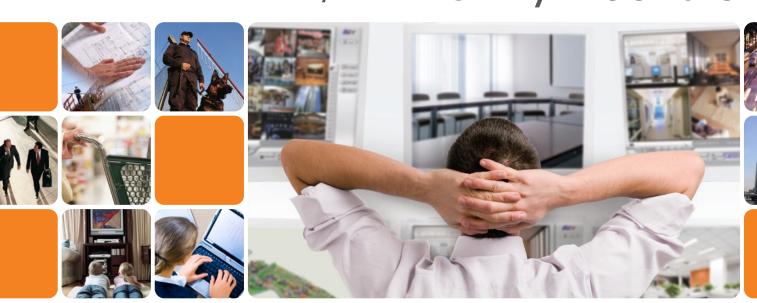# DVR/NVR Family Brochure

2012

Smart Solutions for Complex Security Projects

AVer's wide range of complete surveillance solutions provides users with a variety of specifications and software support to accommodate the demands of nearly all security projects. AVer's leading hybrid surveillance technology gives users the flexibility to simultaneously support both megapixel IP cameras and analog cameras using the same DVR. This cost-effective approach allows for IP camera installation in select/critical areas and use of analog cameras in less critical areas or areas with extensive analog infrastructures already in place. Rounding out AVer's smart security solutions is its advanced DVR/NVR software which ensures a friendly user experience and easy management of events through video footage clustering.

Intelligent Streaming
This unique feature allows users to optimize streams from AVer's megapixel IP cameras to remote and local monitoring sites by selecting different types of compression, frame rates, and quality for preview, playback, and remote monitoring with most AVer DVRs/NVRs.

Simplified Camera Settings
Users can individually adjust the video size and frame rate for every connected analog camera plus easily setup attached IP cameras through friendly features like hassle-free protocol searching for most major IP camera brands.

Advanced Alarm Settings
AVer's extensive real-time alarming conditions, (i.e. motion detection, sensor, POS keyword, etc.) can be easily and quickly set to trigger different alarm actions (i.e. launch E-map, enlarge camera view, send to CMS, etc.) to minimize false alarms and immediately notify a number of users.

Onvif

			4CH	8CH	16CH	20CH	24CH	32CH
NVR	Windows	USB drive	NXU8004 iSCSI	NXU8008 iSCSI	NXU8016 iSCSI			NXU8032 iSCSI
	Embedded Linux	Standalone	EXR6004 Mini HDD x1					
Hybrid DVR	Windows	PCI-e card		NV6240T (PCI-e 1x) iSCSI	NV6480T (PCI-e 1x) iSCSI	NV6480T (PCI-e 1x) + NXU8004 iSCSI	NV6480T (PCI-e 1x) + NXU8008 iSCSI	NV6480T x2 iSCSI
					NV8416T (PCI-e 4x) iSCSI	NV8416T (PCI-e 4x) + NXU8004 iSCSI	NV8416T (PCI-e 4x) + NXU8008 iSCSI	NV8416T x2 iSCSI
	Embedded Windows	Standalone			SA6416E Rack iSCSI HDD x4			SA6832E Rack iSCSI HDD x5
					IWH3216 Touch series iSCSI IWH Touch: HDD x3 IWH Touch II: HDD x4			
	Embedded Linux			EH6108H+ HDD*x4	EH6216H+ HDD*x4			
					EH1116H-4+ (up to 4 IP camera channels) NEW HDD*x2			
			EH1004H-4 Nano (up to 4 IP camera channels) HDD*x1	EH1008H-4 Nano (up to 4 IP camera channels) HDD*x1	EH1116H-4 Nano (up to 4 IP camera channels) HDD*x1			

* Each internal eSATA HDD supports up to 3TB.

