VBOX-3282
VBOX-3284
VBOX-3264

2U Web-enabled 8/16-port Digital Video Recorder

Features

- Supports both Wavelet and the latest MPEG-4 compression algorithms with 2~4 Kbytes image frame size
- Scheduled, continuous, or motion detected video recording by all cameras
- Fast image recording speeds of 60 and 120 FPS available and real-time display speeds of 480 FPS
- 4-ch audio input and synchronized audio and video playback
- Password authorization allows remote users to monitor, record or playback captured video
- Simultaneous video capture, record and playback
- Alarm notification through e-mail/telephone line and acoustic signal
- Powerful alarm management for increased security
- PTZ camera control function and ADAM remote I/O connection
- Remote monitoring from anywhere at anytime via standard browser
- ActiveX controls provided for user application integration
- Central surveillance management for up to 10 servers or 160 video cameras at the same time
- Multicasting over Intranet for multi-site monitoring
- Two-way audio and bandwidth control

Introduction

Advantech's VBOX-3200 series consist of 8/16-channel digital video recorders with industrial-grade 2U chassis. The VBOX-3200 series offers a highly reliable system and the highest compression rate on the market, by MPEG-4 technology (up to 300:1) for faster Internet image transmissions. The VBOX-3200 series is a powerful web-enabled video & audio surveillance solution that helps users remotely monitor facilities through a browser from anywhere at anytime. Powerful surveillance functions support real-time display, recording, playback and web-enabled remote monitoring and playback, simultaneously. It provides an easy way to capture and distribute live video (image and audio) over a network using a standard web browser. The VBOX-3200 series combines control systems by connecting with alarm I/O and plays a key role for users to not only get data signals, but also video surveillance at the same time.

The Latest MPEG-4 Compression Algorithm

MPEG-4 improves upon the previously successful MPEG-I and MPEG-II standards in areas related to Internet streaming, bandwidth scalability, interactivity, and coding efficiency. MPEG-4 enables a superior multimedia experience compared to other approaches currently in use, and brings excellent performance for streaming media, allowing for rate, format, and quality conversions in a fast, dynamic manner.

Simultaneous Image/Video Capture, Record and Playback

The VBOX-3200 series has 8/16 camera inputs that supports the most popular NTSC/PAL color and/or black & white cameras. The VBOX-3264B has 480 FPS display capability for 16 camera inputs. The VBOX-3200 series provides four operation modes: real-time display, record, playback and web-enabled remote monitoring. These four functions can all operate at the same time and satisfy most facility surveillance needs.

Central Surveillance Management for Multiple Video Servers

With a central surveillance management function, you can automatically receive video images or clips from up to 10 VBOX systems located on different areas when intrusion occurs at one time over Internet /WAN or Internet/LAN networks. The connection time is less than 1 second in Intranet environments. Therefore, the Advantech VBOX-3200 series offers you a distributed surveillance system architecture with central surveillance capability over Ethernet that brings flexible installation for large-area applications, like environment surveillance systems and SCADA etc.

Remote Monitoring from Anywhere at Anytime via Standard Browser

The VBOX-3200 series supports web-based surveillance that allows users to monitor and playback up to 16 camera images and PTZ camera, I/O control remotely via standard browser from anywhere at anytime. The VBOX-3200 series also supports ADSL, ISDN and PSTN connections, making it flexible for diversified applications.

Advantech ADAM Remote I/O Support

The VBOX-3200 series can be integrated with Advantech ADAM-4051/4060 digital I/O and relay output I/O modules via a RS-485 netwo

ActiveX Controls for Integration with 3rd party Application Programs and HMI/SCADA Software

The VBOX-3200 series provides ActiveX controls to integrate images into any HMI/SCADA software with the ActiveX container function, like Advantech Studio. It can be also used in many development environments, including Visual Basic, Visual C++, Delphi and C++ Builder. The VBOX-3200 series ActiveX controls offer live video display, playback, remote recording, PTZ camera control and I/O access.

Ordering Information

- **VBOX-3282A-8AE0** — 2U Web-enabled 8-port 60FPS Digital Video Recorder
- **VBOX-3284A-8AE0** — 2U Web-enabled 8-port 120FPS Digital Video Recorder with Audio
- **VBOX-3264A-8AE0** — 2U Web-enabled 16-port 120FPS Digital Video Recorder
- **VBOX-3264B-8AE0** — 2U Web-enabled 16-port 120FPS Digital Video Recorder with Real-time Display

