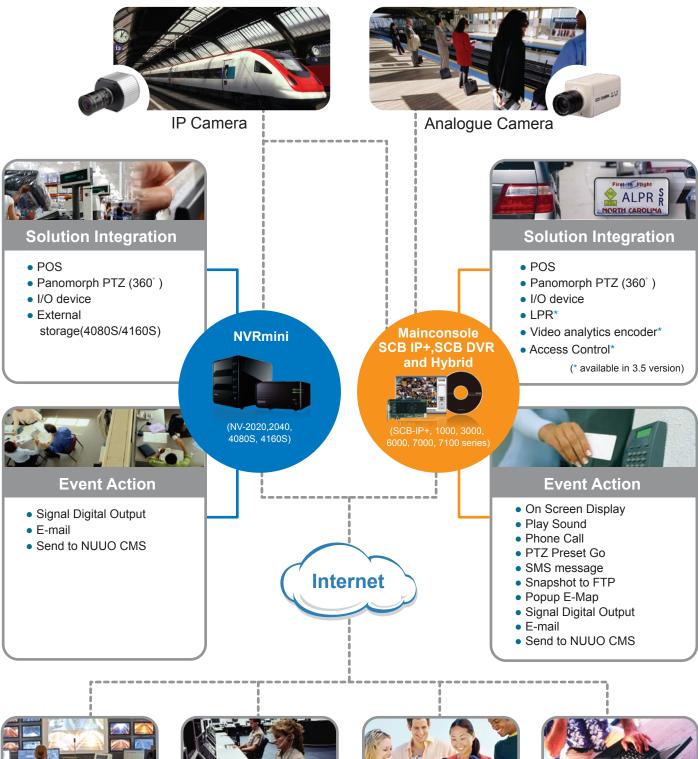
Open Platform

Our commitment to open platform has achieved the result in integration with over 50 leading brands of IP cameras and 1200 models, allowing our clients to enjoy the most economical option. We also continue seeking integration with partners in License Plate Recognition(LPR), Access Control, Video Analytics, Storage...etc., to bring out the best value for our clients.

Ease of Use

At NUUO, we have made a commitment in providing professional functionality in a user-friendly environment. NUUO products are easy to install, easy to learn and easy to use. Our products are based on the design of Graphical User Interface (GUI) with intuitive use concept in mind, saving the cost and effort for all the end-users.

NUUO Total Solution





CMS

NUUO CMS can manage all NUUO solutions including NVR, DVR, Hybrid and NVRmini.CMS has the most powerful alarm management system and unlimited matrix wall



Remote Client

Remote client can access and display live video from multiple NUUO servers (NVR, DVR, Hybrid and NVRmini) and manage up to 128 channels simultaneously



Mobile

- iPhone / iPad / Android Blackberry (Q2 2011)
- Smart phone support (Windows Mobile 5.0/6.0/6.5)*
- PDA*

(* available in Mainconsole)



WEB Browser

NUUO web client can both display live video and playback recordings (16 channels) on remote server.



NVRmini is a Linux-embedded system that is free from virus attack. It receives video stream and audio data from cameras, and users access NVRmini through browsers to get video and audio no matter live view or playback. With its Server-Client architecture, NVRmini guarantees a most stable and high quality monitoring and recording performance.











