

Siemens: one brand, one partner – one system

– for all your security & Intruder Detection 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:

Varifocal fixed domes, to surveil the shop

High resolution DIP switch colour camera monitoring customers paying and forecourt

17” TFT 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

19” 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

22” TFT display monitor

SISTORE MX 3G hybrid recorder, with WAN connection to security office



Siemens AB,
Security Products
International Headquarters
Englundavagen 7
Box 1275
17124 Solna
Sweden
Tel +46 8 629 0300

Siemens AG
Industry Sector
Building Technologies Division
Fire Safety & Security Products
Siemensallee 84
76187 Karlsruhe,
Germany
Tel. +49 (721) 595-4291
Fax: +49 (721) 595-2806

Siemens plc
I BT Security Products
Suite 7
Castlegate Business Park
Caldicot
South Wales
NP26 5AD
UK
Main: +44 (0) 1291 437920
Fax: +44 (0) 1291 437943

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.

Subject to change

www.siemens.com/cctv

CCTV

Planning Guide



Answers for infrastructure

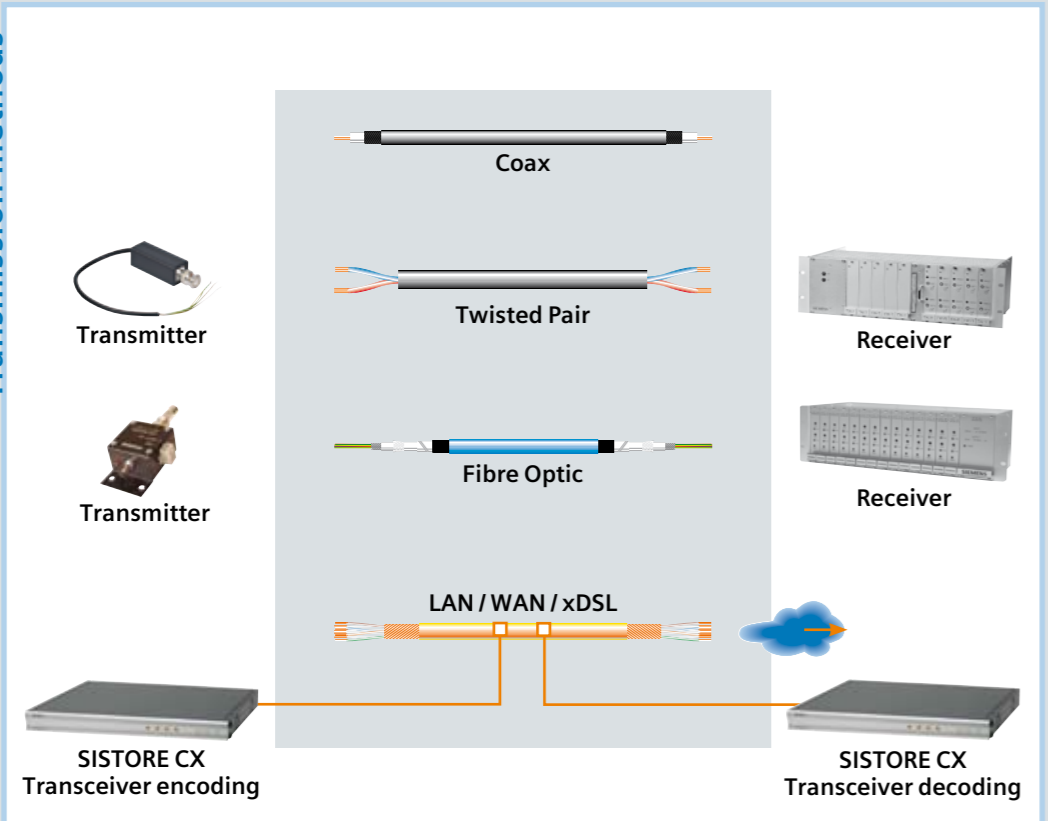
SIEMENS

CCTV planning guide

Analogue cameras



Transmission methods

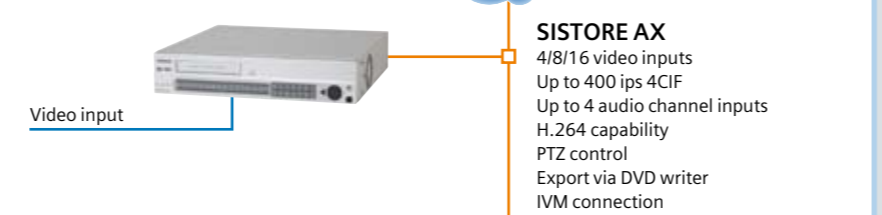
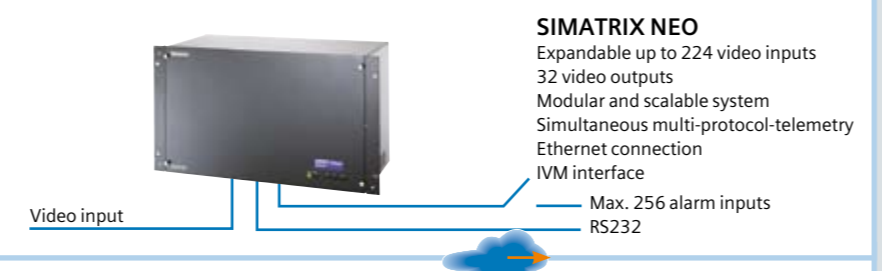


