



CCTV

Planning Guide

Planning guide – CCTV portfolio overview

Analogue cameras



Monochrome camera



Colour camera



Day-night camera



Auto focus camera



Fixed monofocal dome



Fixed varifocal dome



Vandal resistant varifocal dome



Speed dome



Weatherproof housing



Pan-tilt heads



Infrared lighting



Telemetry receiver driver for pan-tilt heads

Transmission methods



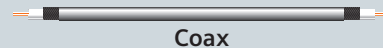
Transmitter



Transmitter



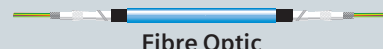
SISTORE CX
Transceiver encoding



Coax



Twisted Pair



Fibre Optic



LAN / WAN / xDSL



Receiver



Receiver



SISTORE CX
Transceiver decoding

Advantages

Coaxial cable

- Low cost
- Simple to cable, simple handling
- Point-to-point connection
- No maintenance required
- No active amplifier required

Twisted pair (two-wire) transmission

- Range up to 1500 m
- Uses existing cable infrastructure
- Small space required due to narrow diameter of cable
- Cost-effective for short distances

Fibre optic transmission

- Range up to 69 km
- Secure against interference and tapping
- Low pallet and fire load (weight)
- No maintenance required
- Multiple transmission of signals possible

PSTN / ISDN dial-up line

- Unlimited range in existing ISDN telecommunication networks
- Cross-border connection possible
- For in-house systems, no costs if the systems present are used

LAN / WAN / Web

- Uses existing network structures and hardware
- No range limit within the network
- Internet integration possible

Disadvantages

Coaxial cable

- Large space required due to wide diameter of cable
- Signal interference from electro-magnetic sources
- Limited range: up to 200 m depending on cable specification
- Lightning protection expensive
- Separate cable required for control

Twisted pair (two-wire) transmission

- Active elements (transmitter and receiver required)
- Maintenance required (temperature-dependent)

Fibre optic transmission

- Higher cost (material and handling)
- Active elements (transmitter and receiver required)
- Significant effort and expense involved with changes in camera location
- Special installation training required

PSTN / ISDN dial-up line

- Cost depends on the availability of telecommunication networks
- Active elements (transmitter and receiver) required
- Slower image transmission speed

LAN / WAN / Web

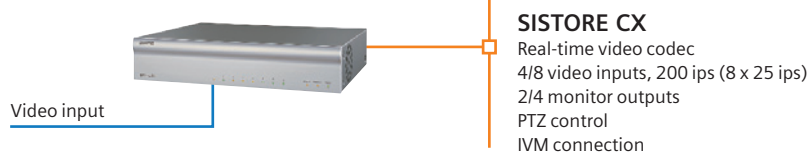
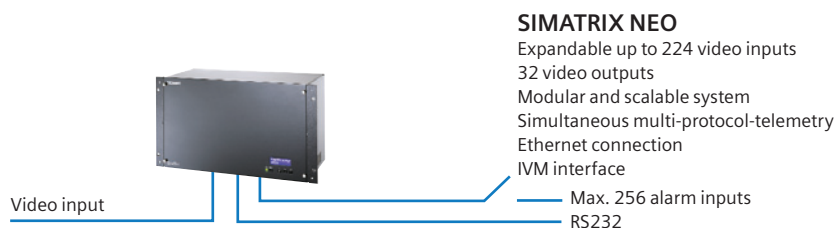
- Hardware cost
- Bandwidth restriction for image transmission speed
- Bandwidth restriction for image transmission quality

Video (direct connection)

Outdoor motion
detection & tracking

Video switching

Digital recording



Video (transmitted)

