



## MK8000 MP4.10

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.
- Available as a Stand-alone OPC Server and as an option of MM8000 Management Station.

## 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, XP and 2003 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;
- Optional redundancy solution with dual servers to prevent service interruption;
- Free 2 hour Demo mode.

## Architectural Solutions – 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:
  - One or more MM8000 Management Stations
  - A networked access to the field (NK8000)
- Distributed communication over multiple Front-End Processor (FEP) computers over the network

### Client/Server: fault-tolerant solution for large systems

- Same as “Client/Server” above but includes dual hardware servers and a virtual MK8000 application. If a device or an entire server fails, MK8000 continues to operate uninterrupted.

## 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 fire detection systems
- FC700A fire detection systems
- CS1115 fire detection systems
- FC330A fire detection systems
- CZ10 fire detection systems
- CC60 gas detection systems
- STT11 Système de Télécommande et Télésignalisation

- STT20 Système de Télécommande et Télésignalisation
- STT2410 Système de Télécommande et Télésignalisation
- SIGMASYS / D100

**Siemens security units:**

- SI410/420 Sintony intrusion detection systems
- CS6 Guarto intrusion detection systems
- CS440 intrusion detection systems
- CS4 intrusion detection systems
- CZ12 intrusion detection systems

**Siemens video surveillance units:**

- SIMATRIX, SIMATRIX NEO video crossbars
- SISTORE AX, CX, MX (including NVR\*), MXpro and SX digital video recorders (DVRs)
- TELSCAN Video Web Server
- IP cameras (fixed) equipped with:
  - CCIS1337-LP
  - CFVA-IP
  - CVVA-IP

\*Network video recorder

**Siemens access control units:**

- SiPass Integrated
- CerPass CC30 controllers (connected via SiPass)

**Siemens automation and I/O units:**

- MF7033 digital PLC unit
- CF9000 I/O system

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

- Philips Burle Allegiant LTC 8x00 video switchers

## 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

## Technical data

<b>Hardware Requirements</b>	Pentium IV or equivalent	2.4 GHz or faster
	Memory RAM	1024 MB or better For large configurations plan to install at least 2048 MB.
	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
<b>Operating Systems</b>	Microsoft Windows 2000 Professional or Server	SP4 + Microsoft critical updates
	Microsoft Windows XP Professional	SP2 + Microsoft critical updates
	Microsoft Windows 2003 Server	SP1 or R2 + Microsoft critical updates
<b>Software requirements</b>	MSDE (Microsoft SQL Data Engine)	Available on the DMS8000 product CD
	MS SQL Server 2005 Express	Available on the DMS8000 product CD
	SQLXML	Available on the DMS8000 product CD
	.Net Framework V1.1 and V2.0	Available on the DMS8000 product CD
<b>Technical Characteristics</b>		
<b>System dimensions</b>	Subsystems	Please contact customer support for configurations above 128 subsystems
	Data Points	100,000
	OPC clients	8
	Serial connections - standard	3
	Serial connections - distributed	48 (3 FEPs x 16 lines each)
	Ethernet connections to NK822x	100
	<b>Networks supported</b>	Cerloop
CDI-net		Via GW2x
NK8000		Via NK822x
Direct control unit connection		RS-232; LAN
<b>Subsystems supported</b>	CS11 AlgoRex	<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>
	CS1115	<ul style="list-style-type: none"> <li>● Direct RS-232 configuration</li> </ul>
	FC330A	

CZ10	
CC60	● Cerloop configuration
CS4	● CDI-net configuration / Cerban
CS440	● NK8000 configuration / Cerban
CZ12	
MF7033	
STT11	
STT20	● Cerloop configuration
STT2410	
SIGMASYS / D100	
SIMATRIX, SIMATRIX NEO	
Philips/Burle video switcher (LTC 8x00)	● NK8000 configuration
CF9000	
SI410/420 Sintony	● Direct RS-232 configuration / ISO1745 ● NK8000 configuration
CS6 Quarto	● NK8000 configuration: max. 4 CS6 per NK8223 / NK8225; CS6 connected via LON Bus to NK822x
SISTORE AX DVR	
SISTORE CX DVR	
SISTORE MX (including NVR) DVR	
SISTORE MXpro DVR	
SISTORE SX DVR	● LAN configuration
TELSCAN Video Web Server	
IP cameras (fixed)	
SiPass Integrated	● Equipped with: CCIS1337-LP / CFVA-IP / CVVA-IP
CerPass CC30 controllers	
OPC server subsystems	● LAN configuration ● SDK for OPC client functions

## 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	
Optional dual hardware for redundant systems	For details contact customer support

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

→ Contact your local sales distribution centre.



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