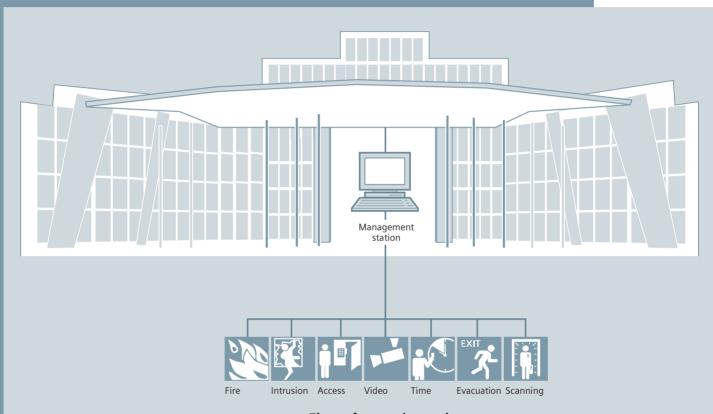






# Everything you need for fire safety and security.

From fire protection and fire detection to safety – Siemens offers a comprehensive portfolio for security needs from one source.



#### Fire safety and security









Whatever your requirements, Siemens provides a comprehensive portfolio for all fire safety and security needs.

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## **Danger Management System**



# MM8000 – the danger management station for Sinteso $^{\text{TM}}$

MM8000 is a powerful danger management station, which runs on a standard Windows PC. The safe MM8000 is focused on easy-to-use operation, supporting guided treatments in emergency situations. It may be used as stand-alone application or as a multi-user client server application.

MM8000 is the ideal management station for the following subsystems:

- Fire safety
- Intrusion protection
- Access control
- Video surveillance
- and other life-safety-relevant equipments

Sinteso™ FC20 panels are connected directly via BACnet/IP to MM8000. Connecting Sinteso to MM8000 adds among other benefits the following remarkable features to the fire detection system:

- Graphics for navigation and alarm localization
- Guided event treatment
- Interactions with other subsystems
- Remote alarm notification
- Scheduled tasks
- History database



MM8000xxx

Type Order No.

#### MM8000xxx



#### MM8000 management station

The MM8000 danger management station provides a powerful solution for the centralized alarm management and supervision of a wide range of fire safety, security and control systems. It supports specifically fire, gas and intrusion detection, access control, video surveillance and building automation installations.

The MM8000 architecture allows the integration of Siemens fire safety, security and control systems as well as 3rd party solutions via standard interfaces.

#### **Functionality**

Complete overview about the actual state of the technical installations in a building at any time.

Homogeneous and intuitive operation of the different subsystems. Comprehensive guidance and support of the operator in case of an alarm.

Logging of all activities and powerful reporting possibilities.

#### Advantages

Safety: User guidance in case of an emergency guarantees that the right measures are taken.

Reliability: Based on the concept of autonomous subsystems and distributed control; possibility of redundant configurations.

Flexibility: Can be built and configured to fit the requirements of the customer.

Openness: OPC, BACnet and Modbus (via NK) interfaces for subsystem integration.

Scalability: MM8000 will easily grow to support more subsystems, disciplines and stations.

#### **Features**

Comfortable navigation through the system via graphical maps or object trees.

Advanced graphics including AutoCAD.

Automatic and/or manual alarm dispatching via e-mail, SMS and pagers.

Scheduler application for time-based actions.

Configurable interactions between different subsystems.

Macro editor for complex commands.

System security based on Microsoft Windows (combined login).

Flexible configuration of user access rights.

Support of dual monitor configurations.

System requirements The MM8000 SW runs on a Micro-

soft Windows PC.

Ordering Information Contact your local SBT sales support

representative for further informa-

tion.

Data sheet A6V10074451

#### Type Order No.

#### MK8000OPCxxx

## © CPC

#### MK8000 OPC Server

The MK8000 OPC Server provides a standard access to a wide range of fire safety and security systems. With the MK8000 it is possible to integrate fire, gas and intrusion detection and access control systems into any central management station with an OPC client interface.

#### **Features**

- •OPC Server interface
- •Compliant to OPC Data Access 2.0x Specification
- •Supports Tag browsing (IOPCBrowse ServerAddressSpace)
- •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

System requirements The MM8000 SW runs on a Micro-

soft Windows PC.

