

SIEMENS



MT8001 MP3.15 Management Terminal System Description

Data and design subject to change without notice. / Supply subject to availability.
© 2005 Copyright by
Siemens Switzerland Ltd

We reserve all rights in this document and in the subject thereof. By acceptance of the document the recipient acknowledges these rights and undertakes not to publish the document nor the subject thereof in full or in part, nor to make them available to any third party without our prior express written authorization, nor to use it for any purpose other than for which it was delivered to him.

About this document.....	4
Definition of terms.....	7
1 Introduction	9
1.1 MT8001 overview.....	9
1.2 Features and benefits	10
2 Functional capabilities	11
2.1 User interface.....	11
2.1.1 Summary bar	11
2.1.2 Event list	12
2.1.3 Menu bar.....	12
2.1.4 Plant browser.....	13
2.1.5 History browser.....	13
2.2 Event treatment.....	14
2.2.1 Event announcement.....	14
2.2.2 Event treatment	14
3 Product set-up & configuration	16
3.1 Composer® : the integrated configuration tool	16
3.2 The MapMaker ®' creation of graphical pages.....	17
3.3 Software protection	17
4 System solutions	18
4.1 Small fire system.....	18
4.2 Cerloop.....	18
4.3 NK8000 network.....	19
4.4 DMS8000 decentralised solution	19

About this document

This document describes the MT8001 version MP3.15 functional and system capabilities. It explains the product fundamentals and user benefits. It also explains the basics of how the MT8001 can be integrated into your facility.

Document overview:

This document provides you with the information you need to determine whether the MT8001 fits your security needs. It is divided into five basic sections:

- A section defining common terms is located in the front of this document.
- Section 1 explains what the MT8001 is, and briefly lists system highlights, features and benefits.
- Section 2 details functional capabilities of the MT8001, and provides an overview of how to perform some common tasks.
- Section 3 describes in brief the MT8001 set-up and configuration process. It also describes the configuration and graphical tools available to tailor the system to your facility, and the significance and uses of the software protection hardware key.
- Section 4 details system capabilities of the MT8001. This includes architecture, including user interface features and site configuration options, system extensibility, subsystems supported, and system parameters.

Scope

This document applies to the MT8001 management terminal, version 3.15.

Modification index

Current version	Date	Notes
008605_a_en	10.2005	Corresponds to MT8001 version 3.15

Reference documents

The most recently released technical documentation for customers can be found in the Electronic Documentation Management System (EDMS) in the Siemens Intranet at the following address: <http://intranet.sbt.siemens.com/fs/content/default.asp>

1. Choose 'Documentation (EDMS)' in the 'Go direct' drop-down menu near the top of the screen.
2. Select 'All documents' from the menu at the upper left of the screen to go to the EDMS interface (Electronic Documentation Management System).
3. Enter the EDMS number (for example, enter 004968 for the product datasheet) in the 'Document no.' field, and click 'Search'.

Note: To see all documents for a product family, use the search tool and enter the product number (for example, MT8001) in the 'Short Name' field.

