

# MatriVideo DVR “Digital Video Recorder”

## HR-DR3000-3U Series

### Features

- ◆ Durable embedded DVR\_On\_Chip hardware design
- ◆ Stable and secure application on Linux OS
- ◆ Real time recording at 30 fps per camera, 480 fps per DVR
- ◆ High performance hardware H.264 (MPEG-4 Part 10) video compression
- ◆ Synchronized audio/video recording and playback
- ◆ Automatic time synchronization between all units in MatriVideo (NTP protocol)
- ◆ Variant recording modes - continuous, motion detected, alarm, scheduled, manual and SDK API
- ◆ SDK API ready for integration with POS, Access Control and Building Automation systems
- ◆ Quadruple operations for camera live viewing, recording, playback and remote streaming
- ◆ Alarm history and user activity log for six months
- ◆ Comprehensive graphical illustration for quick search of recorded video
- ◆ Playback by date, time, camera and alarm instance
- ◆ Dual watchdog for guaranteed high availability
- ◆ Support advanced PTZ control 8 aux per camera
- ◆ Support RAID-5 for video data protection
- ◆ Remote viewing, access, and control via TCP/IP (LAN/WAN/Internet)
- ◆ Dual power supply hardware design

### High performance enterprise-class DVR for mission critical security requirements

MatriVideo™ embedded DVR is designed for the dynamic needs of the emergent digital video surveillance market. With the high video image resolution, seamlessly integrated mass storage, alarm recording, and hybrid camera configuration, MatriVideo™ DVR delivers the power of high performance to security professionals from small to large installations.

HR-DR3000 Series support optional hybrid configuration, which allows customers to use both analog and digital/IP cameras of various video formats: MJPEG, MPEG-4, and H.264. MatriVideo hybrid DVR can adopt the existing analog devices and preserve additional IP capacity for future expansion.

MatriVideo™ DVR provides high-resolution image from CIF to 4CIF with 40% smaller data size than MPEG-4. It is achieved by using advanced hardware H.264 (MPEG-4 Part 10) compression technology. It also comes with dual compression streams for remote live streaming (low bit rate) and local recording (high quality) simultaneously.

Unlike conventional DVR systems, MatriVideo™ DVR is solid built upon most stable Linux operating system and the whole system is placed on one single flash disk. This DVR\_On\_Chip technology, combine with dual power supplies and RAID-5 enhancement, increases overall system availability by reducing system idling time caused by power supply and hard drive failure. It has the capability to keep complete audit trail database (with six months history) that tracks users and their activities on the system.

MatriVideo™ DVR allows dynamic recording configurations of quality level and frame rate for live view, continuous/ scheduled recording, and motion detected / alarm triggered recording. This not only increases the data storage utilization, but also facilitates quick and instant event searching.

MatriVideo™ DVR provides the most intelligent and comprehensive video search tool. Its graphical display illustrates the recorded video period distribution over the history, yet with quick indicators for alarm instances (from video loss, motion detection, sensor or digital input, even POS or Access Control System event), and manual recording instances. Users can always retrieve the desired video image almost in no time.



# MATRIVIDEO™

A complete system to provide high resolution, long term digital video storage and IP based CCTV solution on a scalable and reliable platform

**MatriVideo™** is a complete solution for digital video surveillance industry. It is a platform that incorporates the legacy analog CCTV system and new IP-based digital surveillance system with hybrid configuration, distributed enterprise architecture and centralized management.

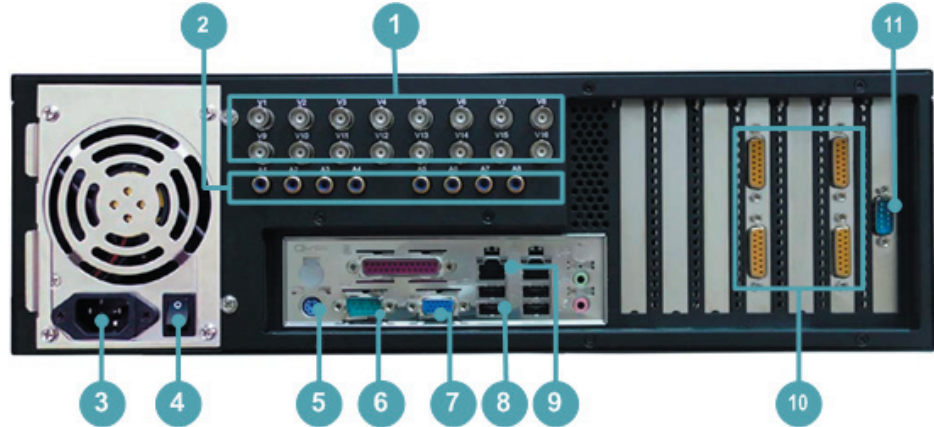
**MatriVideo™** is an open platform that adopts the latest IT technology yet provides easy installation and configuration for security professionals. Its plug-and-play feature allows users to extend and grow their security sites confidently.