Ordering Information Contact your local SBT sales support

representative for further informa-

MK8000xxx

tion.

Data sheet A6V10062465

### 2-2



Type Order No.

#### MT8000xxx



#### MT8000 Management terminal

The approved wall-mounted Danger Management Terminal MT8001 provides multi-discipline operation and offers management station functionality in a wall or desk-mountable cabinet. It provides a common user interface for Fire and Intrusion subsystems.

The MT8001 is a system terminal with a touch-screen user interface designed especially for rapid and accurate handling of events in emergency situations.

The low power requirements of the MT8001 enable it to be powered directly from a fire protection panel, although it may also be powered by a separate battery backup.

MT8000 Management Terminal Products family consists of the MT8001 Management Terminal HW, SW-licenses and accessories.

#### **Features**

Event treatment Plant browser History browser Macro commands PIN-controlled access

Operating system Windows CE.Net

Display 10.4" TFT-Color-display (640x480

pixels)

Screen Touch screen, Impact strength com-

pliant with EN54-2

Storage Compact Flash Card

Power consumption max. 15 W
Input voltage 18.5 ... 31.0 VDC
Operating temperature +4... +50 °C
Relative humidity 10... 95 %
Protection category IP30

Cabinet dimensions (W x H x D) 424 x 200 x 64 mm

Approval CE

CE

Vds-Certificate: G294042

System requirements

Ordering Information Contact your local SBT sales support

representative for further informa-

tion.

Data sheet 006952

#### MT8000xxx

Туре		Order No.
MH8051	MT8001 Control desk mounting  A mounting to install MT8001 either as a control desk application or a wall-mounted application.  Dimensions (W x H x D) 440 x 238 x 138 mm  Approval	A6E600053
MH8053	MT8001 19' rack mounting  Rack mounting option to install MT8001 in a 19" rack  Approval	A6E600225
MH8055  Sanisk 20  64  General State of the Sanisk 20  Compact State	MT8001 compact flash 64 MB (expandable) flash card used to transfer the configuration from a service-PC to the MT8001	A6E600301



Order No. Type

#### NK8000xxx

#### NK8000 networks





NK8000 is the network solution for connecting various safety and security units to the DMS8000 Management Station products (MM8000 Management Station, the MT8001 Management Terminal and the MK8000 OPC Server).

NK8000 connects the subsystems over serial connection to MT8001 systems and via Ethernet TCP/IP or BACnet/IP to the MM8000 and the MK8000. In addition NK8000 supports dial-up connections to MM8000 and MK8000 as backup connections.

The following NK822x products make up the NK8000 product family:

NK8222 Ethernet Port for a single subsystem

NK8223 Ethernet Port

NK8225 Ethernet Port with BACnet Gateway

The NK822x Ethernet Ports are supplied in a plastic housing for easy DIN-rail mounting.

Connectivity Support for both locally and geo-

graphically distributed field units via LAN / WAN-TCP/IP networks and

PSTN.

Interface Up to 4 x RS232 lines

1x Ethernet IEEE 802.3, 10Base-T

1 x RS485 1 x LON: 1 x I2C

Interaction Programmable interaction pro-

> grams including single or multiple triggers (incoming events) and single or multiple effects (outgoing

control actions).

Connectors D-Sub 9 pin, female type (for serial

and modem lines)

RJ-45 connector for Ethernet Wieland 5-pin connector for power

supply and LON

Connection cable RS232 lines: two unshielded twist-

ed pairs (Cat.3 UTP, max. 15 m) LON line: one unshielded twisted pair (Cat.4 UTP, 22AWG)

Ethernet: standard cable (Cat.5

UTP, max. 100 m)

for NK822x.2 :6.34 W Power consumption

for fully equipped NK822x.CL4:

8.34 W

10... 33 VDC Input voltage Operating temperature 0... +50 °C Storage temperature -40... +55 °C