IWH3216 Touch II

IWH3216 Touch

TAIWAN EXCELLENCE 2011

		hybrid DVR		embedded hybrid DVR	
model		SA6832E Rack	SA6416E Rack	IWH3216 Touch II	IWH3216 Touch
application		Project-based DVRs perfect for cases with demanding specification requirements Ex. airports, transportation hubs, government offices		Professional DVR series innovatively designed for medium to large-sized security projects Ex. shopping malls, hospitals, banks	
feature overview		· Hybrid SPOT monitor and dual monitor output · Intelligent video integration such as POS, FaceFinder, PTZ tracking, etc. · Extensive storage capability with up to 5 internal HDD, e-SATA, RAID, and iSCSI support · Remote software integration with CMS, iPhone, iPad, and Android phones		· Incorporates dual core processor which delivers significant CPU perofrmance · Supports H.264 H/W compression up to 480/400fps recording · Extensive storage capability and easy installation of 4 removable HDD trays (Touch II only) · Advanced iPOS function and POS integration with most commonly used systems	
system					
operating system		embedded Windows®		embedded Windows®	
total channel numbers		32	16	16	
max. IP camera inputs		32	16	16	
camera inputs (analog)		32 BNC connectors	16 BNC connectors	16 BNC connectors	
loop outputs (analog)		no		16	
performance					
recording (analog)	compression	S/W H.264/ MPEG4/ MJPEG		H/W H.264	
	resolution	NTSC: 352 x 240 (CIF), 640 x 480 (VGA), 720 x 240 (Half-D1), 720 x 480 (D1)		NTSC: 352 x 240 (CIF), 720 x 240 (Half-D1), 720 x 480 (D1)	
		PAL: 352 x 288 (CIF), 640 x 480 (VGA), 720 x 288 (Half-D1), 720 x 576 (D1)		PAL: 352 x 288 (CIF), 720 x 288 (Half-D1), 720 x 576 (D1)	
	frame rate (NTSC/PAL)	CIF: 960/800fps	CIF: 480/400fps	CIF: 480/400fps	
		Half-D1: 480/400fps	Half-D1: 240/200fps	Half-D1: 480/400fps	
		D1: 320/256fps	D1: 160/128fps	D1: 240/200fps	
recording (IP)	resolution	up to 5 megapixels for one channel, and a total of 42 megapixels for all channels in H.264/MPEG4/MJPEG format		up to 5 megapixels for one channel, and a total of 42 megapixels for all channels in H.264/MPEG4/MJPEG format	
display (analog)	frame rate (NTSC/PAL)	960/800fps	480/400fps	480/400fps	
storage	internal HDD capacity	supports up to 5 SATA HDD (1 removable HDD tray)	supports up to 4 SATA HDD (1 removable HDD tray)	supports up to 4 SATA HDD (4 removable HDD trays)	supports up to 3 SATA HDD
	external HDD	supports 1 external e-SATA HDD or RAID		supports 1 external e-SATA HDD or RAID	
	iSCSI	supports iSCSI device		supports iSCSI device	
interface					
monitors	VGA outputs	VGA 1: up to 1920 x 1200		VGA 1: up to 1920 x 1200	
		VGA 2: up to 1920 x 1200		VGA 2: 1280 x 1024	
	SPOT monitor outputs	1 (supports hybrid multi-quad output)		2 (full screen output from alerted analog cameras)	
audio	inputs	32 line-in, 8KHz sampling rate	16 line-in, 8KHz sampling rate	16 line-in, 8KHz sampling rate	
	outputs	1 line-out		1 line-out	
MIC	inputs	1 line-in		1 line-in	
alarm	sensor (alarm) inputs	8	4	16	
		input voltage: max. 6 VDC		input voltage: max. 6 VDC	
	relay outputs	8 (NO/NC)	4 (NO/NC)	4 (NO/NC)	
		voltage range: 125 VAC/ 30 VDC		voltage range: 125 VAC/ 30 VDC	
		switching current: max. 1A		switching current: max. 1A	
network	Ethernet (RJ-45)	2 (10/100/1000Base-T)	1 (10/100/1000Base-T)	2 (10/100/1000Base-T)	
backup	DVD writer	yes		no	yes
connections	e-SATA	1		1	
	RS-232	1 (D-sub 9 pins, male)		1 (D-sub 9 pins, male)	
	RS-485	1 set (Tx+, Tx-, Rx+, Rx-)		1 set (Tx+, Tx-, Rx+, Rx-)	
	USB 2.0	6 (2 ports on front panel, 4 ports on rear plate)		6 (2 ports on front panel, 4 ports on rear plate)	
control	front key pad	no		yes	
general					
electrical	power input	350W PSU		120W power adaptor, 19V DC	
environmental	operating temperature	0 °C to 40 °C (32 ° to 104 °F)		0 °C to 40 °C (32 ° to 104 °F)	
mechanical	dimensions (W x H x D)	432 x 132 x 529 mm		430 x 105 x 410 mm	430 x 60 x 370 mm
	weight (net)	13.9kg	13.7kg	7.6kg	5.2kg