Hardware Specification

Model	NV-2020	NV-2040	NV-4080S	NV-4160S					
Recording Camera	1-2	1-4	1-8	1-16					
Number of Drives	2xSATA II	2xSATA II	4xSATA II	4xSATA II					
Embedded Drives (US only)	1 ~ 4TB	1 ~ 4TB	1 ~ 8TB	1 ~ 8TB					
RAID Level	RAID 0,1	RAID 0,1	RAID 0, 1, 5, 5+Spare, 10	RAID 0, 1, 5, 5+Spare, 10					
I/O Interface	1xUSB 2.0 (for UPS)	1xUSB 2.0 (for UPS)	2xUSB 2.0 (for UPS),	2xUSB 2.0 (for UPS),					
			1xeSATA (for DAS)	1xeSATA (for DAS)					
LAN Transmission Speed	10/100/1000 Mbps (RJ45)	10/100/1000 Mbps (RJ45)	10/100/1000 Mbps (RJ45)	10/100/1000 Mbps (RJ45)					
Dimension	92.0 x 145.2 x 213.2 mm	92.0 x 145.2 x 213.2 mm	188.5 x 152.5 x 227.6 mm	188.5 x 152.5 x 227.6 mm					
Temperature		Operating: 5°C	to 35°C (±5°C)						
Humidity		Operating:	10%-85%						
Compression Format		MPEG4, M-JPEG, H264, Mxl	PEG (Depends on IP camera)					
	Camera dependent	Camera dependent	Camera dependent	Camera dependent					
Recording Performance	(Around 65fps at 1.3M)	(Around 55fps at 1.3M)	(Around 240fps at 1.3M)	(Around 120fps at 1.3M)					
	Total bitrate: 20Mbps	Total bitrate: 20Mbps	Total bitrate: 65Mbps	Total bitrate: 55Mbps					
Remote PC CPU		Intel Core 2 [Duo, 2.6 GHz						
Remote PC RAM		1 (GB						
User Interface	HTTP Web t	prowser - Internet Explorer 7 o	or later/ NUUO Client Applicat	tion Program					
Recording Type	Continuous record, Re	cord by schedule, Manual rec	cord, Event trigger record, Dig	gital input trigger record					
Remote Live View Control	L	ive view, Preset / Go, PTZ fur	nctions, Remote I/O, Snapsho	ot					
Audio & Video Recording		Audio & video recordi	ing in synchronization						
POS		Live view, record and sea	arch for every transaction						
Auto Backup	Autor	matically backup the recorded	d video of the previous date to	FTP					
Smart Search	General n	General motion, Missing object, Foreign object, Lose focus, Camera occlusion							
Remote Client OS Platform		Win7 (32 and 64-bit) / Vista (32-bit) / Windows XP (32-bit)						
Remote Live View Connection	ons	Live view maximum 16 cor	nnections at the same time						
Mobile Client OS Platform		iPhone, iPad, An	droid, BlackBerry						
IP Camera Brand Support	ACTi, ArecontVision,AR	M, Axis, Basler, Brickcom, Bo	ACTi, ArecontVision,ARM, Axis, Basler, Brickcom, Bosch, Cisco, CNB, D-Link, Dynacolor, Eneo, Fine,						

ACTi, ArecontVision,ARM, Axis, Basler, Brickcom, Bosch, Cisco, CNB, D-Link, Dynacolor, Eneo, Fine, HIKVision, IQinVision, LevelOne, Lumenera, Linksys, Mobotix, Onvif, Panasonic, Samsung, Santec, SANYO, Sony, StarDot, Toshiba, Videosec, VIVOTEK, Zavio,

Software Features

Multiple View

Duplicate channels and utilize digital PTZ for different angles







GUI (Graphic User Interface)

User-friendly interface for recording schedule configuration









Panomorph PTZ (360°)



