**TeleEye**

# TeleEye Video Management Centre Solution

## Ideal Platform for Remote Management and Alarm Verification Applications

TeleEye Video Management Centre Solution is a reliable and complete video management platform purposely built for remote video response centres (RVRCs) or central monitoring stations. The Solution provides a complete remote monitoring product line including HD IP cameras, HD / SD video recording servers compliance with British Standard BS 8418 and video management software for offsite video monitoring and traceable alarm verification via fixed or mobile network. Not only it helps to verify alarm swiftly but takes an active role to combat any illegal acts for numerous sites immediately.

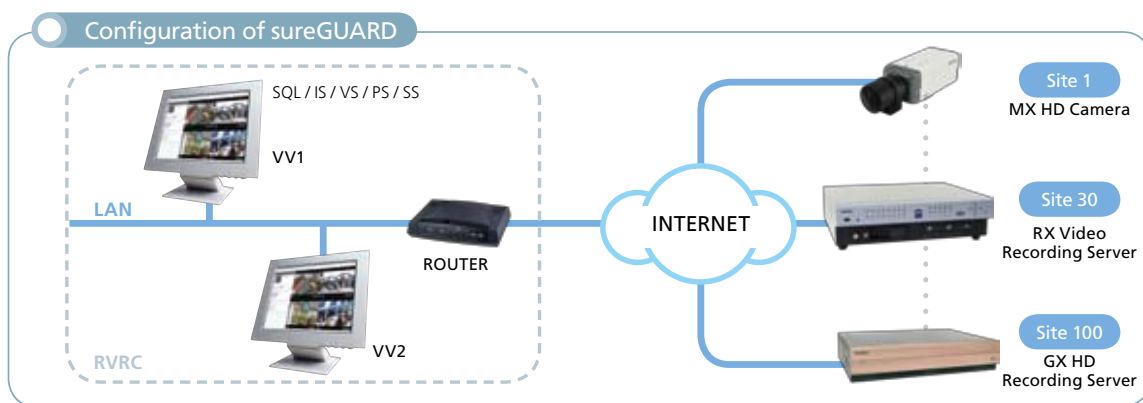The complete range of TeleEye Video Management Centre Solution includes:

- sureGUARD Video Management Software
- TeleEye MX HD Video Camera
- TeleEye GX HD Video Recording Server
- TeleEye RX Video Recording Server
- TeleEye CX Video Recording Server

**BS 8418**
*Compliance*

## sureGUARD Video Management Software

sureGUARD Video Management Software is a professional video alarm management solution for Remote Video Response Centre (RVRCs) or central monitoring stations. It fully complies with British Standard BS 8418 for remote monitoring of detector activated CCTV systems. sureGUARD allows multiple operators to handle large volume of video alarm events from up to 5000 sites in 24x7 operations. Many built-in features facilitate speedy visual verification and greatly improve the efficiency of operators.

### Configuration of sureGUARD

SQL / IS / VS / PS / SS

VV1

LAN

ROUTER

VV2

RVRC

INTERNET

Site 1
MX HD Camera

Site 30
RX Video
Recording Server

Site 100
GX HD
Recording Server

### Scalable Design & Operation

sureGUARD consists of 5 functional modules, namely VS (Video Management Server), VV (Video Viewer), PS (Playback Server), SS (Site Check Server) and IS (Information Server). sureGUARD platform can manage up to many sites simultaneously, and can be expanded to different levels by increasing the number of modules.

### Professional British Standard BS 8418 Compliance

sureGUARD and the TeleEye video recording servers are designed to fully comply with the British Standard BS 8418, providing robust and professional remote monitoring and visual alarm verification solution to RVRCs and central monitoring stations. Comprehensive alarm management functions like tamper and power failure detection, data retention, system arm / disarm setting, entry / exit zone configuration, individual fire zone setting, system tamper and connection authentication are embedded.

### Excellent Video Transmission Performance

TeleEye video recording servers like RX and CX Series incorporate with proprietary SMAC-M multi-stream compression technology, which transmits video faster and records video longer than MPEG-4 systems. Since the RVRCs require to monitor and verify live videos of different sites through their single network when there is an alarm event, the multi-stream architecture and the compression efficiency of SMAC-M are definitely big advantages in such limited network resource environment.

### Swift Alarm Verification and Response

Alarm images will be captured from all associated cameras before, at, and after the event is triggered. RVRC's operators can verify the alarm images and take appropriate response in a speedy manner.

○ *Operators can verify alarm by looking at the alarm images taken.*

## Full Traceability

sureGUARD allows operators to key in their own remarks for each event. Detailed reports can be generated. They include site report, operator report and site check report. Alarm responses taken by the operators are all traceable in the centralized logging system.