* Specifications are subject to change without prior notice

NEW

	embedded hybrid DVR		
model	EH6216H⁺	EH6108H⁺	EH1116H-4⁺
application	Feature-upgraded DVR series that has been approved in medium-sized and retail chain stores security applications Ex. supermarkets, university campuses, business plazas		Smart hybrid solution that is perfect for medium-sized projects Ex. restaurants, factories, warehouses
feature overview	· Supports H.264 H/W compression up to 480/400fps recording · Analog SPOT monitor and VGA monitor output · Advanced intelligent streaming technology provides excellent preview performance (with AVer's IP camera series) · Remote software integration with CMS, iPhone, iPad, and Android phones		· Embedded hybrid DVR supports up to 4 IP cameras · Supports up to 5 megapixels for one channel to provide high quality images · Advanced intelligent streaming technology provides excellent preview performance (with AVer's IP camera series) · Remote software integration with CMS, iPhone, iPad, and Android phones

system				
operating system		embedded Linux		embedded Linux
total channel numbers		16	8	16
max. IP camera inputs		16	8	4
camera inputs (analog)		16 BNC connectors	8 BNC connectors	16 BNC connectors
loop outputs (analog)		16	8	no

performance				
recording (analog)	compression	H/W H.264		H/W H.264
	resolution	NTSC: 352 x 240 (CIF), 720 x 240 (Half-D1), 720 x 480 (D1)		NTSC: 352 x 240 (CIF), 720 x 240 (Half-D1), 720 x 480 (D1)
		PAL: 352 x 288 (CIF), 720 x 288 (Half-D1), 720 x 576 (D1)		PAL: 352 x 288 (CIF), 720 x 288 (Half-D1), 720 x 576 (D1)
	frame rate (NTSC/PAL)	CIF: 480/400fps	CIF: 240/200fps	CIF: 480/400fps
		Half-D1: 480/400fps	Half-D1: 240/200fps	Half-D1: 240/200fps
		D1: 240/200fps	D1: 120/100fps	D1: 120/100fps
recording (IP)	resolution	up to 5 megapixels for one channel, and a total of 16 megapixels for all channels in H.264/ MPEG4/ MJPEG format	up to 5 megapixels for one channel, and a total of 8 megapixels for all channels in H.264/ MPEG4/ MJPEG format	up to 5 megapixels for one channel, and a total of 8 megapixels for all 4 IP camera channels in H.264/ MPEG4/ MJPEG format
display (analog)	frame rate (NTSC/PAL)	480/400fps	240/200fps	480/400fps
storage	internal HDD capacity	supports up to 4 SATA HDD (1 removable HDD tray)		supports up to 2 SATA HDD
	external HDD	supports 1 external e-SATA HDD or RAID		no
	iSCSI	no		no

