

XVideoNet



What is XVideoNet?

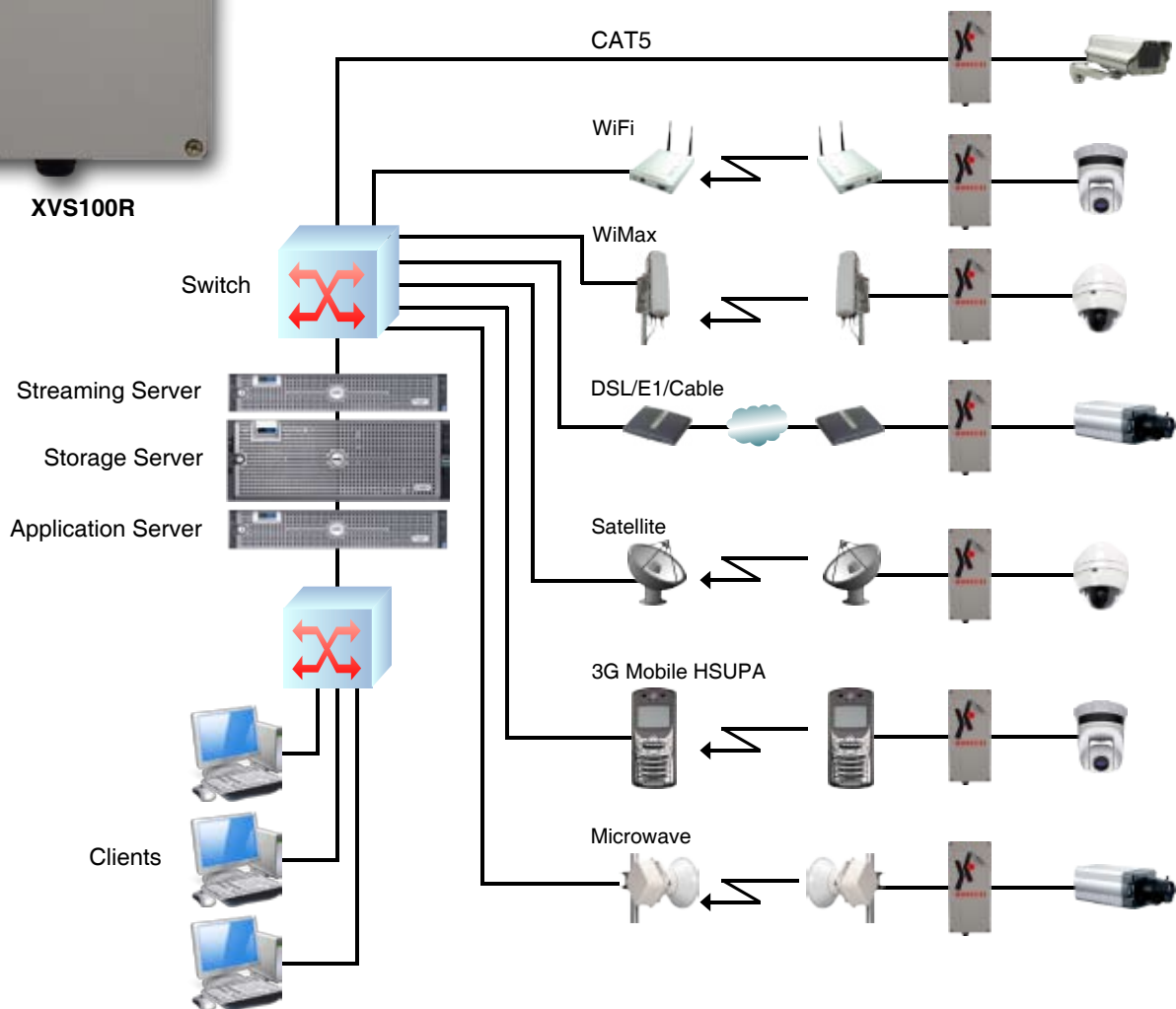


XVS100R

XVideoNet is a digital video surveillance solution, based on the latest H264 video compression technology. Building end to end IP network between distant camera posts and control rooms, XVideoNet allows high volumes of multi-location footage to be captured, transmitted, stored and analysed under a common platform.