Five Intelligent Search



Dual Stream Profile



Event Alert



E- MAP



Auto Back up Video to FTP



Multi-Platform Mobile Client



Web Based Live View



Compatible with NUUO CMS



Remote Client for multiple NVRmini co nnections within 128ch



H.264, MPEG4,



RAID 0,1,5,5+spare,10



Remote I/O Solution



Digital Watermark



NUUO NVRmini

Software Specification

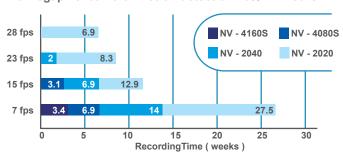
Local Monitoring	No					
Screen Display (AP)	1/4/6/9/10/13/16/25/36/49/64/12+1/16+1 divided screen / Dual Monitor Display (1 for Live-view / 1 for Playback)					
Screen Display (Web)	1/4/6/9/10/13/16/25/36/49/64/12+1/16+1 divided screen / Multiple Monitor Display (by numerous browsers)					
Live Display	Multi-View / Digital PTZ /Advanced E-Map / Bandwidth Monitoring					
Recording	continuous Record / Event Recording / Manual Record / Motion Record / Record by schedule / Record by Digital Input					
RAID	RAID 0,1,5,5+spare,10					
Playback	Smart Search (General Motion / Missing Object / Foreign Object / Camera Occlusion / Signal Lost) /					
	Backup Video Enhancement / Export video					
Alarm Notification	Camera Events (Motion from camera, Connection lost)					
	Signal Digital Input Event					
	System Event (Abnormal disk status / Daily system report / Unable to access FTP / Backup unfinished/					
	Power-on notification)					
	3 Instant Responses (Send E-mail / Signal Digital Output / Send to Central Server)					
Backup	Auto Backup					
Remote Monitoring	Remote Client (Multiple Servers, up to 128 channels) / IO Event Support / E-Map / PTZ					
	Web View					
	Mobile Client (iPhone / iPad / Android)					
	CMS					
External Device	POS / Remote I/ O Box / ImmerVision Lens / DAS / Joystick / UPS					
Management & Authentication	User Authority Management/ Watermark Verification Tool (Video, Snapshot)					
Supported Languages	English, Japanese, Traditional Chinese, Spanish, Deutsch, Finnish, French, Hungarian, Italian, Russian,					
	Czech, Korean, Polish, Dutch, Serbian, Swedish, Portuguese (Brazil)					

Liveview and Recording performance (H.264 Format)

Model	Throughput	Total FPS						
Model	Tilloughput	1M	2M	3M	5M			
NV - 2020	20Mbps	65	50	20	10			
NV - 2040	20Mbps	55	32	16	9			
NV - 4080S	65Mbps	240	120	65	32			
NV - 4160S	55Mbps	120	65	42	28			

1T HDD recording times (count in weeks)

1.3 Megapixel camera/ motion detection 10%/ 24 hours





SCB-IP+ series (License code) • Connection of IP cameras



Model	IP + 01	IP + 04	IP + 08	IP + 12	IP + 16	IP + 25	IP + 32	IP + 36	IP + 64
Max connection of IP cameras	1	4	8	12	16	25	32	36	64

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/

SCB DVR Card • Connection of analogue cameras

SCB-1000 / 3000 / 6000 / 7000 / 7100 series



Software compression card	Hardware compression card
SCB-1000 / 3000 series	SCB-6000 / 7000 / 7100 series (TV out)

Hybrid • Connection of IP cameras and analogue cameras





SCB-IP+ series (License code) + SCB-1000 / 3000 / 6000 / 7000 / 7100 series

(Hybrid consists of SCB DVR Card and SCB IP+ License)

IP Camera Partners



































































































Digital PTZ

Main Features

Local Monitoring	Yes					
Screen Display	1/4/6/9/10/13/16/25/36/49/64/12+1/16+1 divided screen/Triple Monitor Display (2 for Live-view/1 for Playback) /					
	Wide Screen Supported (16:9, 16:10)					
Live Display	Multi-View/ Digital PTZ/ Advanced E-Map/ Bandwidth Monitoring/ 2-Way Audio/ Instant Playback/ Privacy Mask					
Recording	Continuous Recording/ Event Recording/ Manual Recording/ Motion Recording/ Record by schedule/					
	Record by Digital Input/ Transcoding/ Auto-Load Balance/ Boosting Recording/ 2-Way Audio					
Playback	Smart Search (General Motion/ Missing Object/ Foreign Object/ Camera Occlusion/ Signal Lost)/ DBTool/ Backup/					
	Video Enhancement Tool					
Alarm Notification	Camera Events (General Motion/ Missing Object/ Foreign Object/ Camera Occlusion/ Lose Focus/ Signal Lost)					
	Signal Digital Input Event					
	System Event					
	(Disk Space Exhausted/ System Health Unusual/ CPU Loading/ CPU Temperature/ Network Congestion)					
	10 instant responses (On Screen Display/ Play Sound/ Send E-mail/ Phone Call/ PTZ Preset Go/					
	Signal Digital Output/ Send SMS Message/ Send to Central Server/ Send Snapshot to FTP/ Pop-up E-map on Even					
Backup	Auto Backup/ Remote Backup/ iSCSI Support (Promise Brand)**					
Remote Monitoring	Remote Client (Multiple Servers, up to 128 CH)/ IO Event Support/ E-Map/ 2-Way Audio/ PTZ					
	Web View					
	Mobile Client (PDA/ iPhone/ iPad/ Android/ Blackberry)					
	CMS					
External Device	POS/ External I/O Box/ ImmerVision Lens					
Management & Authentication	User Authority Management/ Windows Active Directory/ Watermark Verification Tool (Video, Snapshot)					
Supported Languages	Bulgarian, Chinese (Simplified), Chinese (Traditional), Czech, Danish, English, Farsi, Finnish, French, German,					
	Greek, Hebrew, Hungarian, Italian, Japanese, Korean, Norse, Polish, Portuguese (Brazil), Portuguese (Portugal),					
	Romanian, Russian, Serbia, Slovak, Slovenian, Spanish, Swedish, Thai, Turkish					

