



## MK8000 MP3.18

DMS

## OPC Server for subsystems

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- The MK8000 OPC Server for subsystems provides a wide array of solutions for the centralisation and management of physical security and control systems.
- Founded on leading software and network technology standards, the OPC Server is designed specifically for safety, security, and building automation applications and enables complete management from a single workstation.
- The Siemens 'Fire Safety & Security Products' line of security management systems include solutions for fire, intrusion and gas detections, access control, closed circuit television monitoring, and evacuation and extinguishing systems.
- The MK8000 OPC Server for subsystems has been optimised for the management of the 'Fire Safety & Security Products' solutions line, and allows interoperability with systems from both our SBT 'Building Automation' division, as well as 3<sup>rd</sup> parties.
- The MK8000 OPC Server for subsystems complies with the OPC Foundation's tests and standards.

## Background and Introduction

For years, the Siemens Fire Safety & Security Products division has been recognised for its high quality security systems.

Much of our success lies in our commitment to continuously updating our products with the latest technological advances while maximising the lifetime of our customer's investment.

In compliance with the OPC Foundation's tests and standards, the MK8000 OPC Server can be integrated with any OPC standard management system.

If you are looking for a security solution that is complete, flexible, and scalable, it would be our pleasure to show you how the MK8000 OPC Server can help you to maximise both your security options as well as the lifetime of your system.

## Benefits

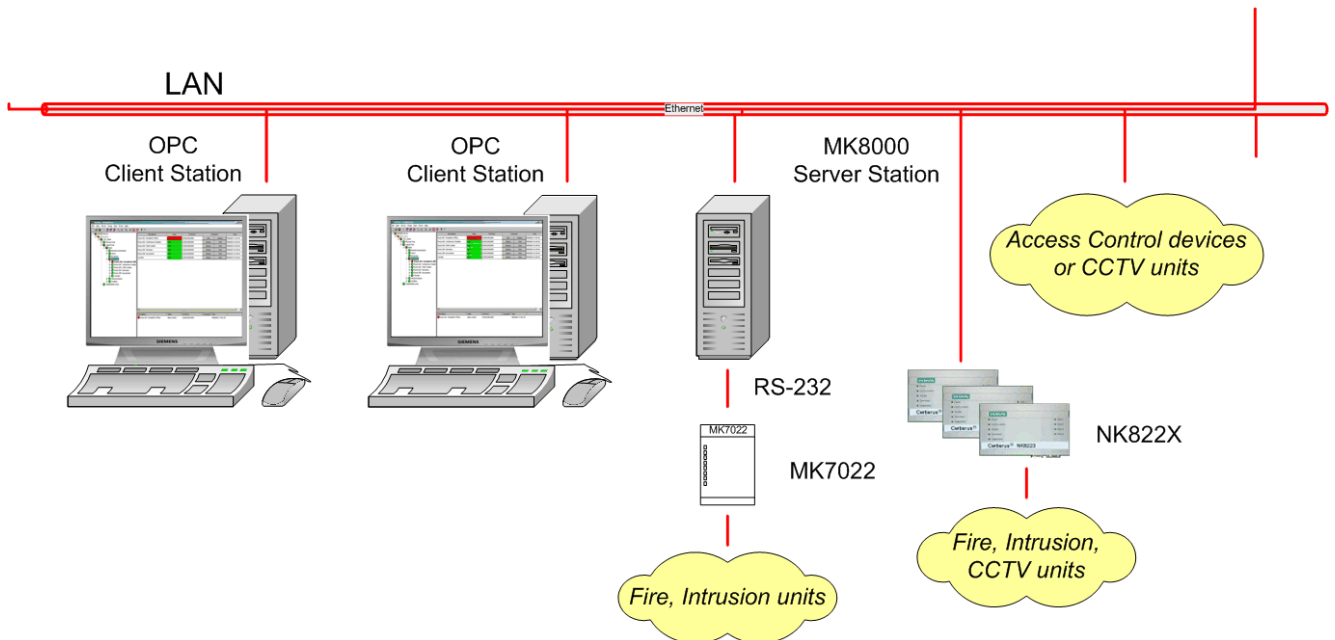
- System and software solutions specifically designed for safety, security, and building automation applications;
- Open System Philosophy based on up-to-date market standards: standard PC hardware, Microsoft Windows 2000 and XP operating system;
- Secure and Flexible architecture allows solutions ranging from a simple single-station configuration, to complex distributed configurations;
- Complete scalability of all configurations, allowing need-based expansion of any system, from small and medium systems to complex and sophisticated systems;
- Open communication with third-party units utilising standard interfaces;
- Communication can be performed through local and networked connections (Network data transfer support via DCOM);
- Long term investment;
- Easy implementation and modification;
- Configuration with Composer, our powerful DMS8000 tool environment.