10 to 90% non condensing Relative humidity

IP20 Protection category

Housing RAL7001 Color housing/cover Cover RAL7035

Cabinet dimensions (W x H x D) 180 x 108 x 80 mm

Approval

Data sheet See Data sheets for NK822x

Туре			Order No.
NK8222	Ethernet Port		NK8222
CHANGE CONT.	The NK8222 allows connection of a single safety or security subsystem to the NK8000 network and is best suited for distributed systems or geographical networks where only one subsystem has to be connected to a remote management system.		
NKBZZZ CE	Subsystem Expansion  Approval	DF8090 Power supply supervision module (external, on I2C bus) DF8000 I/O system (external, on RS485 IF) DF8020 8-relay output module (external, on I2C bus) DF8040 8-input module (external, on I2C bus) NK8021 Analog modem (external) NE8001 Wall-mountable, metallic cabinet with DIN-rail. Including prewired power supply unit CE	
	Data sheet	A6V10062433	
NK8222.2	Ethernet Port		A6E600089
	As NK8222 for technical details, but with the following differences:		
	Interface Expansion	1 Ethernet line for remote station 2 serial lines for local sta- tion/modem NH8010 NK822x LON board (inter- nal)	
NK8222.CL2	Ethernet Port	,	A6E600090
	As NK8222 for technical details	, but with the following differences:	
	Interface	1 Ethernet line for remote station 2 serial lines for local sta- tion/modem 1 LON line for subsystem	



Type			Order No.
Туре			Order No.
NK8223	Ethernet Port		NK8223
Con   Con	The NK8223 allows connection of multiple SBT and 3rd party subsystems to the NK8000 network, and is best suited for local systems, campus-size or wide area extension systems, where more than one subsystem has to be connected, or system extensions with additional subsystems are expected.		
NK0223	Subsystem	more than 1	
	Expansion	DF8090 Power supply supervision module (external, on I2C bus) DF8000 I/O system (external, on RS485 IF)	
		DF8020 8-relay output module (external, on I2C bus) DF8040 8-input module (external, on I2C bus)	
		NK8021 Analog modem (external) NE8001 Wall-mountable, metallic cabinet with DIN-rail. Including pre- wired power supply unit	
	Approval	CE	
	Data sheet	A6V10062431	
NK8223.2	Ethernet Port		A6E600005
	As NK8223 for technical details,	but with the following differences:	
	Interface	1 x Ethernet line for remote station 2 x serial lines for subsystems/local station/modem	
	Expansion	NH8002 2 serial port add-on board (internal) NH8010 NK822x LON board (inter- nal)	
NK8223.4	Ethernet Port		A6E600006
	As NK8223 for technical details,	but with the following differences:	
	Interface	1 x Ethernet line for remote station 4 x serial lines for subsystems/local station/modem	
	Expansion	NH8010 LON add-on board (internal)	
NK8223.CL2	Ethernet Port		A6E600007
	As NK8223 for technical details, but with the following differences:		
	Interface	1 x Ethernet line for remote station 2 x serial lines for subsystems/local station/modes	
	Expansion	1 x LON line for subsystems NH8002 2 serial port add-on board (internal)	

Туре			Order No.
NK8223.CL4	Ethernet Port		A6E600008
	As NK8223 for technical details, but with the following differences:		
		4 Ed. 11 6	
	Interface	1 x Ethernet line for remote station 4 x serial lines for subsystems/local station/modem 1 x LON line for subsystems	



Туре			Order No.
NK8225	Ethernet Port with BACnet Gate	way	NK8225
CIMENS  - Company  - C	The NK8225 offers the same connectivity capabilities as the NK8223. In addition NK8225 provides BACnet connectivity between NK8225 for network-wide interactions.		
NK8225	Subsystem	more than 1	
	Expansion	DF8090 Power supply supervision module (external, on I2C bus) DF8000 I/O system (external, on R5485 IF) DF8020 8-relay output module (external, on I2C bus) DF8040 8-input module (external, on I2C bus) NK8021 Analog modem (external) NE8001 Wall-mountable, metallic cabinet with DIN-rail. Including pre-	
		wired power supply unit	
	Approval Data sheet	CE A6V10062445	
NK8225.2	Ethernet Port with BACnet Gate	way	A6E600303
	As NK8225 for technical details, but with the following differences:		
	Interface	1 x Ethernet line for remote station 2 x serial lines for subsystems/local station/modem	
	Expansion	NH8002 2 serial port add-on board (internal) NH8010 LON add-on board (inter- nal)	
NK8225.4	Ethernet Port with BACnet Gate	way	A6E600304
	As NK8225 for technical details,	but with the following differences:	
	Interface	1 x Ethernet line for remote station 2 x serial lines for subsystems/local station/modem	
	Expansion	NH8010 LON add-on board (internal)	
NK8225.CL2	Ethernet Port with BACnet Gate	way	A6E600305
	As NK8225 for technical details,	but with the following differences:	
	Interface	1 x Ethernet line for remote station 4 x serial lines for subsystems/local station/modem	
	Expansion	NH8002 2 serial port add-on board (internal)	