Product	Document Name	EDMS #	Date	Latest update
Sales documents				
MT8001				
MT8001	Product Datasheet	006952	09.2005	MP3.15
MT8001	Sales Presentation	007346	09.2005	MP3.15
MT8001	System Description	008605	09.2005	MP3.15
MT8001	Sales Guide	007286	09.2005	MP3.15
MT8001	Tender Specifications	007788	09.2005	MP3.15
MT8001	Demo Material	008078	09.2005	MP3.15
MM8000				
MM8000	Product Datasheet	006882	09.2005	MP3.15
MM8000	System Description	006883	09.2005	MP3.15
MM8000	Sales Presentation	006961	09.2005	MP3.15
MM8000	Sales Guide	007086	09.2005	MP3.15
MM8000	Tender Specifications	006884	09.2005	MP3.15
MM8000	Offer Template	007087	09.2005	MP3.15
NK8000				
NK8000	Product Datasheet NK8223	007777	09.2005	MP3.15
NK8000	Product Datasheet NK8222	007780	09.2005	MP3.15
NK8000	Product Datasheet NE8000	006913	12.2004	MP3.10
NK8000	Sales Presentation	007794	09.2005	MP3.15
NK8000	Sales Guide	007920	12.2004	MP3.10
NK8000	Demo Material	008077	02.2004	MP2.11
MK8000				
MK8000	Product Datasheet	004968	12.2004	MP3.10
MK8000	Sales Presentation	007121	03.2003	MP1.10
MK8000	Sales Guide	004970	03.2003	MP1.10
Technical documents				
MT8001				
MT8001	Release Notes for MP1.20	008094	02.2004	MP1.20
MT8001	Release Notes for MP3.15	008604	09.2005	MP3.15
MT8001	Operation	006611	09.2005	MP3.15
MT8001	Operation Quick Reference	008088	09.2005	MP3.15
MT8001	Installation, Configuration and Commissioning	006647	09.2005	MP3.15
MT8001	Localisation - Engineering guide	008083	09.2005	MP3.15
MT8001	History Analysis Installation	006962	03.2003	MP1.00

MM8000				
MM8000	Release Notes for MP3.10	008601	12.2004	MP3.10
MM8000	Release Notes for MP3.15	008901	09.2005	MP3.15
MM8000	Operation	006798	09.2005	MP3.15
MM8000	Operation Quick Reference	008082	09.2005	MP3.15
MM8000	Installation, Configuration and Commissioning	006799	09.2005	MP3.15
MM8000	Configuration Quick Reference	008598	09.2005	MP3.15
MM8000	Graphical Maps Quick Reference	008906	06.2005	MP3.12
MM8000	Localisation Engineering guide	007769	09.2005	MP3.15
NK8000				
NK8000	Release Notes for MP3.10	008602	12.2004	MP3.10
NK8000	Release Notes for MP3.15	008902	09.2005	MP3.15
NK8000	Installation, Configuration and Commissioning	007798	09.2005	MP3.15
MK8000				
MK8000	Release Notes for MP3.10	008603	12.2004	MP3.10
MK8000	Installation, Configuration and Commissioning	004972	12.2004	MP3.10
DMS8000 and Composer				
WW8000	Composer Datasheet	003331	09.2005	MP3.15
WW8000	Composer Technical Manual	003183	09.2005	MP3.15
WW8000	Composer Configuration Quick Reference	008081	02.2004	MP2.3.1
WW8000	Composer Release Notes	008900	09.2005	MP3.15
DMS8000	Connectivity Configuration Guide	007083	09.2005	MP3.15
DMS8000	Graphical Map Configuration	008904	09.2005	MP3.15
DMS8000	Graphical Map Configuration Quick Reference	008906	09.2005	MP3.15