*Detailed report can be generated for operators' references.*

## Interactive Sitemap

With sureGUARD siteMAP module, clients' sites will be shown on a geographical map. Operators can manage their numerous sites, select cameras and verify alarms with just a few clicks on the map. This is especially suitable for operators that need to manage a lot of sites at the same time.



*Triggered alarms will be shown on the floor plan and geographical map. Operators can manage their sites by clicking on them.*

## Video Matrix

Digital video matrix module for sureGUARD is designed for video wall applications. The video matrix supports displaying up to 80 live videos on 4 LCD screens with 20 live videos on 4 LCD screens. sureGUARD can display maximum of 400 live videos with the maximum of 5 video matrix workstations.
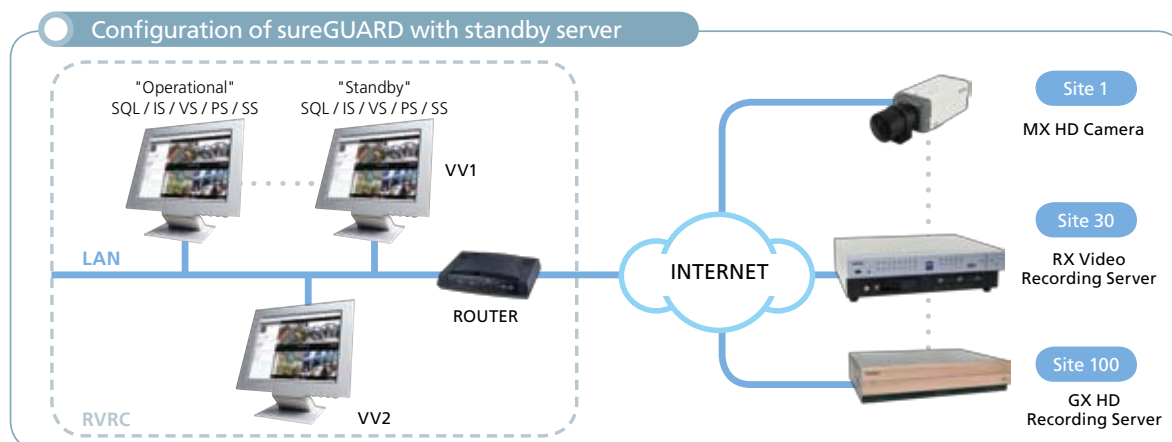


*Video wall applications.*

## End to End Site Checking

End to end site checking is a special function of sureGUARD, which allows operators to ensure every single site can be connected properly when event is triggered. This function is especially suitable for RVRCs, as they need to manage a lot of sites at the same time.

## Redundancy Design for Enhanced Reliability

sureGUARD can be configured to support redundancy design for enhanced reliability. If it detects a breakdown in the primary connection medium of a site, like ADSL, it can switch the communication over automatically through to 3G connection and resume work. sureGUARD is based on a fail-proof design which supports two identical systems. It will switch to stand-by server when the main system fails and resume alarm verification work in a very short time.

Configuration of sureGUARD with standby server

"Operational"
SQL / IS / VS / PS / SS

"Standby"
SQL / IS / VS / PS / SS

VV1

LAN

ROUTER

INTERNET

Site 1

MX HD Camera

Site 30

RX Video
Recording Server

Site 100

RVRC

VV2

GX HD
Recording Server

## Functional Modules

| Module | Description |
|---|---|
| Information Server (IS) | Communication platform for all sureGUARD modules |
| Video Management Server (VS) | Connection gateway, recording engine |
| Playback Server (PS) | Locating & streaming the selected recorded footage to VV |
| Video Viewer (VV) | Operator console |
| siteMAP Module (SM) | Manage numerous sites, position cameras and verify alarms on site map |
| Site Check Server (SS) | Connect to the remote servers according to the schedule time and the result can be viewed through site check report |

## sureGUARD License Details

| CMD License | Remote Site | Video Management Server | Concurrent Connection |
|---|---|---|---|
| CMD030 | 30 | 2 | 16 |
| CMD100 | 100 | 2 | 16 |
| CMD200 | 200 | 3 | 24 |

## PC Requirements

| | |
|---|---|
| CPU | Intel® Core™ i3 processor |
| RAM | 2 GB |
| HDD | 10 GB free space |
| Display | Direct 3D, Nvidia® GeForce® GT 220/ATI® Radeon® HD 5450 or above |
| OS | MS Windows XP/Vista/7 or MS Windows 2008 R2 (64-bit edition) |
| Ethernet | 10/100 Mbps |

## Comprehensive Range of Video Transmission Products

The TeleEye Video Management Centre Solution provides a comprehensive range of video transmission products including HD / SD video recording servers compliance with British Standard BS 8418, HD IP cameras and standard video recording servers which is fully compatible with the sureGUARD software.