Туре			Order No.
IK8225.CL4	Ethernet Port with BA	Cnet Gateway	A6E600306
	As NK8225 for technical details, but with the following differences:		
	Interface	1 x Ethernet line for remote station 4 x serial lines for subsystems/local station/modem 1 x LON line for subsystems	



Туре			Order No.
NH8002	2 serial port add-on board fo	r NK822x	A6E600013
To a second	Add-on board for expansion of NK822x.2 and NK822x.CL2 with 2 serial ports.		
	Dimensions (W x H x D) Approval	120 x 58 x 15 mm CE	
NH8010	LON board for NK822x		A6E600014
		NK822x.2 and NK822x.4 with a LON line S6 intrusion detection systems.	
	Dimensions (W x H x D)	60 x 96 25 mm	
(	Approval	CE	
NH8052	NH8052; 520-l CPU mod. NK8	2225; F/W inst.	A6E600307
	DIMM-PC module for upgrading NK8223 Ethernet Ports to NK8225 Ethernet Ports with BACnet Gateway.		
	Operating current	0.4A @ 5 V	
ESMT	Dimensions (W x H x D) Approval	40 x 67 x 6 mm CE	
NZ8201	NK822x Mounting kit for CS1		A6E600185
	Card holders and cable set for	installing NK822x in CS11 or CS440	

## Order No. Type A6E600186 NZ8202 NK822x Mounting kit for CS6 Mounting plate, card holders and cable set for installing NK822x in CS6 NZ8203 A6E600187 NK822x Mounting kit for SI410 Mounting plate, card holders and cable set for installing NK822x in SI410 Sintony (standard or Scandinavian housings) Further options: Cable for connecting SI410 to NK822x must be ordered separately from the intrusion product range (80064100001 SAQ18 Cable link X25 SAQ18). A6E600010 DF8090 Power supply supervision module for I2C bus Optional module for supervising the NK822x power supply and detecting power failures and battery low conditions. It is not needed when NK822x is installed in a fire or intrusion control unit, where power supply is already supervised. Operating voltage 12 VDC 0.01A@ 13.8 VDC Power consumption Dimensions (W x H x D) 75x45x48 mm



Type Order No.

#### DF8000xxx

#### DF8000 I/O system (formerly CF9000)

The DF8000 unit is a flexible I/O system made up of DIN rail-mounted modules that can be combined in local units so as to concentrate from 4 to 48 I/O points, distributed on a RS-485 line.

DF8000 detects any input status change, and transmits this information to the supervising host. The individual outputs are controlled according to the commands sent by the supervising station. The communication line to and from the supervisor is fully monitored.

DF8000 can be used to interface technological signals or to interface with control panels.

Input voltage 10... 33 VDC
Power consumption 0.01A @ 13.8 VDC
Data sheet A6V10081184

#### DF8003

#### CPU Module for DF8000 I/O system

DF8003 is a CPU module, equipped with a RS-485 interface that can be connected to a Bus and to the supervision centre via NK822x Ethernet Ports. It controls up to 6 DF80xx I/O modules on a local I2C Bus.

Dimensions (W x H x D) 75x50x48 mm

Approval CE

#### DF8020

#### 8-relay digital outputs module

Module for 8 non supervised outputs with NO/NC relays included Max 1 module can be directly connected to NK822x. For more connectivity (as well as for supervised inputs), it is necessary to use a DF8003 CPU on one of the serial connections.

Dimensions (W x H x D) 75x45x48 mm

Approval CE

#### DF8040

#### 8-digital inputs module

Module with 8 none supervised inputs with galvanic isolation for acquiring digital contacts.

Max 2 modules can be directly connected to NK822x.

For more connectivity (as well as for supervised inputs), it is necessary to use a DF8003 CPU on one of the serial connections.

Operating current Max.