Definition of terms

Advisory	A type of event. A notification that something has occurred that the operator should be aware of, but does not need to respond to in any way. For example, an Advisory may be triggered when the system changes from night mode to day mode.
Alarm	A type of event. A notification that there is a situation that may become a problem and escalate to Severe alarm, and requires immediate attention from the operator. For example, an Alarm may be caused by situations such as (but not limited to) a high concentration of smoke (more than a cigarette, but less than a fire), or sabotage of an intrusion detector.
Anomaly	A type of event. A notification that the state of a detector or group of detectors has changed, but doesn't cause any risk to security. For example, a section of fire detectors have been switched to test mode.
Composer™	The WW8000 Composer is the easy-to-use configuration tool used to customise the MT8001. The tool is common to the entire DMS8000 family.
Control Unit	The physical panel (for example, CS11 fire subsystems) that is connected to a group of detectors. The control unit receives messages from and sends commands to the detectors. When a control panel is connected to the MT8001, it behaves as a liaison (or translator) between the detectors and the MT8001. It receives commands from the MT8001, and communicates them to the detectors, and it receives messages from the detectors and communicates them to the MT8001.
DMS8000	The Danger Management System family of the Siemens Building Technologies group. It includes the MM8000 management station, the MT8001 management terminal, the MK8000 OPC server, and the NK8000 network.
Event	A security situation that the operator either needs to be aware of, or needs to respond to. Typical event categories are: Severe alarm, Alarm, Fault, Exclusion, Anomaly, and Advisory.
Event Counters	Any one of the six boxes located in the event bar. (See Fig. 2 on page 11.) The event counter notifies the operator that there is a situation that either requires attention (in the case of Severe alarm, Alarm, or Fault), or that the operator should be aware of (in the case of Exclusion, Anomaly, or Advisory).
Event Treatment	The actions taken in response to an event such as calling the police, turning off a detector, or filing a report. Event treatment can be <i>manual</i> or <i>automatic</i> , depending on the selection mode, <i>fast</i> or <i>assisted</i> , depending on the type of guidance provided by the system. Assisted treatment can be <i>guided</i> or <i>free</i> , depending on how the MT8001 is configured.
Exclusion	A type of event. An Exclusion alarm occurs when the state of a detector or sections has changed creating a situation that could be a security risk, such as the disconnection of an intrusion detector that monitors a high-security area.
Fault	A type of event. A Fault alarm occurs when there is a technical problem or failure of a detector or other security equipment.
History browser	Detailed records of events, operator activity, and system behaviour are accessible through the history browser (by authorised users).
Map	MT8001 can handle graphic maps, representing a building floor or part of it (Background) and including dynamic points (Foreground).
MM8000	The management station solution of the DMS8000 family. It is based on Windows workstations, and can range from small, stand-alone solutions to large and networked systems.
NK8000	A series of LAN/WAN network devices for connecting safety and security units to the DMS8000 architecture. The NK8000 devices (NK8222 and NK8223) also feature a local message treatment and can provide a programmable level of automated functions.
Operator	The person responsible for treating events using the MT8001. The operator is usually either a member of the security force, or the fire brigade.
Organisation mode	Safety and security control units can operate expecting an operator attendance or not. In the first case (day or manned mode), the units, upon an alarm event, can delay the automatic reactions, waiting for the operator intervention. Instead, in the second case (night or unmanned mode), the reactions (general alarming, remote transmission) are started immediately when an alarm condition is detected.
Plant	The physical location being protected by the security detectors and controlled with the MT8001. Synonyms are: facility, site, building, area, etc.
Plant Browser	Each detector and security device in the plant can be monitored and controlled through the plant browser. The plant browser can be launched through the browsers option on the menu (located on the summary bar).

Introduction

Remote Transmission	The notification to a remote destination of an abnormal condition detected by a control unit (e.g. alarm, fault). Typical destinations are the Fire Brigade or the Police.
Severe Alarm	A type of event. A notification that there is a life-threatening situation that requires immediate attention from the operator. A Severe alarm may be caused by situations such as (but not limited to) an armed robbery or a fire.
Subsystem	A control unit configured in the Composer environment.

1 Introduction

The MT8001 is a professional management and monitoring terminal for integrating security and safety systems. Primary users of the MT8001 are guards and managers responsible for safety and security. However, occasional users can also use the terminal whenever this becomes necessary.

1.1 MT8001 overview

Wide application range

Designed for both wall and desk-mounting solutions, the MT8001 management terminal provides an easy-to-use point of access to the safety and/or security network used in your facility. The MT8001 allows you to monitor and control any area or device within the system from one place.

In large installations, where a high-level management station (e.g. MM8000) is used, the MT8001 can be effectively used as a local operating terminal at floor or building level.

Fire-protection approvals

The MT8001 is approved as an operating terminal for AlgoRex CS1140 subsystems, by the Verband der Sachversicherer of Germany (VdS), in accordance with the EN54 Norm¹.

Customisation to meet your specific needs

The MT8001 fits in a wide range of custom applications where professional and accurate security and safety management is of the highest concern. The MT8001 can be used in high-risk industries, large office buildings with sensitive operations, financial institutions, large museums, high tech industries, telecom operations, banks, and others.

