

# MatriVideo Enterprise Hybrid DVR

HR-DR5000-2U Series

Available Q3 2010

## 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, and manual recording
- ◆ 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
- ◆ Equipped with up to 8 Internal HDDs for 16 TB storage capacity
- ◆ Comprehensive graphical illustration for quick search of recorded video
- ◆ Playback by date, time, camera and alarm instance
- ◆ Dual watchdog for guaranteed high availability
- ◆ PTZ control with optional remote I/O module
- ◆ Support RAID-5 for video data protection
- ◆ Remote viewing, access, and control via TCP/IP (LAN/WAN/Internet)
- ◆ Digital signature with watermark protection

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

MatriVideo™ DVR is designed for the various needs from the digital video surveillance market. With the high video image resolution, seamlessly integrated mass storage, and alarm recording features, MatriVideo™ DVR\_On\_Chip delivers the power of high performance to security savvy and meets the critical security requirements from small to large installations. DR5400-2U Series is the ideal selections for users in retail, banks, and manufacturing industries. With lower total cost of ownership (TCO), MatriVideo™ DVR increases its overall system availability and accessibility by enhance hardware design and adding more user friendly features.

HR-DR5000 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 various image resolutions from CIF to 4CIF. By adapting the most advanced hardware compression technology, H.264 (MPEG-4 Part 10), MatriVideo DVR produces image size 40% smaller than those adapt MPEG-4. The system is solid built upon most stable Linux operating system and the whole system is placed on one single flash disk. With this DVR\_On\_Chip technology, MatriVideo™ DVR has the ability to keep data integrity that security professionals can track events happened in the past six months without retrieving archived data from offline data center.

MatriVideo™ DVR allows dynamic recording configuration 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 enhanced its hardware design by PTZ control and remote I/O module within the hardware box. Its open system architecture allow MatriVideo™ integrate with various third party solutions, such as digital cameras, POS, access control, fire alarm, and burglar alarm systems. With MatriVideo™ DVR most intelligent and comprehensive video search tool, users can always retrieve the desired video image almost in no time.



## MATRIVIDEO™

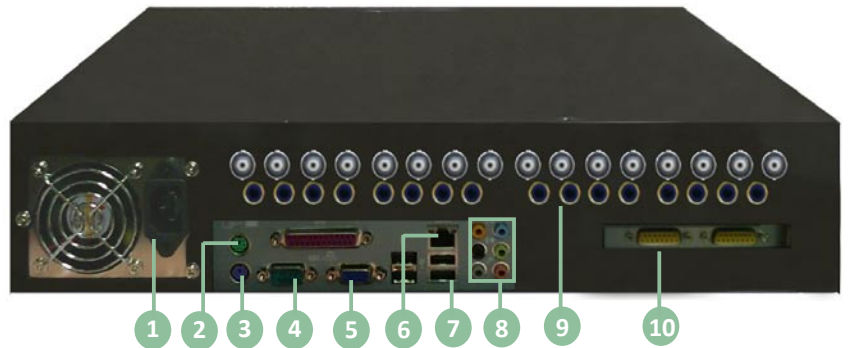
A complete system to provide high resolution, long term digital video storage and IP based CCTV solution on a scalable and reliable platform

**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



1 Power Socket

2 PS/2 Connector for Mouse

3 PS/2 Connector for Keyboard

4 COM Port

5 VGA Port

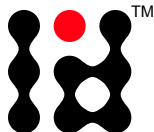
6 Ethernet Port

7 USB Ports

8 Audio Connectors

9 BNC Connectors

10 Analog Video Capture Card



# Specification

MatriVideo™ DVRs		HR-DR5400-2U	HR-DR5300-2U	
<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	Up to 32 Analog Channels		
	Audio Input	Up to 16 Channels		
	Audio Input Level	2Vp-p/ 1000 Ohm		
	Max. Image Resolution	704 x 480 (NTSC) / 704 x 576 (PAL)		
	Max. Frame Rate per Channel**	30 fps (NTSC) @ 4CIF	12~15 fps @ 4CIF / 30 fps @ CIF (NTSC)	
		25 fps (PAL) @ 4CIF	10~12 fps @ 4CIF / 25 fps @ CIF (PAL)	
	Max. Frame Rate per system**	240 fps (NTSC) @ 4CIF	120, 240 fps @ 4CIF / 240, 480 fps @ CIF (NTSC)	
		200 fps (PAL) @ 4CIF	100, 200 fps @ 4CIF / 200, 400 fps @ CIF (PAL)	
	Recording Compression	Hardware H.264 (MPEG-4 Part 10)		
	Image Size	1.06KB ~ 20.0KB / frame		
Data Bit Rate	160Kb ~ 1.8M			
<b>IP CAM (IP pack is required)</b>	Video Input	16 Channels		
	Audio Input	16 Channels		
	Supported Resolution	All resolutions supported		
	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 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	up to 32 BNC Ports		
	Audio Input Ports	1 Line in port		
	Serial Port	1 x RS-232		
	Keyboard/ Mouse	PS/2 Style		
	Ethernet	RJ-45, 10/100/1000Mbps		
	USB	2 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 / 8 DO) C232-485i (RS232/485 converter)		
<b>INTEGRATION COMPATIBILITY</b>	Analog PTZ Protocols	Panasonic, Bosch, PELCO, VCL, Lilin, Honeywell, Tyco, TOA, Mikami, IP Camera native		
	Analog PTZ Receiver	ChipER		
	Video Servers, IP Cameras	ACTi, Arecont Vision, AXIS, CNB Technology, D-Link, Messoa, Hunt, Hikvision, Instek Digital, Panasonic, PELCO, SANYO, SONY, Vivotek		
	ACS	Cardax, Heart, Infogenesis		
<b>ELECTRICAL</b>	Electric Power Source	AC 100 ~ 240V		
	Power Output	400 W		
<b>ENVIRONMENT</b>	Operating Temperature	0 ~ 40°C		
	Humidity	Maximum 80%, non-condensing		
<b>PHYSICAL</b>	Dimension	484.50 (W) X 595.50 (D) X 94.74 (H) mm		
	Weight	8.05 kg without HDD		

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

\*\* 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.



**INSTEK DIGITAL**  
www.instekdigital.com

**Instek Digital USA**

3661 Walnut Ave,  
Chino, CA 91710, USA  
TEL 1 (909) 627-8811  
FAX 1 (909) 627-8838

Email sales@instekdigital.com

**Instek Digital Taiwan**

4F, No.119-1, Baozhung Road,  
Xindian City, Taipei County, Taiwan 231  
TEL 886-2-29141839  
FAX 886-2-29101803

**V.2010520**