0.024A @ 12V

0.073A @ 27V

Dimensions (W x H x D) 75x45x48 mm

Approval CE

#### DF8000xxx

S54461-C1-A1

A6E600194

A6E600195

Туре			Order No.
DF8045	4-supervised digital input mod	ule	A6E600196
***************************************	Module with 4 supervised, normally closed inputs with optical isolation (only via DF8003 CPU module)		
	Operating current	Max. 0.03A @ 12V 0.03A @ 27V	
eritore.	Dimensions (W x H x D) Approval	75x45x48 mm CE	
DF8046	4-supervised digital input mod	ule	A6E600197
*******	Module with 4 supervised, norma (only via DF8003 CPU module)	ally open inputs with optical isolation	
	Operating current	Max. 0.03A @ 12V 0.03A @ 27V	
	Dimensions (W x H x D) Approval	75x45x48 mm CE	
NE8001	Housing for NK822x		A6E600066
	Metallic cabinet for easy wall-mounting, including a DIN rail and a pre- wired power supply for NK822x and local I/O		
	Mains voltage Mains fuse	100 240 VAC F3.15AL / 250V / 3-pole screw con- nector	
	Power supply	60 W	
	Operating temperature Storage temperature	0 +50 °C °C -40 +55 °C	
THE RESERVE OF THE PERSON OF T	Relative humidity	10 95 % (no condensation)	
O a	Protection category Color housing/cover	IP42 light grey, RAL 7035	
	Cabinet dimensions (W x H x D)	390 x 450 x 150 mm	
The state of the s	Approval Data sheet	CE A6V10063431	
Res Consultan	Expansion	A6V10062421 1x NK822x	
	,	2x DF8040 modules (connected via	
		I2C) 1x DF8020 module (connected via	
		I2C) 1x NK8021 Analog modem	



Order No. Type

#### NK8021

#### NK8021 Analog Modem





Analog modem for public switched telephone network (PSTN) with

V24/V28 Serial Interface. Compatible to the following standards: V.90, V.34+, V.34, V.32bis, V.32, V.22bis, V.22, V.21

Input voltage 5 VDC or 12 VDC Power consumption 0.2A @ 12 VDC Operating temperature 0... +50 °C °C

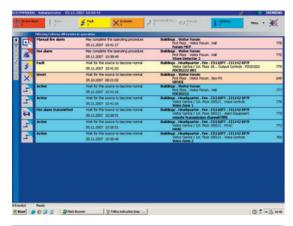
Relative humidity 20... 80% non condensing Dimensions (W x H x D) 100 x 150 x 18 mm

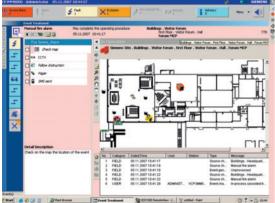
Approval

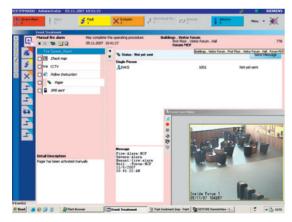
Data sheet A6V10075902

## MM8000 Alarm Scenario

Customization of operating workflow adapted to organizational and executive workflow of customers company and facility.











#### 1. Select the event



#### Overview in every situation:

Pre-defined operating procedures provide step-by-step access to the required detailed information.

#### Easy and clear event presentation:

If an event occurs, an event entry is added to the event list, the corresponding lamp is activated, the accompanying counter is incremented, and an acoustic signal sounds. The event list is the starting point for the event handling procedure.



#### 2. Acknowledge the event

#### Rapid and guided operation:

The MM8000 guides the user in the easiest way and supports in making decisions. It allows him to concentrate on the main steps, and in this way prevents potential danger from escalating to catastrophes.

## 3. Follow the recommended treatment procedure (free treatment or guided treatment)

#### The correct action at the right moment:

The individual steps can be freely defined – specifically adapted to the requirements of the installation and its organization.

#### After selecting an event for example...

- the relevant part of the building plan is displayed, the alarm source is marked up
- monitoring can be switched on (live image display, recording, playback)
- the security guard, the fire brigade or police department can be notified by phone, pager or SMS
- an instruction page presents information about the necessary intervention steps
- the event-report can be filled in
- → Investigate and clear the cause of the alarm



#### 4. Reset the alarm



#### 5. Attach a note if desired







MM8000 creates clarity and overview with an easy navigation from complex to detailed information, allows automatic logging and simple report creation.

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NK8223.CL2	Ethernet Port	A6E600007	5-7
NK8223.CL4	Ethernet Port	A6E600008	5-8
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The information in this document contains general descriptions of 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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