^{*} Available in version 3.5 (May 2011)

^{**}USB, eSATA and network attached storage devices are no longer supported as storage locations.

You cannot add new drives to the system and we strongly recommend not using existing NAS devices.

NUUO Mainconsole

NUUO NVR IP+ Series

IP+ Series	IP+01	IP+04	IP+08	IP+12	IP+16	IP+25	IP+32	IP+36	IP+64
Video Input	1	4	8	12	16	25	32	36	64
Audio Support	2-Way Audio								
Compression Format	H.264 / MPEG4 / MJPEG / MxPEG								
Supported OS	Windows 7 (32 and 64-bit) / Windows 2008 (64-bit) / Windows XP (32-bit)								

Minimum Hardware Specification

	ware specimenton		
CPU	Intel Core 2 Duo E5300		
Mother-board	Intel P55, H55, X58, P45, P43 chip, MB vendor ASUS Gigabyte or MSI with Intel Chipset recommended		
Graphic Card	ATI Radeon 4650, nVIDIA GeForce GF-9600 or above (ATI Driver V9-2 recommended, ATI Driver V10 not support)		
RAM	2 GB		
Supported IP Camera	Brands 52 IP Camera Brands (Axis, Arecont Vision, Panasonic, Sanyo, Sony, ACTi, Vivotek, Honeywell, Mobotix etc)		
Access Control Partner CDVI, FALCO, Software House			
LPR Partner	Visec		

^{*} Please check with NUUO FAE or local authorized distributor for the hardware installation configuration or refer to NUUO Wiki at http://support.nuuo.com/calculator/