XVideoNet leads the way in advanced digital surveillance solutions, replacing the 'old' analogue CCTV systems with a raft of new benefits associated with IP video technology. Within XVideoNet, a ruggedized outdoor hardware video server (XVS100R) is installed at each camera post to digitise and stream video sourced from analogue cameras.

XAD video management software runs at the control centre on commercially available hardware with terabytes of disk storage. It contains both hardware and software elements to build a centralised or distributed wide area storage and content analysis network.



Who uses XVideoNet?

XVideoNet has applications for many organisations, including Security Surveillance, Traffic Management, Airport Security, Law Enforcement and Crowd Management. XVideoNet provides an advanced and cost effective video management solution that can be tailored to the specific needs of our customers.

XVideoNet is easy to deploy and is ideal for both permanent installations as well as rapid deployment by mobile surveillance units. The robustness of the solution ensures its reliability in both outdoor as well as indoor environments.

How does XVideoNet work?

A typical XVideoNet deployment consists of a scattered cluster of camera posts connected to a video monitoring centre over wired or wireless IP links (WiFi, WiMax, Satellite, 3G Mobile or Microwave).

The XVS100R hardware video servers, which are deployed at the camera posts, enable video signals from the analogue camera to be digitized, compressed and transferred to the video monitoring centre over the IP network. At the monitoring centre, custom written video management software controls the network of cameras enabling users to record, playback, analyze, and switch between incoming video streams. XVS100R provides integrated capability to operate wipers, heaters, IR illuminators and third party devices at the camera posts from the video management software.

XVS100R Technical Specifications:

Video		Connectivity	
Video standard	H.264 standard compliant	Telemetry (PTZ, Wiper) control	via 12 pin connector
No of channels	1	Camera power	via 12 pin connector
Video resolution	4CIF: (704*576) CIF: (352x288) QVGA: (320*240)	Analogue video	via 12 pin connector
Frame rate	1-25fps (PAL), 1-30fps (NTSC)	Digital video and controls	via RJ45 IP68 socket
Image adjustment	Saturation, Brightness, Contrast, Hue	Wireless link power	via RJ45 using POE / 12 pin connector
Encoding delay	Less than 80 msec	Mains power	via 3 pin power connector
H264 Settings - General		Physical	
Controls	via web interface / PC SDK	Construction material	Aluminium Si 12, DIN 12
Regulation mode	Constant quality (1-20) Constant bitrate (10kbps-4Mbps) Constant frame rate (1-25fps)	Dimensions	Length (360mm) Width (160mm) Height (90mm)
Coding	Customizable for different scene types	Standard finish	Power coated
Intra refresh	1-300	Standard colour	Silver Grey: RAL 7001
Deinterlace filter	on, off	Weight	4 kg (max)
H264 Settings - Advanced		Network Settings	
Inter prediction mode	16x16, 16x8, 8x16, 8x8	Streaming protocol	RTSP / RTP (RFC-1889 compliant)
Intra prediction mode	16x16, 4x4	Encryption	
Chroma prediction mode	8x8 (DC mode only), 8x8 (All 4 modes)	Standard	AES 128 (optional)
Motion estimation	Full Pel, Half Pel, 1/4 Pel	Sensors and Alerts	
Search range	8, 16, 32		Temperature sensor 6 digital GPIO pins
Fast skip mode	on, off	Accessories	
Environmental		Pole mounting	Brackets and quick release snaplock clamps (optional) Pole diameter: 51mm – 311mm
Operating temperature	0 to 50C	Wall mounting	Brackets with 4 screws compatible with XVS100R box (optional)
Weather proofing	Protected against dust & heavy water jets	Cables	Electrical cable 10m, 20m, 25m (optional) Composite cable 2M, 10M, 20M or 25M (optional) CAT5 cable 2M, 10M, 20M or 25M (optional)
Ingress protection	NEMA 4x / IP66 in accordance with EN60529		
Impact resistance	7 Joule in accordance with EN50014		
Mechanical			
12 pin circular connector	IP67 waterproof screwable		
Rj45 socket	IP67 waterproof shielded screwable		
Mains power socket	IP67 waterproof pluggable		
Electrical			
Mains voltage	220V AC		
Regulated Power Output			
Camera & PTZ motor voltage	18V DC (27 W max)		
Wireless link voltage	48V DC (24W max)		
Video server voltage	5V DC (5W max)		

Specifications are subject to change without notice



XVS100R connectors

Why buy XVideoNet?



