

# AXIS 2460 Network DVR

Digital video. Recorded locally. Viewed globally.

Sophisticated yet brilliant in its simplicity, the AXIS 2460 Network DVR takes digital video recording to a completely new level of advancement. Connect it directly to a TCP/IP network and remotely access digital video and system administration tools, using a standard web browser. Accommodating up to four analog cameras, it has its own built-in web server and is completely self-maintained. No need for tapes, tangles or expensive moving parts!

Retaining important video sequences for longer than any other DVR solution, the AXIS 2460 offers an almost inexhaustible local recording resource for security video —using revolutionary APViS™ (Axis Prioritized Video Storage) technology\*.

Used as a single standalone system for a small business, or as an autonomous component within a globally distributed video surveillance system, the AXIS 2460 is perfect for use within large retail chains, franchise operations, or any business that requires convenient network access to live or recorded surveillance video.

\*Patent pending









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- Stores important video for longer using revolutionary APViS Technology
- Fault tolerant system with database mirroring and distributed video storage
- Self-contained and self-maintained system
- Built-in firewall functionality
- Simultaneous viewing, recording, playback, and administration via web browser
- Designed for networks



### Innovative APViS™

### Stores Important Video for Longer

Older video recordings can contain vital visual evidence. But when the hard disk in any conventional DVR is full, it is simply the oldest recordings that are indiscriminately erased in order to make room for new ones. It's standard FIFO logic: the First image In is the First one Out. But, is this *really* the smartest way of managing modern surveillance video?

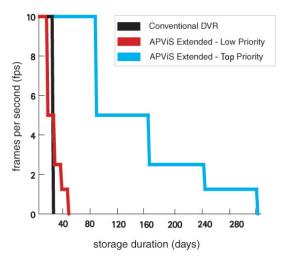
Using innovative APViS technology, the AXIS 2460 Network DVR makes more efficient use of valuable disk space to preserve video recordings for longer. By intelligently using event and alarm data, it cleverly differentiates between 'important' and 'less important' video.

Using this criteria, the AXIS 2460 is able to store top priority video sequences at their original recording rate four times longer than any conventional FIFO storage solution—and up to sixteen times longer using an incrementally reducing framerate. In practical terms, this can be the dramatic difference between having the evidence—and not having it!

#### Example

The graph to the right displays typical storage times for APViS 'Extended' recording mode versus conventional 'FIFO' storage, based on the following configuration:

- Original recording frame rate = 10 fps
- Average image size = 8kB
- 1 x camera
- 4 x 40GB IDE HD
- Continuous low priority recording, and a single top priority alarm recording with 30 minute duration



## Secure Video. Secure Storage.

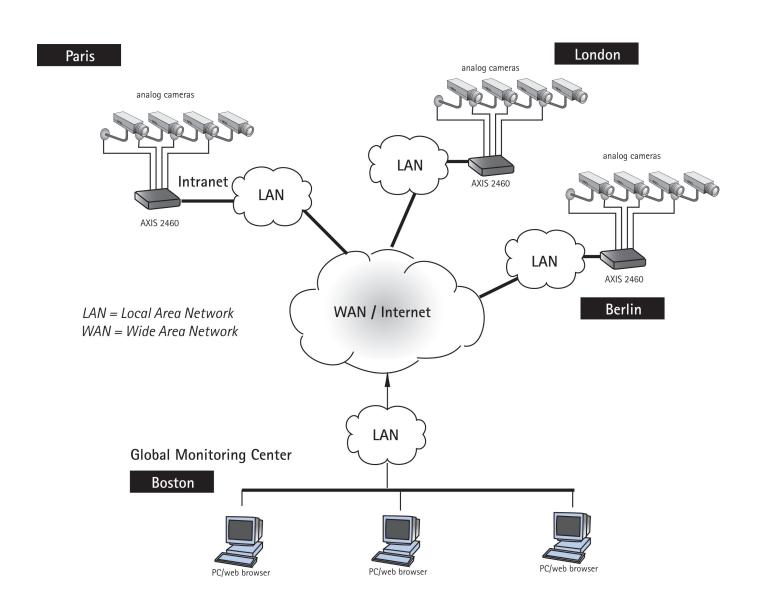
- In security applications, consistent quality of the recorded image is vital. With three different resolutions available per connected camera, the AXIS 2460 records in Motion JPEG format and guarantees consistent high-quality on each and every image.
- The unique use of data base mirroring and distributed video storage on all available hard disks allows the AXIS 2460 to tolerate hard disk failure without losing complete video recordings. The practical implication of hard disk failure is a relative reduction in the frame rate of the recordings.
- Three levels of user/password protection, with built-in firewall functionality for secure remote system access over TCP/IP networks.