NUUO DVR Card Comparison Table

Product Ima	age		*			1110			1000 A						
NUUO DVR	R Card	7100 s	series	7	'000 serie	s	6	000 serie	S	3000 series			1000 :	1000 series	
Model		7108	7116	7004	7008	7016	6004	6008	6016	3004	3008	3016	1004	1008	
Video Input		8	16	4	8	16	4	8	16	4	8	16	4	8	
Audio Input		8	16	4	8	16	4	8	16		4		1	l	
Maximum C	ards	1	1	4	4	2	4	4	4		2		4	1	
Maximum C	hannels	32 (with 6000	/ 7000 series)		32			64			32		3	32	
Display	NTSC	240 fps	480 fps	120 fps	240 fps	480 fps	120 fps	240 fps	480 fps		240 fps	3	30	fps	
Rate	PAL	200 fps	400 fps	100 fps	200 fps	400 fps	100 fps	200 fps	400 fps		200 fps	3	25	fps	
Recording	NTSC	240 fps	480 fps	120 fps	240 fps	480 fps	120 fps	240 fps	480 fps		120 fps	3	30	fps	
Rate @CIF	PAL	200 fps	400 fps	100 fps	200 fps	400 fps	100 fps	200 fps	400 fps	100 fps		100 fps 25 fps		fps	
Recording	NTSC	240 fps	480 fps	120 fps	240 fps	480 fps	30 fps	60 fps	120 fps	120 fps		120 fps 30 fps		fps	
Rate @D1	PAL	200 fps	400 fps	100 fps	200 fps	400 fps	25 fps	50 fps	100 fps	100 fps		100 fps 25 fps		fps	
TV Output	w/ HDMI	RCA and H	DMI: 10fps		N/A			N/A			N/A		N/A		
Rate	w/o HDMI	RCA:	25fps		N/A		N/A			N/A		N/A			
	Only HDMI	HDMI:	14fps		N/A		N/A			N/A N/A			A		
Video Reso	lution			D1	, CIF, QC	IF						D1, V0	GA, CIF		
Compression	n Format			F	I/W H.264						S/	W H.26	4, MPEG	4	
Interface		PCI - e x1 PCI - e x1						PCI - e x1				Р	CI		
Available I/0	O Card	2	4	1	2	4	1	2	4	4		1	1		
Available I/0	Э Вох	Support Suppo						port							
Hardware V	Vatchdog	g Support S						Sup	port						
Dimension	Dimension (mm) 216(W) x 126(H)			7004 / 08:167(W) x 121(H)		6004 / 08:167(W) x 121(H)		200(W) x 12	20(H)	155(W)	x 120(H)			
			7016: 216(W) x 126(H)			6016: 216(W) x 126(H)									
Warranty		2 ye	ear		2 year			2 year			2 year		2 y	ear	

System Minimum Requirements

OS Supported		Windows VD (22 bit) / Windows 7 (22 and 64 bit) / Window	0000 (0413)				
		VVIIIdows AF (32-bit) / VVIIIdows / (32 and 64-bit) / VVIIIdov	Windows XP (32-bit) / Windows 7 (32 and 64-bit) / Windows 2008 (64-bit)				
CPU	Intel Core 2 Quad Q8400 Intel Core 2 DuoE5300 Intel Core 2 DuoE530						
Mother-board	Intel P55, H55, X58, P45, P43 chip, MB vendor ASUS Gigabyte or MSI with Intel Chipset recommended						
Graphic Card	ATI Radeon 4850, nVIDIA GeForce GF-9600 or above (ATI Driver V9-2 recommended, ATI Driver V10 not support)						
HDD	250 GB or Above						
RAM	2 GB						
Note	Above RAM amount is recommended based on one DVR card installation. For system with multiple DVR cards stacked,						
	1G RAM for system ur	nder 16ch, 2G RAM for system under 32ch, and 3G RAM for system	m with 32ch or above are recommended.				

^{*} For stability reason, we strongly recommend to apply a desktop with a system fan when using SCB-7100/7000/6000 series.

^{**} Any combination of SCB-7100/7000 series cards is possible with a limitation on the maximum 32 analog channels to be managed on single machine.

^{***} When installed two 3000 series card on one PC, the system can only support 352x240 (NTSC) 352x288 (PAL) resolutions for each.

^{****} The warranty of US area is 3 years.



Centralized Management

- Authentic Client –Server architecture
- Alarm record is kept in SQL Server 2005 Express Database.
- Unlimited client to monitor multiple NUUO solutions at the same time
- Centralized video management by Matrix wall (64 channels of video display per monitor)
- Assign different levels of privileges according to each user account and user group
- A built-in "remote desktop configuration" can remotely configure any NUUO front site solutions.
- Auto alarm backup
- Windows Active Directory*

Intuitive Operation

- Multiple layers of tree structured E-Map : All functions are accessible directly from the E-map.
- Supports intuitive GUI indicators of cameras, I/O devices, POS, LPR*, Access Control* and server locations.
- Clients are supported with popup live window and instant playback, remote playback, embedded remote playback application and smart search in playback for special events.
- Trigger digital output device, check system status.
- Supports multiple display matrixes for remote liveview with PTZ, joystick and keyboard control*

Alarm Management

- Define Alarm: support up to 45 alarm types, 6 analytics events, define priorities and set up Independent alarm coverage.
- Identify Alarms: by "indicate event on the E-Map", "Popup live video windows" and "Sent channels with alert directly to the matrix"
- Handle Alarms: With alarm guide, operators can know how to respond to different alarm immediately. System
 provides alarm status, data mining and reporting function.
- Alarm video recording: backup alarm video recording in Clients
- * Available in version 1.6

Centralized Management

Access and control unlimited cameras, I/O devices and POS from any NUUO recording servers (NVR/DVR/NDVR Hybrid and NVRmini). Assign different levels of privilege to access server, camera, alarm and much more to each user account and user group.