Specifications

VBOX-3200 Series: 2U Web-enabled Digital Video Server Spec Table				
Function Item	**VBOX-3282A-8AE0**	**VBOX-3284A-8AE0**	**VBOX-3264A-8AE0**	**VBOX-3264B-8AE0**
System Components				
CPU	Intel Celeron 1.2 GHz	Intel Pentium IV 1.8GHz		
Main Memory	133 MHz,256 MB,SDRAM	256 MHz 256 MB DDR RAM		
HDD	80 GB			
OS	Windows 2000 Professional			
Ethernet	One 10/100Base-T LAN, RJ45 connector			
Serial port	Two RS-232	Two RS-232, TWO isolated RS-485		Two RS-232
Keyboard	PS/2 Keyboard			
USB	Two USB2.0; Transmission rate up to 480 Mbps			
Language	English			
System Recovery	Auto Reboot by Schedule; Automatic System Resumption of Operation after Power Recovered			
Operating Temperature	0 ~ 40° C			
Storage temperature	-40 ~ 70° C			
Relative Humidity	10 ~ 95% @ 40° C, non-condensing			
Vibration	5 Hz ~ 500 Hz; 0.5 G rams			
Shock	2.0 G with 11 m Sec duration, 1/2 sine wave			
Power Source	AC 110/220 V_{AC}, 50 ~ 60 Hz			
Weight	9.5 Kg			
Dimensions	19" Rackmount, 2U Height 482 x 88 x 450 mm (19" x 3.5" x 17.7")			
Safety	CE compliant			
Video				
Video Input	8-ch Composite Video (Color &BNC,BNC Type)		16-ch Composite Video (Color &BNC,BNC Type)	
Compression Algorithm	MPEG-4 / Wavelet			
Image Compression Rate	2 ~ 3 KB (320 x 240 Recording Resolution) on Medium Quality			
Cameras automatically detected upon system startup	Yes			
Video quality processing	Yes, brightness, contrast, sharpeness, smooth, grayscale			
Video Output	RGB (PC Monitor), 800 x 600 Display Resolution			
Display Function				
Display Speed	Max. 60 Frames/sec for NSTC;50 Frames/sec for PAL	Max. 120 Frames/sec for NSTC;100 Frames/sec for PAL	Max. 120 Frames/sec for NSTC;100 Frames/sec for PAL	Max. 480 Frames/sec for NSTC;400 Frames/sec for PAL
Display Screen	1/4/8/9/10/12/16 division screen, Capable of sequential camera scan			
Image quality processing	Yes			
Video Loss Detection	Yes			
Recording				
Recording Frame	Max. 60 Frames/sec for NSTC;50 Frames/sec for PAL	Max. 120 Frames/sec for NSTC; 100 Frames/sec for PAL		
Recording Mode	Alarm action; Round-the-clock; Scheduling			
Recording Resolution Mode	640 x 480, 640 x 240 and 320 x 240 (Can be chosen)			
Data Back	640/680MB CD-R/W, 2.6/4.7GB DVR-R/W, ZIP,JAZ,MO and NAS			
Playback				
Playback Mode	a. Data and time search per selected camera b. Graphical search by month, day, hour or minute scale (per camera) c. Playback all cameras simultaneously d. Adjustable playback speed: x 1/8, x 1/4, x1/2, x 1, x 2, x 4, x 8, x 16 e. Zoom in / Zoom out during playback			
Alarm				
Alarm I/O	Advantech ADAM series Remote I/O through RS-485 Network(This function will be supported in the future)			
Alarm Events	Motion Detection; Trigger from Remote Input			
Alarm Actions	Recording; Increase Recording Rate; Trigger Remote Output; Acoustic Signal; E-mail Notification; Post-alarm Recording; Pager Notification			
PTZ	PTZ Camera Support	Mintron 22X Zoom; Pelco/P-version protocol; DynaColor D7720; Sony EVI-D100; Panasonic WV-CS850; Kalatel Dome; Canon VC-C3		
Audio	Audio Input	No	4-ch Audio Input; Synchronized video and audio playback; Audio recording trigger base on sound	No	
Security		Digital Watermark Protection; Password Protection; Camera monitoring by User Group			
Remote Monitoring				
OCX for 3rd Party Application Integration	Yes, Display, Playback, PTZ Camera, Remote I/O access and System Information			
Web-enabled Functions	Yes, Display, Playback, PTZ Camera, Remote I/O access and System Information			
Central Monitoring Function on Remote Site	Yes			
IP Multicasting Browsing through Intranet	Yes			
Remote Transmission	LAN, TCP/IP, UDP, ADSL, ISDN, PSTN			
Chassis				
Construction	Heavy duty steel chassis			
Drive Bay	Shock-proof and front accessible CD-ROM(x1)&3.5"bay (x2)			
Cooling System	Dual easy to replace 42~57 CFM cooling fan with front-accessible air filter			
Controls	Power On/Off switch or momentary switch Reset switch behind lockable door			
Indicators	■ Power: Bi-color LED (Green/Red) for power failure ■ HDD: Single color LED (Orange) for HDD activity ■ Fan: Bi-color LED (Green/Red) for any fan failure ■ Temperature: Bi-collor LED (Green/Red) for overheating average temperature 50			
Paint Color	Silver-Gray			
Acoustic Noise	Less than 52db sound pressure at +5? to +28? (+41? to +82?)			

1 IPPC & AWS
2 TPC
3 FPM
4 ATM
5 DA&C
6 cPCI
7 ADAM-3000
8 eConnectivity
9 ICOM
10 Software
11 UNO-2000/3000
12 VBOX
13 ADAM-4000
14 ADAM-5000
15 ADAM-6000
16 ADAM-8000