1. Less Bandwidth and Disk Storage :

H264 video compression technology offers saving of up to 50% on bandwidth and disk storage space requirements when compared to conventional MPEG-2 technology.

2. Ultimate Reliability :

Hardware based encoding at the camera post significantly reduces the probability of failure, providing ultimate reliability. XVideoNet allows tens of hundreds of video channels to be recorded independently which make the system extremely resilient and reliable when connected to large number of cameras and system users. XVS100R ruggedized design has built in power supplies for camera, PTZ motor and wireless link. It is an ideal solution for outdoor deployment.

3. Integrated Control :

With PTZ commands being sent over the IP network major cost savings and greater flexibility can be achieved, including increased functionality & integration potential. All aspects of camera operation, e.g. wiper, cooling fan, heater, system alarms, PTZ controls, are all controlled via the IP network. This means that there is no requirement for integrating separate hardware control devices at the camera posts. A single software control also ensures supreme ease of use whilst providing a consistent user interface for camera operatives.

4. Automatic Motion Detection :

Operators can set up alarms and alerts to be issued when a movement is detected within a defined area of surveillance interest. By automating this task, human error is minimised and a very high probability of detection is achieved.

5. Flexible and Scalable :

XVideoNet software is compatible with most PC platforms. Therefore operators can typically use their existing work stations ensuring minimum disruption, ease of access and cost effectiveness. Additional work stations and storage servers can also be added as future operational needs dictate.

6. Security :

XVS100R supports advanced AES 128 bit video encryption. You can therefore be absolutely confident that video transmission is extremely secure.

7. Flexibility of Transmission Bandwidth :

XVideoNet offers fixed bit rate video streams allowing reliable video stream transmission across heterogeneous networks. This means XVideoNet can be deployed on GPRS, 3G, WiFi, WiMax, HSDPA, Microwave, Fiber Optic or a combination of links to build a single video surveillance network.

8. Protecting Your Investment :

Organisations that have already made investments in analogue systems can integrate their existing CCTV systems with XVideoNet bringing them the latest digital video technology. So instead of starting from scratch, it is possible to transfer any existing analogue CCTV system to XVideoNet, thereby cost effectively acquiring all the functionality and benefits of the latest end to end IP technology.

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9. Open Protocols :

Because XVideoNet supports RTP/RTSP protocol, video streams can be played on commonly used video players such as Videolan and Apple Quick Time. This provides users with the capability to easily display data on many systems, including mobile phones, external to XVideoNet.

10. Real Time Video Relay :

The management software allows video relaying in real time to multiple secondary command and control centres, this means analysis and decision making can be quickly coordinated across a number of centres.

11. Incident Recreation via Multi-stream playback :

Whilst investigating an incident, video footage from a number of cameras can be re-played simultaneously enabling a holistic and accurate approach to incident recreation.

12. Workflow Management :

Cameras can be 'grouped' so that they are linked to defined 'user teams' thus facilitating efficient management and work flow practices.

13. Tamper Proof Legal Evidence :

XVideoNet offers a 'water marking' feature on exported video which ensures that it remains tamper proof. This ensures it can be presented as an evidence for legal prosecution and court cases.

14. Instant Playback :

XVideoNet management software enables live video footage to be quickly repeated providing operators with a very powerful tool when further analysis and quick decision making is required.

15. Video Search and Playback :

XVideoNet can display live video in simultaneously to recorded video streams enabling operators to search and analyse recorded video whilst live footage is being displayed.

16. Operator Performance Management :

XVideoNet records and logs the activity of all system users. Logs can then be easily retrieved and used to identify performance issues and training needs of the operators.

17. Dual Video Streaming :

XVideoNet server supports dual video streaming. This means that a second live or recorded video can be used to provide, for example, a zoomed region of interest in addition to the primary video stream.

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