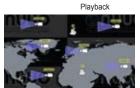


- · Support unlimited recording servers
- Multiple user accounts and groups
- Remote Live View and Playback
- Auto back up and recycle alarm
- Support multiple stream
- Two Way Audio
- Windows Active Directory*

E-Map

Tree structured map layout supporting unlimited maps layers. Intuitive GUI indicator of cameras, I/O devices, POS, LPR, access control and server locations.

- Unlimited layers of map Instant alarm notification
- Intuitive map operations Real-time status of devices



Alarm Management

Real-time alarm management supporting up to 45 alarm types, 6 video analytic events, alarm status, priorities and independent alarm coverage, data mining tool and much more.

- Instant alarm notifications Alarm popup
- Alarm management Backup alarm recording on clients



Matrix - Video Wall

Unlimited video matrixes supporting up to 64 channels of video display per monitor



- Flexible display layout
- Camera sequencing (auto scan)
- View carousel & carousel in views*
- PTZ Control with CMS Client
- Alarm carousel*
- Matrix view profile (device groups)



CMS Part number

NCS-BASE

Central Management System Base license

1 base license+ 48 camera connection+ 8 I/O connection

NCS-CN-CAM

Central Management System Connection - Camera

1 license of camera connection

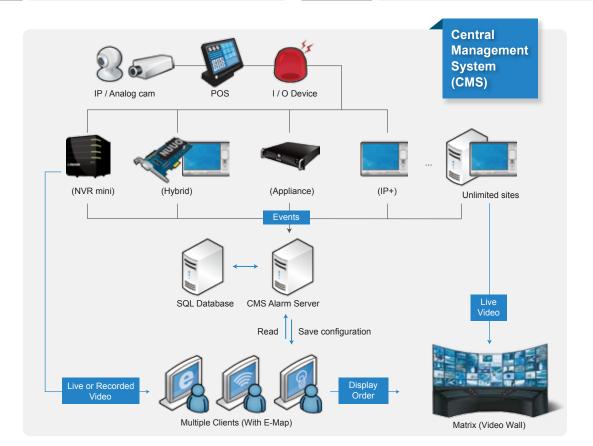
NCS-CN-IO

NCS-CN-POS

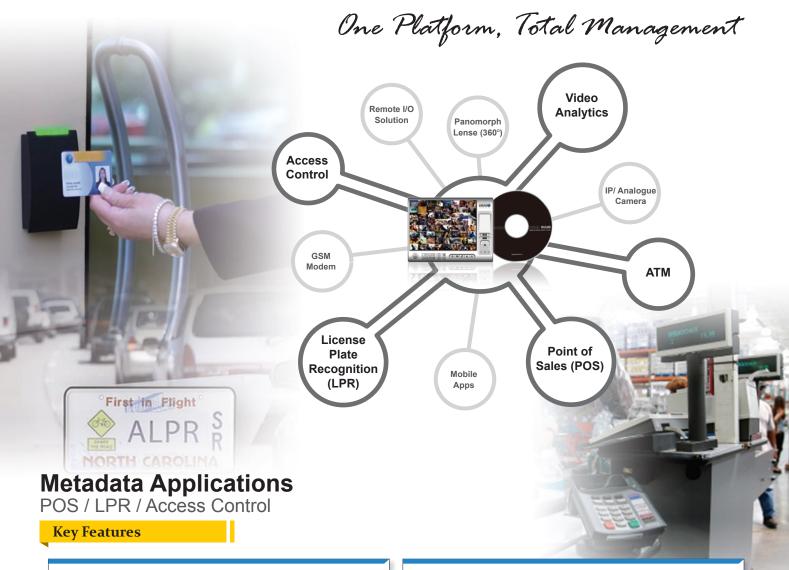
Central Management System Connection - I/O