## Flexible Network Configuration

### Standalone or Components within Globally Distributed Systems

- With over 90% of archived video recordings often never even looked at, decentralized video recording avoids unnecessary network utilization and makes sense when network bandwidth is limited.
- An AXIS 2460 Network DVR has its own built-in web server and is securely accessed from any remote geographical location using Microsoft Internet Explorer.
- By deploying a single AXIS 2460 in each remote site, organizations now have the opportunity to build large globally distributed video storage systems, viewed and managed from anywhere over TCP/IP networks.



Above: A globally distributed system comprising several AXIS 2460 Network DVRs

## **Technical Specifications**

#### **KEY FEATURES**

- Simultaneous live remote viewing, recording, playback and administration via a web browser
- Consistent high-quality digital images that do not deteriorate with age
- Continuous, event/alarm, manual and scheduled recording modes
- Snapshots and AVI extraction to PC hard disk or any preferred digital media
- Self-maintained system requires no physical intervention during normal operation
- Self-contained system requires no additional software components
- · Quad view display
- User-selectable settings for frame rate, compression and resolution
- Event notification via e-mail
- Pre-alarm buffer and recording duration settings

#### SYSTEM REQUIREMENTS

- Ethernet network or supported v.90 compatible modem
- Internet Explorer 5.x or higher
- Supports standard Internet TCP/IP protocols and can be used with: Windows 95/98, NT/2000, Me, and XP.

#### **SYSTEM**

- 100baseTX Fast Ethernet or 10baseT Ethernet
- CPU: AXIS ETRAX 100 LX 32 bit RISC processor
- Flash memory: 4 MB
- RAM: 32 MB
- Based on Linux version 2.4 operating system
- Shipped with optional 0, 2 or 4 IDE hard disks

#### **INSTALLATION**

- Physical network connection using RJ-45 twisted pair cable
- Installs directly to NTSC or PAL video cameras using BNC connectors

#### **SOFTWARE UPDATES**

Flash memory allows central and remote software updates over the network using FTP over TCP/IP. Software upgrades available from Axis' web site at: www.axis.com

#### FRONT PANEL CONTROLS AND INDICATORS

#### **LED Indicators**

- 4 x video indicators, 4 x alarm active indicators, 1 x power indicator,
  - 1 x status indicator, 1 x disk activity indicator and
  - 1 x network activity indicator

#### **Push-button Controls**

• 1 soft power on/off button

#### RESOLUTION

QCIF: 176 x 112 (NTSC), 176 x 144 (PAL)
 CIF: 352 x 240 (NTSC), 352 x 288 (PAL)
 4CIF: 704 x 480 (NTSC), 704 x 576 (PAL)

#### RECORDING FRAME RATE

- 1 camera: CIF, normal compression: 30 / 25 fps (NTSC/PAL)
- 4 cameras: CIF, normal compression: 30 /25 fps (NTSC/PAL)\*
  \*Total number of frames with connecting cameras synchronized



#### STORAGE CAPACITY

- 80 GB, 160 GB, or as installed by system integrator
- Storage duration dependent on image settings
- Recording duration of CIF images, with respect to the available APViS recording and compression modes, are provided below:

Compression	Filesize	Normal	Extended	Ext. Long		
High	8 kB	45 days	96 days	253 days		
Normal	13 kB	27 days	57 days	149 days		
Low	17 kB	20 days	42 days	110 days		
(Based on 4 x 40 GB HD model, recording from 4 cameras at 1 fps/each)						

#### **SECURITY**

- User level password protection
- Built-in IP firewall functionality protects against illicit use from unauthorised computers

#### CONNECTIONS

#### **Network Connector**

• RJ-45 connection to 10/100Mbit Ethernet networks

#### Video Input

- 4 x composite video inputs with 75 ohm, Hi Z termination
- Autosensing for NTSC and PAL

#### Video Output

• 4 x BNC video loop-through ports

#### Single Terminal Block Connector

- 4 x opto-isolated alarm inputs
- 1 x output relay

#### Serial Connector

- 9 pin D-SUB RS-232 max 230 Kbps
- 9 pin D-SUB RS-232 or RS-485/422 max 38.4 Kbps, half duplex

#### **OPERATING CONDITIONS**

- $\bullet$  Temperature 41-104° F (5-40° C)
- Humidity 8-80% RHG

#### **METRICS**

- Physical Dimensions: 16.9" x 12.6" x 3.9", 430 x 320 x 100 mm
- Delivered with brackets for 19" rack mount
- Weight: No disks 7kg (15.4 lbs), 2 disks 8.2kg (18.1 lbs), 4 disks – 9.4 kg (20.7 lbs)

#### **APPROVALS**

- EMC:
- C€ EN55022 Class B, EN55024
- C FCC Class A
- Safety
- EN 60950, C-UL Listed



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