interface				
monitors	VGA outputs	1 (1024 x 768)		1 (1024 x 768)
	SPOT monitor outputs	2 (full screen output from alerted analog cameras)		1 SPOT output (full screen output from alerted analog cameras) 1 TV output (full screen output same as VGA video)
audio	inputs	16 line-in, 8KHz sampling rate	8 line-in, 8KHz sampling rate	4 line-in, 8 KHz sampling rate
	outputs	1 line-out		1 line-out
MIC	inputs	1 line-in		no
alarm	sensor (alarm) inputs	16		4
		input voltage: max. 6 VDC		input voltage: max. 6 VDC
	relay outputs	4 (NO/ NC)		1 (NO/ NC)
		voltage range: 125 VAC/ 30 VDC		voltage range: 125VAC/ 30 VDC.
		switching current: max. 1A		switching current: max. 1A
network	Ethernet (RJ-45)	2 (10/100/1000Base-T)		1 (10/100/1000Base-T)
backup	DVD writer	optional (swappable with HDD tray)		no
connections	e-SATA	1		no
	RS-232	1 (D-sub 9 pins, male)		1 (D-sub 9 pins, male)
	RS-485	1 set (Tx+, Tx-, Rx+, Rx-)		1 set (Tx+, Tx-, Rx+, Rx-)
	USB 2.0	3 (3 ports on front panel)		2 (2 ports on front panel)
control	front key pad	yes		yes

general				
electrical	power input	90W power adaptor, 19V DC		48W power adaptor, 12V DC
environmental	operating temperature	0 °C to 40 °C (32 ° to 104 °F)		0 °C to 40 °C (32 ° to 104 °F)
mechanical	dimensions (W x H x D)	430 x 60 x 370 mm		430 x 60 x 370 mm
	weight (net)	5.7kg		3.7kg

		embedded hybrid DVR		
model		EH1116H-4 Nano	EH1008H-4 Nano	EH1004H-4 Nano
application		Featuring compact-size with intuitive graphical interface, this user-friendly DVR series is made to apply in retail industry and residential sector Ex. convenience stores, ATMs, homes		
feature overview		· Compact-sized embedded hybrid DVR that supports up to 4 IP cameras · Fan-less (4/8CH) and mini-fan (16CH) system design provide noise-free environment · Advanced intelligent streaming technology provides excellent preview performance (with AVer's IP camera series) · Remote software integration with CMS, iPhone, iPad, and Android phones		

system				
operating system		embedded Linux		
total channel numbers		16	8	4
max. IP camera inputs		4		
camera inputs (analog)		16 BNC connectors	8 BNC connectors	4 BNC connectors
loop outputs (analog)		no		

performance				
recording (analog)	compression	H/W H.264		
	resolution	NTSC: 352 x 240 (CIF), 720 x 240 (Half-D1), 720 x 480 (D1)		
		PAL: 352 x 288 (CIF), 720 x 288 (Half-D1), 720 x 576 (D1)		
	frame rate (NTSC/PAL)	CIF: 480/400fps	CIF: 240/200fps	CIF: 120/100fps
		Half-D1: 240/200fps	Half-D1: 120/100fps	
		D1: 120/100fps	D1: 60/50fps	
recording (IP)	resolution	up to 5 megapixels for one channel, and a total of 8 megapixels for all 4 IP camera channels in H.264/ MPEG4/ MJPEG format		
display (analog)	frame rate (NTSC/PAL)	480/400fps	240/200fps	120/100fps
storage	internal HDD capacity	supports 1 SATA HDD		
	external HDD	supports 1 external e-SATA HDD		
	iSCSI	no		

interface				
monitors	VGA outputs	1 (1024 x 768)		
	SPOT monitor outputs	1 SPOT output (full screen output from alerted analog cameras) 1 TV output (full screen output same as VGA video)		
audio	inputs	4 line-in, 8 KHz sampling rate		
	outputs	1 line-out		
MIC	inputs	no		
alarm	sensor (alarm) inputs	4		
		input voltage: max. 6 VDC		
	relay outputs	1 (NO/ NC)		
		voltage range: 125VAC/ 30 VDC.		
		switching current: max. 1A		
network	Ethernet (RJ-45)	1 (10/100/1000Base-T)	1 (10/100Base-T)	
backup	DVD writer	no		
connections	e-SATA	1		
	RS-232	1 (D-sub 9 pins, male)		
	RS-485	1 set (Tx+, Tx-, Rx+, Rx-)		
	USB 2.0	2 (2 ports on front panel)		
control	front key pad	no		