Advantages	Disadvantages
Coaxial cable <ul style="list-style-type: none"> Low cost Simple to cable, simple handling Point-to-point connection No maintenance required No active amplifier required 	Coaxial cable <ul style="list-style-type: none"> Large space required due to wide diameter of cable Signal 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 <ul style="list-style-type: none"> Range up to 1500 m Uses existing cable infrastructure Small space required due to narrow diameter of cable Cost-effective for short distances 	Twisted pair (two-wire) transmission <ul style="list-style-type: none"> Active elements (transmitter and receiver required) Maintenance required (temperature-dependent)
Fibre optic transmission <ul style="list-style-type: none"> Range up to 69 km Secure against interference and tapping Low pallet and fire load (weight) No maintenance required Multiple transmission of signals possible 	Fibre optic transmission <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> Unlimited range in existing ISDN telecommunication networks Cross-border connection possible For in-house systems, no costs if the systems present are used 	PSTN / ISDN dial-up line <ul style="list-style-type: none"> Cost depends on the availability of telecommunication networks Active elements (transmitter and receiver) required Slower image transmission speed
LAN / WAN / Web <ul style="list-style-type: none"> Uses existing network structures and hardware No range limit within the network Internet integration possible 	LAN / WAN / Web <ul style="list-style-type: none"> Hardware cost Bandwidth restriction for image transmission speed Bandwidth restriction for image transmission quality

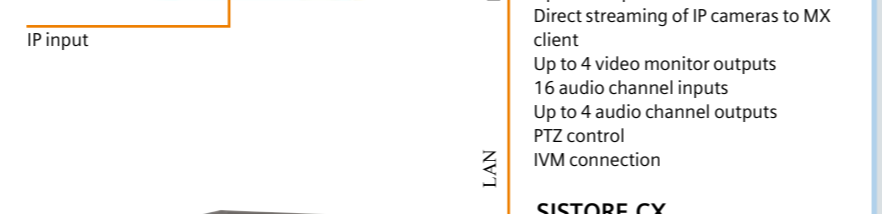
Embedded real-time video analysis



Video switching



Digital recording



Monitoring and control

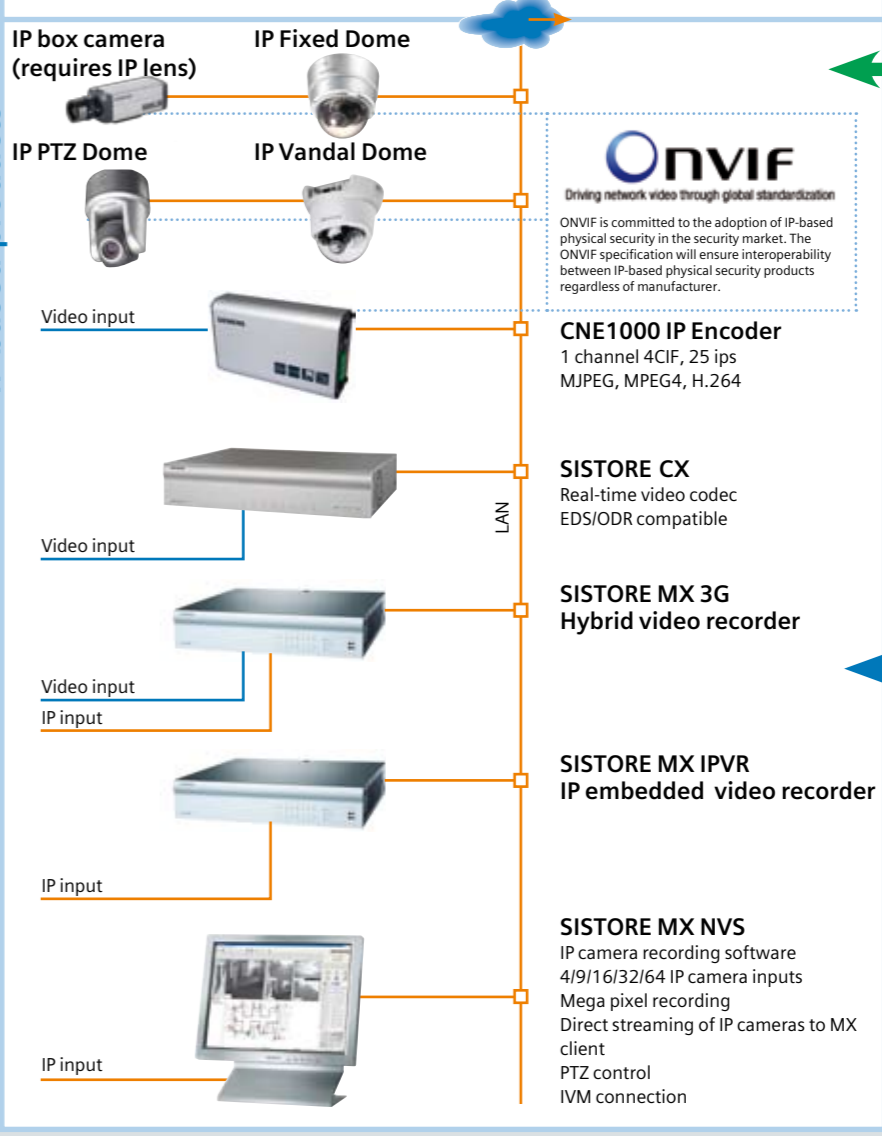
- TFT LCD display monitor
- DVR remote access software
- Interactive Video Management software
- Remote keyboard CKA4820

Video software



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

IP based products



Interoperability between CCTV & Access Control



Interoperability between CCTV & Intruder Detection



Video (direct connection)

Video (transmitted)

Improved operational efficiency with centrally managed security and building management systems

Improved out-of-hours security and evidence gathering with alarm triggered video recording