## Features

- OPC Data Access 2.0x Specification;
- Supports Tag browsing (IOPCBrowseServerAddressSpace);
- Server attempts to renew lost connections;
- Tag export function;
- History log function;
- MK8000 test client included;
- OPC interface inspection utility included;
- Free 2h Demo mode

## Typical Architecture

A typical system configuration for medium-size systems is shown below



## Management level Configurations

### Stand-alone: the easy solution for small size systems

- Single workstation that contains all software levels (OPC client, server, and communication);
- Station communicates with the next level using local ports (EIA/TIA-232) or via the NK8000 Ethernet Port.

### Peer-to-peer: the natively redundant solution, ideal for medium-size systems

- Multiple, independent workstations that contain all software levels (OPC client, server, and communication);
- Stations communicate with the next level using local ports (EIA/TIA-232) or via the NK8000 Ethernet Port;
- Each station autonomous and independent; databases are not shared.

### Client/Server: best for large systems with multiple operation responsibilities

- A server station provides communication and background functions to one or more networked client workstations;
- The server coordinates all activities so more operators can seamlessly cooperate on the same site;
- The architecture may also include a networked access to the field (NK8000);

### Advanced distributed Client/Server: highest connectivity for huge configurations

- The communication layer may be separated from the server and distributed over multiple Front-End Processor (FEP) computers over the network.

## Connectivity

Communication with locally distributed field units can be performed using:

- Cerloop redundant rings
- CDI-net star topology
- NK8000 serial and IP networks
- Direct RS-232
- Direct LAN

## Control level Configurations

### **Siemens safety units:**

- CS11 AlgoRex (EP5, EP7F) fire detection systems
- FC700A fire detection systems
- CZ10 fire detection systems
- CC60 gas detection systems
- STT11 Système de Télécommande et Télésignalisation

### **Siemens security units:**

- SI410/SI420 Sintony intrusion detection systems
- CS6 MP3 Guarato intrusion detection systems
- CS440 intrusion detection systems
- CS4 intrusion detection systems
- CZ12 intrusion detection systems

### **Siemens video surveillance units:**

- SIMATRIX video crossbar
- SISTORE AX, SISTORE MXpro Digital Video Recorders (DVRs)

### **Siemens access control:**

- SiPass MP2.3
- CerPass CC30 controllers (connected via SiPass)

### **Siemens I/O units:**

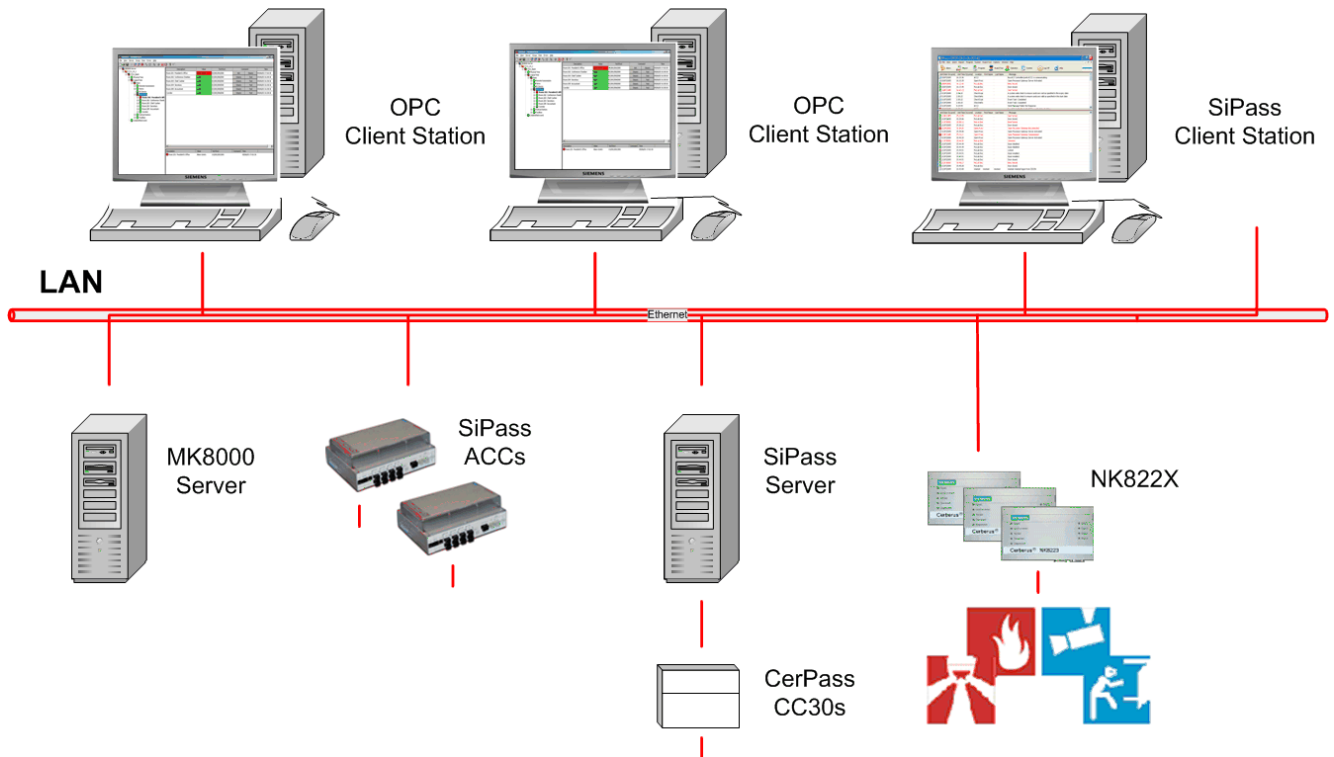
- MF7033 digital PLC unit;
- CF9000 I/O system.