general				
electrical	power input	48W power adaptor, 12V DC	24W power adaptor, 12V DC	
environmental	operating temperature	0 ℃ to 40 ℃ (32 ° to 104 °F)		
mechanical	dimensions (W x H x D)	245 x 50 x 160 mm		
	weight (net)	0.8kg		

	hybrid capture card		
model	NV8416T	NV6480T	NV6240T
application	Customizable security solution to accommdate variety of demands for different types of scurity project Ex. mechanic shops, parking lots, business buildings		
feature overview	· Customize your own surveillance system that is stackable up to 32CH · Hybrid SPOT monitor and dual monitor output · S/W compression with real-time recording and display · Advnaced iPOS function and POS integration with most commonly used systems · Remote software integration with CMS, iPhone, iPad, and Android phones		

system

		NV8416T	NV6480T	NV6240T
interface		PCI-e 4x	PCI-e 1x	PCI-e 1x
operating system		supports Windows® XP (32bit)/ Vista (32 bit)/ 7 (32/64bit)		
total channel numbers		16 (stackable up to 2 cards)		8 (stackable up to 2 cards)
max. IP camera inputs		16		8
camera inputs (analog)		16 BNC connectors		8 BNC connectors
loop outputs (analog)		no		

performance

		NV8416T	NV6480T	NV6240T
recording (analog)	compression	S/W H.264/ MPEG4		
	resolution	NTSC: 352 x 240 (CIF), 640 x 480 (VGA), 720 x 240 (Half-D1), 720 x 480 (D1)		
		PAL: 352 x 288 (CIF), 640 x 480 (VGA), 720 x 288 (Half-D1), 720 x 576 (D1)		
	frame rate (NTSC/PAL)	CIF: 480/400fps	CIF: 480/400fps	CIF: 240/200fps
		VGA: 480/400fps	VGA: 480/400fps	VGA: 240/200fps
		Half-D1: 480/400fps	Half-D1: 240/200fps	Half-D1: 240/200fps
		D1: 480/400fps	D1: 160/128fps	D1: 240/200fps
recording (IP)	resolution	up to 5 megapixels for one channel, and a total of 42 megapixels for all channels in H.264/MPEG4/MJPEG format		
display (analog)	frame rate (NTSC/PAL)	480/400fps	480/400fps	240/200fps
storage	Internal HDD capacity	no		
	external HDD	no		
	iSCSI	supports iSCSI device		

interface

		NV8416T	NV6480T	NV6240T
monitors	VGA outputs	supports up to 1920 x 1200 (from graphic card)		
	SPOT monitor outputs	1 (supports hybrid multi-quad VGA output)		
audio	inputs	16 line-in, 8 KHz sampling rate		8 line-in, 8 KHz sampling rate
	outputs	no		
MIC	inputs	no		
alarm	sensor (alarm) inputs	4 (with I/O card)		
		input voltage: max. 6 VDC		
	relay outputs	4 (with I/O card)		
		voltage range: 125 VAC/ 30 VDC		
		switching current: max. 1A		
network	Ethernet (RJ-45)	no		
backup	DVD writer	no		
connections	e-SATA	no		
	RS-232	no		
	RS-485	no		
	USB 2.0	no		
control	front key pad	no		

general

		NV8416T	NV6480T	NV6240T
environmental	operating temperature	0 ℃ to 40 ℃ (32 ° to 104 °F)		
mechanical	dimensions (W x H x D)	165 x 109.5 mm		
	weight (net)	0.143kg	0.118kg	0.113kg