Monitoring and control



TFT LCD display monitor



DVR remote access software



Interactive Video Management software



Remote keyboard CKA3210



Remote keyboard CKA4820



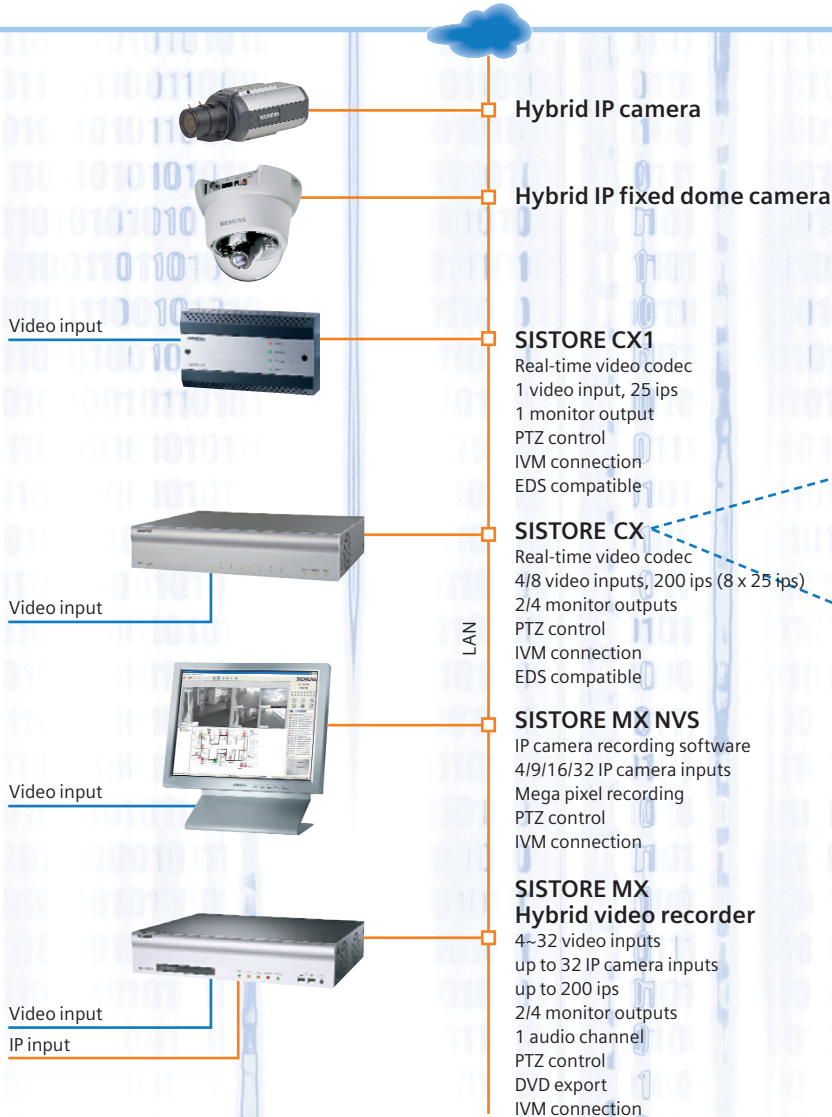
IVM Security control

Interactive Video Management system

IVM is a scalable, open, interactive system for the control and operation of security applications:

- Controls analogue (SIMATRIX) matrix switchers
- Display of configured site plans with cameras, monitors, alarm lists, log books etc.

- Controls DVR systems (SISTORE)
- Compatible with SiPass access control
- Complete PTZ control
- Multi-client access



SISTORE CX

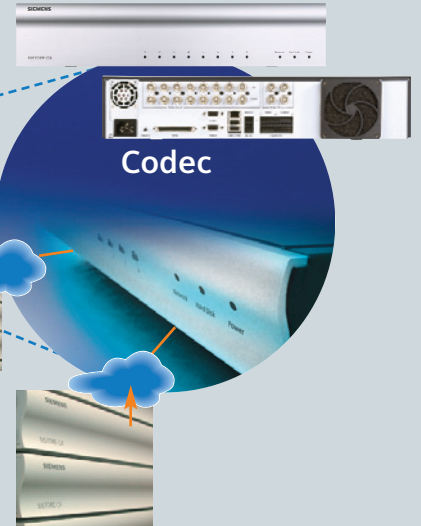
Transceiver (encoder & decoder)

Streaming:

- 200 ips encoding (CIF, 2CIF)
- 100 ips encoding (4CIF)
- 100 ips encoding & 50 ips decoding (2CIF)
- 50 ips encoding & 50 ips decoding (4CIF)
- 100 ips decoding (2CIF, 4CIF)

Compression:

- 4CIF = ~ DVD quality
- 2CIF = ~ SVHS quality
- CIF = ~ VHS quality



Codec

SISTORE CX

Virtual matrix

Scalable digital solution

Video encoder & decoder in one system

Web based control

Multi-client / multi-server access

Internal hard disk storage

Siemens: one brand, one partner – one system – for all your security & fire safety requirements

 Access control

 CCTV

 Fire safety

 Intruder detection

Every day small sized applications in "standalone" operation
– small convenience store or petrol station shop



 CCTV products for this example:

Monofocal fixed domes, to surveil the shop

High resolution DIP switch colour camera monitoring customers paying and forecourt

15" high resolution public display monitor

SISTORE AX4 Lite, 4 camera digital recorder, operating in a standalone mode



Medium sized applications with local area networking (LAN)
– large supermarket with warehouse



 CCTV products for this example:

Speed domes, to surveil all the aisles

High resolution IP cameras monitoring "sale items" on end of aisles for Marketing purposes

CKA keyboard to control speed domes, SIMATRIX & SISTORE AX

15" TFT display monitor

SISTORE AX16, 16 camera digital recorder, with LAN connection to head office

SISTORE CX, digital video codec for IP transmission & recording of warehouse cameras



High risk applications with wide area networking (WAN)
– commercial bank



 CCTV products for this example:

Vandal resistant domes monitoring public floor areas for the highest protection

High resolution colour cameras monitoring customers being served

High resolution wide dynamic cameras monitoring customers entering through glass doors to the bank

19" TFT display monitor

SISTORE MX hybrid recorder, with WAN connection to security office



Welcome to the world of innovative thinking

■ Innovation

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The information in this document contains general descriptions of the technical options available, which do not always have to be present in individual cases. The required features should therefore be specified in each individual case at the time of closing the contract.

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