### **3<sup>rd</sup> party units:**

- Philips Burle Allegiant LTC 8x00 video switchers.

## Configuration Example

See the following configuration example for a system connected to various subsystems. For details regarding supported configurations, please refer to the Application & Planning Manual.



## Software Architecture

The OPC Server for subsystems is designed using a software architecture optimised for freedom and flexibility. The key features are:

- Structured architecture with a well-defined layer interface
- Real Client/Server Configuration
- Fully Modular
- Object Oriented

## System Requirements

### Hardware Requirements

Pentium IV or equivalent	2.4 GHz or faster
Memory RAM	512 MB or higher
Hard disk space	500 MB free
CD-ROM or DVD	Required
COM Port	1 (2-3 optional)
LPT Port	1 (optional if a USB port is present)
USB Port	1 (optional if a parallel port is present)
LAN Connections	10/100 MB
Keyboard and pointing device	Standard keyboard; mouse or trackball
SW protection Key provided by SBT	USB or parallel

### Operating Systems

Microsoft Windows 2000 Professional	SP4 + Microsoft critical updates
Microsoft Windows XP Professional	SP2 + Microsoft critical updates

<b>Additional Applications</b>	MSDE	Available on the MK8000 product CD
	.Net Framework	Available on the MK8000 product CD
<b>Technical Characteristics</b>		
<b>System dimensions</b>	Subsystem	128
	Data Points	65000
	OPC clients	8
	Serial connections - standard	3
	Serial connections - distributed	48 (3 FEPs x 16 lines each)
	Ethernet connections to NK8223	500
<b>Networks supported</b>	Cerloop	Via MK7022
	CDI-net	Via GW2x
	NK8000	Via NK8223
	Direct control unit connection	RS-232; LAN
<b>Subsystem supported</b>	CS11 (EP5) CS11 (EP7F)	<ul style="list-style-type: none"> <li>● Direct RS-232 configuration / ISO1745</li> <li>● Cerloop configuration</li> <li>● NK8000 configuration / Cerban</li> <li>● NK8000 configuration / ISO1745</li> <li>● CDI-net configuration / Cerban</li> <li>● CDI-net configuration / ISO1745</li> </ul>
	FC700A	<ul style="list-style-type: none"> <li>● Direct RS-232 configuration / ISO1745</li> <li>● NK8000 configuration / ISO1745</li> <li>● CDI-net configuration / ISO1745</li> </ul>
	CZ10	
	CC60	
	CS4	● Cerloop configuration
	CS440	● CDI-net configuration / Cerban
	CZ12	● NK8000 configuration / Cerban
	MF7033	
	STT11	● Cerloop configuration
	SIMATRIX	
	Philips/Burle video switcher	● NK8000 configuration
	CF9000	
	SI410/SI420 Sintony	<ul style="list-style-type: none"> <li>● Direct RS-232 configuration / ISO1745</li> <li>● NK8000 configuration</li> </ul>
	CS6 MP3 / MP3+	● NK8000 (CDI-WAN) configuration: max. 4 CS6 per NK8223; CS6 connected via LON Bus to NK8223
	SISTORE MXpro DVR Version 2.5	
	SISTORE AX DVR Version 2.6	
	SIMATRIX	● LAN configuration
	SiPass 2.3	
	CerPass CC30 controllers	● Connected via SiPass

## Details for ordering

The following table lists the parameters of each license. For details see price list.

Criterion:	Remarks
Number of Subsystems	
Number of Physical Devices	
Number of Connections and Type of Network Drivers	
Composer	

To facilitate the ordering and calculation an already pre-defined 'MK8000 Project sheet' must be filled in for **every** MK8000 project.

→ Contact your local sales distribution centre.

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