	NVR	
model	EXR6004 Mini	NXU8000 series
application	Compact-size standalone NVR for retail and small-sized projects Ex. jewlery stores, main passage ways, police stations	Easy-to-use plug-in software NVR that can be designed to fit various project requirements Ex. pawn shops, gas stations, prisons
feature overview	· Embedded Linux system with compact design · Dual gigabit LAN support · Local display & setup · Remote software integration with CMS, iPhone, iPad, and Android phones	· Supports up to 5 megapixels IP camera · Advanced iPOS function and POS integration with most commonly used systems · Remote software integration with CMS, iPhone, iPad, and Android phones
system		
operating system	embedded Linux	supports Windows® XP (32bit)/ Vista (32 bit)/ 7 (32/64bit)
total channel numbers	4	4/ 8/ 16/ 32
max. IP camera inputs	4	4/ 8/ 16/ 32
performance		
recording (IP)	resolution	each channel can support up to a 2.3 megapixels, while the last channel is capable of supporting 5 megapixels in MJPEG format; each channel can support a maximum 1.3 megapixel in H.264/ MPEG4 format	up to 5 megapixels for one channel, and a total of 42 megapixels for all channels in H.264/ MPEG4/ MJPEG format
storage	internal HDD capacity	supports 1 SATA HDD	no
	external HDD	supports 1 external e-SATA HDD	no
	iSCSI	no	supports iSCSI device
interface		
monitors	VGA outputs	1 (1024 x 768)	supports up to 1920 x 1200 (from graphic card)
audio	inputs	by IP camera	
	outputs	1 line-out	no
MIC	inputs	1 line-in	no
alarm	sensor (alarm) inputs	4	no
		input voltage: max. 6 VDC	no
	relay outputs	1 (NO/ NC)	no
		voltage range: 125 VAC/ 30 VDC	no
		switching current: max. 1A	no
network	Ethernet (RJ-45)	2 (10/100/1000Base-T)	no
backup	DVD writer	no	no
connections	e-SATA	1	no
	RS-232	no	no
	RS-485	no	no
	USB 2.0	3 (1 port on front panel, 2 ports on rear panel)	no
control	front key pad	no	
general		
electrical	power input	48W power adaptor, 12V DC	no
environmental	operating temperature	0 ℃ to 40 ℃ (32 ° to 104 °F)	0 ℃ to 40 ℃ (32 ° to 104 °F)
mechanical	dimensions (W x H x D)	235 x 50 x 160 mm	82 x 18 x 32 mm
	weight (net)	0.7kg	0.02kg

Key Supported IP Camera Brands

AVer   ACTi Connecting Vision   Arecont Vision   AXIS COMMUNICATIONS

BOSCH   MESSOA®   Security-Vision-Systems MOBOTIX   Panasonic

SAMSUNG   SANYO   SONY   VIVOTEK

Central Management Software (CM3000/CM3000 Gold)

- Control up to 1,000 AVer DVRs/NVRs (CM3000 Gold only)
- Quad monitor support
- 64 E-map or Google Maps support to graphically integrate and display incident alerts and live video
- Remote playback and backup for reviewing recorded video and retrieving critical images
- Advanced alarm center with multiple operator management
- Remote iAlarm for monitoring live alarm events and assigning them to remote managers
- Remote iMatrix for grouping up to 128 monitor views into a myriad of combinations to create a TV-wall command center
- Remote Setup for remote user setup of cameras, recordings, schedules, and alarms

Mobile Control and Access

- Support for iPad, iPhone, and Android phones
- Single or multi-channel live monitoring anytime and anywhere
- Savable profiles for fast connection during future use
- Remote PTZ camera control
- Remote download and playback of selected video footage

Video Intelligence

- Missing object :
  Alarm triggered when defined objects are removed from monitored zones, such as a painting taken off the wall at a museum or art gallery
- Suspicious object :
  Alarm triggered when objects are left alone for an extended period of time, such as baggage left unattended at an airport or railway station
- Scene change :
  Alarm triggered when there is an attempt to reposition or obstruct a monitoring camera, such as a vandal spray painting over the camera lens
- Visual search :
  Easily search by days, hours, minutes, and even seconds for recorded data on a selected channel
- PTZ tracking :
  Zoom in/out, focus, autopan, track moving objects and more from both the local and the remote

POS Integration

- Full compatibility with popular POS systems
- Easy management through the real-time POS data overlay on live video display
- Integrated confidential keyword filter for protection against employee tampering
- Use POS keywords to trigger notifications
- Adjust POS text location and font colors during video playback
- Search transaction data and playback video directly from the live monitoring screen through the advanced iPOS function (SA/ IWH/ NV series)

AVer™
www.aver.com
surveillance.aver.com