## Professional British Standard BS 8418 Compliance

TeleEye video recording servers like GX and RX Series are designed to fully comply with the British Standard BS 8418, providing professional remote monitoring and visual alarm verification solution to RVRCs and central monitoring stations. The system comes with 16-alarm inputs and 4-relay outputs. Comprehensive alarm management functions are embedded to allow integration of TeleEye servers with existing alarm systems. User-defined actions would be carried out immediately when an event is detected.

## Advance Compression Technology for Better and Efficient Transmission

TeleEye video recording servers and IP cameras incorporate with proprietary HD SMAC-M or SMAC-M video coder, which can generate up to 4 independent video streams simultaneously for recording and network viewing. TeleEye systems with HD SMAC-M demonstrate the video size 50% smaller than other H.264-based IP cameras under the same measuring environment, same resolution, frame rate and with same video quality.

**Traditional Video Coding Technology**

HD Video → Traditional Video Coder → Recording / LAN / Broadband
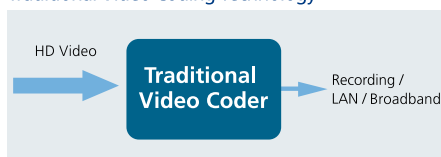
**HD SMAC-M: Multi-stream Video Coding Technology**

HD Video → HD SMAC-M MULTI-STREAM VIDEO → Recording / LAN / Broadband / Mobile
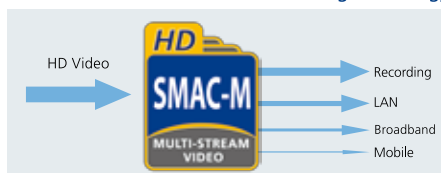
## Hacker Resistant Design

TeleEye MX HD cameras are designed with security concerns in mind. As the cameras adapt the proprietary HD SMAC-M multi-stream video coder, it can avoid hackers to decode the data and reconstruct the video illegally. The authentication process is also protected by AES 256-bit encryption simultaneously. "IP filtering" and "Registration checking" features are also implemented for tightening the security further.

**IP Filtering**

TeleEye RX

ROUTER

155.2.3.1    155.2.3.2    155.2.3.3
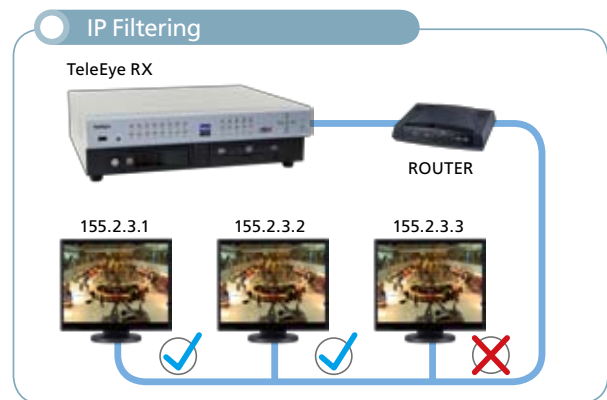
## Recording Servers Compliance with Professional BS 8418 Standard:

*TeleEye GX HD Video Recording Server*

• HD SMAC-M multi-stream coder for HD video
• 720p HDTV resolution
• Video recording up to 400fps
• CAMLOCK Technology: automatic camera setup in seconds
• Secure network architecture
• IP filtering
• British standard BS 8418 compliance
• Tamper-proof alarms and comprehensive alarm functions
• Hacker resistant design

*TeleEye RX Video Recording Server*

- SMAC-M multi-stream coder
- 4-, 8-, 16-composite video inputs
- Maximum transmission frame rate of 100 / 120fps on LAN
- Recording up to 100 / 120fps on D1 & 400 / 480fps on CIF
- Video transmission via LAN, broadband & mobile network
- Built-in DVD writer or USB Port for fast video extraction
- British standard BS 8418 compliance
- Tamper-proof alarms and comprehensive alarm functions
- Hacker resistant design

## Standard Video Recording Server:

*TeleEye CX Video Recording Server*

- SMAC-M multi-stream coder
- 4-, 8-, 16-composite video inputs
- Transmission up to 50 / 60fps on LAN or broadband
- Recording up to 25 / 30fps on D1 & 100 / 120fps on CIF
- Video transmission via LAN, broadband & mobile network
- Schedule, alarm, motion detection & remote recording
- Simultaneous recording, playback & network operation
- Hacker resistant design

## HD IP Cameras:

*TeleEye MX HD Camera*

- HD SMAC-M multi-stream coder for HD video
- 720p Progressive Scan, 16 : 9 aspect ratio
- Independent HD video recording stream
- Enhanced Video Security by password & critical data public keying
  encryption AES 256-bit
- IP filtering
- Hacker resistant design
- Comprehensive HD camera range to cover low light, wide dynamic,
  IR and vandal resistant requirements

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