**MatriVideo™** answers the need for larger storage capacity, networkable components, better image indexing, high image resolution, TCP/IP camera and easier camera relocation. It provides a total solution that meets the emergent and diverse demands from security industry.



## Rear Panel

### Standard Model



### Dual Power Supply Model



- 1 BNC Ports for Analog Video Input
- 2 Audio Input Ports
- 3 Power Socket
- 4 Power Switch
- 5 PS/2 Connector for Keyboard
- 6 COM1 Port
- 7 VGA Port
- 8 USB 2.0/1.1 Ports
- 9 Ethernet Ports
- 10 Analog Video Capture Card
- 11 COM2 Port
- 12 Dual Power Supply (Optional)
- 13 Main Power Switch (Dual Power model)

# Specification

MatriVideo™ DVRs		HR-DR3808, 3816-3U	HR-DR3708,3716,3732-3U	
<b>SYSTEM</b>	Function	DVR / hDVR		
	Operating System	Embedded Linux		
	Video Standard	NTSC / PAL		
	Image Control	Contrast, Brightness, Saturation, Hue		
	Dual Watchdog	Yes		
<b>ANALOG CAM</b>	Video Input	8, 16 Analog Channels	8, 16, 32 Analog Channels	
	Audio Input	8 Channels		
	Audio Input Level	2Vp-p/ 1000 Ohm		
	Max. Image Resolution	704 x 480 (NTSC) / 704 x 576 (PAL)		
	Max. Frame Rate per Channels**	30 fps (NTSC)	12~15 fps @ 4CIF / 30 fps @ CIF (NTSC)	
		25 fps (PAL)	10~12 fps @ 4CIF / 25 fps @ CIF (PAL)	
	Max. Frame Rate per system**	240 / 480 fps (NTSC)	120, 240, 480 fps @ 4CIF / 240, 480, 960 fps @ CIF (NTSC)	
		200 / 400 fps (PAL)	100, 200, 400 fps @ 4CIF / 200, 400, 800 fps @ CIF (PAL)	
	Recording Compression	Hardware H.264 (MPEG-4 Part 10)		
	Image Size	1.06KB ~ 20.0KB / frame		
Data Bit Rate	160Kb ~1.8Mb / Sec			
<b>IP CAM (HR-IP3416 is required)</b>	Video Input	16 Channels		
	Audio Input	16 Channels		
	Supported Resolution	4CIF, DCIF, CIF, QCIF, VGA		
	Supported Format	H.264 / MPEG4 / MJPEG		
	Max. Frame Rate**	30 fps (NTSC) / 25 fps (PAL)		
<b>RECORDING &amp; STORAGE</b>	Recording Modes	Continuous, Scheduled, Motion Detected, Event Triggered, Manual, API		
	Pre/Post Alarm Recording	1 ~ 60 seconds		
	Internal Storage	Up to 8 Swappable HDDs		
	Internal RAID-5	Optional		
	External Storage	Archive Server / DAS (Optional)		
<b>VIDEO MANAGEMENT</b>	Searching Method	Date / Time / Camera / Alarm List		
	Monitoring Environment	MatriVideo Command Center, MatriVideo Command Center Lite, MatriVideo nCCTV		
<b>CONNECTORS</b>	Video Input Connectors	8, 16 BNC Ports	8, 16, 32 BNC Ports	
	Audio Input Ports	8 RCA Ports		
	Serial Port	2 x RS-232		
	Keyboard/ Mouse	PS/2 Style		
	Ethernet	2 x RJ-45, 10/100/1000Mbps		
	USB	5 x USB 2.0 / USB 1.1 Ports		
	VGA Output	15 Pin Female DSUB		
<b>I/O CONTROL</b>	I/O Controls	Maximum 64 Inputs / 32 Outputs using Remote I/O Modules (Optional)		
	Optional Remote I/O Module	ID-IO2000-1600 (16 DI), ID-IO2000-0008 (8 DO), ID-IO2000-0808 (8 DI / 8DO) C232-485i (RS232/485 converter)		
<b>INTEGRATION COMPATIBILITY</b>	PTZ Cameras	Panasonic, Bosch, PELCO, VCL, Lilin, Honeywell, Tyco, TOA, Mikami		
	PTZ Receiver	ChipER		
	Video Servers, IP Cameras	ACTi, Arecont Vision, AXIS, D-Link, Messoa, Hunt, Panasonic, PELCO, SANYO, SONY, Instek Digital, Vivotek		
	ACS	Cardax,Heart, Infogenesis		
<b>ELECTRICAL</b>	Electric Power Source	AC 100 ~ 230V		
	Dual Power Supplies	Optional		
	Power Output	400 W		
<b>ENVIRONMENT</b>	Operating Temperature	0 ~ 40°C		
	Humidity	Maximum 80%, non-condensing		
<b>PHYSICAL</b>	Dimension	17.2"(W) X 22.8"( D) X 5.2"( H)		
	Weight	35.27 lb without HDD		

\* Product specification and availability are subject to change without notice. MatriVideo is a registered trademark of Instek Digital. All other trademarks are the property of their respective owners.

\*\* The actual video performance may vary according to type of camera and lighting condition.



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