1 license of I/O connection

Central Management System Connection - POS 1 license of POS connection



NUUO 3rd Party Integration



3rd Party Compatibility

- Connection up to 64 POS/LPR/Access Control
- Compatible with any ASCII through RS232 serial or TCP/IP interface
- License Management



LiveView & Event Notification

- Synchronization transaction with video
- Overlay transaction on multi-channels
- Alarm Notice based on user-defined event





Data Management

- Data filter and storage transaction data into database
- SQLite format database of transaction data



Smart Search & Playback

- Smart search via user-specified keywords, date, numeric value...etc.
- Playback recorded video with transaction data



Accessories

Converter Box

C31A • RS232 to TCP/IP Converter



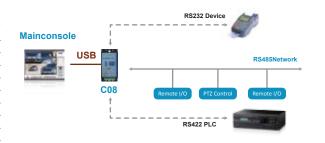
Input	RS232
Output	Ethernet
DC In	DC +9V to +24V
Power consumption	1000 mA
Operating Temp.	-20 to 65°C
Operating Humidity	0-90 % Non-Condensing
Baud Rate	110 bps to 230.4 kbps
Data Bits	5, 6, 7 or 8
Stop Bits	1, 1.5 or 2
Parity	None, Even, Odd, Mark, Space
Flow Control	None, RTX/CTS, XON/XOFF, DTR/DSR



C08 • USB to RS232/422/485 Converter



USB Interface	Compliant with USB V1.0 and V2.0
RS-232 signal	5 full-duplex (TXD, RXD, CTS, RTS, GND).
RS-422 signal	4 half-duplex wires (TX+, RX+, TX-, RX-).
RS-485 signal	2 half-duplex wires (D+, D-).
Cable Type	USB type A to type B.
Transmission distance	RS485 Up to 4000ft (1200M).
Signal LED	Power on, TX, RX.
Direct power from USB port	Support
Power consumption	1.2W
Dimension	151 x 75 x 26 mm

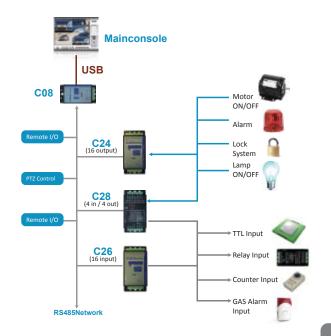


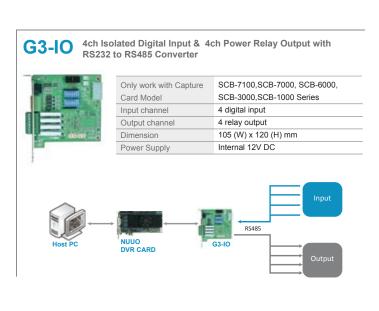
I/O Box & I/O Card

C24 / C26 • 16ch Digital Output / Input Insolated RS485 Module

C28 • 4ch Isolated Digital Input & 4ch Power Relay Output RS485 Module

Product Image	C24	C26	C28
Output/Input Channel	16 digital output channels	16 digital input channels with counter	4 digital input channel/4 digital output channel
Counter Channel/Frequency	N/A	16 / 100Hz	4 / 100Hz
Relay Type	N/A	N/A	2 Form A(R1,R2), 2Form C(R3, R4)
Communication Interface	RS-485 differential 2 half / duplex wires	RS-485 differential 2 half / duplex wires	RS-485
Transmission distance	RS485 Up to 4000ft (1200M)	RS485 Up to 4000ft (1200M)	RS485 Up to 4000ft (1200M)
Power consumption	1.5W	1.5W	2.7W
Dimension	151 x 75 x 26 mm	151 x 75 x 26 mm	151 x 75 x 26 mm





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