Event treatment

In the case of an event that requires attention, the MT8001 alerts you to that event, furnishes important information, and provides guidance during the handling process.

Monitoring and controlling your system

You can monitor or modify the state of a large area, a control unit, a device, or even an individual property. During routine activities such as maintenance or inspections, you can easily deactivate and reactivate specific areas and devices.

System history

The MT8001 records the actions and events that occur, and provides a search engine to help you retrieve the data that you need to view.

Connectivity to the field control units

The MT8001 can support the Siemens fire, intrusion and gas control units. Different connectivity solutions can be provided, including serial lines and redundant loops.

MT8001 can offer peace of mind

The MT8001 fits organisations to handle safety and security 24 hours a day and can provide you a proven solution you can rely on.

¹ Approval expected by 2Q 2006

1.2 Features and benefits

The MT8001 system offers the following features:

- **Flexibility** – The system can be built and configured to best fit your actual situation. MT8001 can be used with brand new installations, as well as to improve the performance of existing systems.
- **Scalability** – MT8001 will easily grow with your needs if support for more sub-systems, disciplines, and stations are needed. Even though most of the needed user functions are already included from the beginning, future releases will offer many add-ons.
- **Reliability** – The MT8001 is compliant with quality standards and it is part of an architecture based on the concept of autonomous subsystems and distributed control. Furthermore, redundant configurations can be implemented.
- **Security** – The operator will have access to exactly what you defined. Not less, not more.

The MT8001 offers the following benefits:

- **Easy** – The graphical user interface can guide the user in the event treatment, or control of the site. The touch sensitive screen makes the control actions extremely simple to command.
- **Safe** – The intuitive user interface helps users avoid mistakes;
- **Approved** – Fire protection solutions requiring VdS/EN54 approvals can include the MT8001 terminals.

2 Functional capabilities

This chapter describes important security tasks the MT8001 can do. It also describes some optional features, and tells how to perform some common tasks.

2.1 User interface

MT8001 user interface categories

The MT8001 user interface (Fig. 1) can be divided into the following primary categories:

- *Summary bar*, on the top, provides an overview of the system conditions.
- *Working area*, in the centre.
- *Menu bar*, at the bottom, shows the general command options available.

Three applications can operate in the Working area. Namely:

- *Event list* – displays active events – you treat events from this list.
- *Plant browser* – helps you to control site systems and detectors.
- *History browser* – helps you to analyse events that occurred in the past.

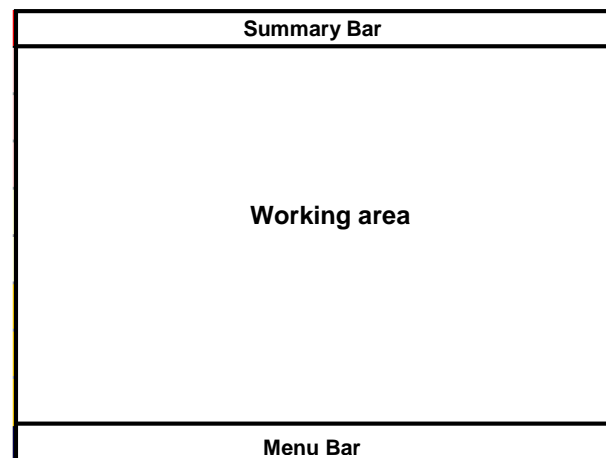


Fig. 1 MT8001 interface

2.1.1 Summary bar

The Summary bar (Fig. 2) is located at the top of your screen. It is made up of 6 event counters and 3 status lamps (horn, remote transmission, and organisation mode).

The status of the system is visible at all times on the Summary bar. When an event occurs, the corresponding event counter lights up. In case of alarm, two more icons display the status of the alarming horn and of the remote notification (e.g. to the fire brigade). A last icon, on the right, displays the current organisation mode, i.e. whether the supervised control units are currently “Unset” (manned or day mode) or “Set” (unmanned or night mode).



Fig. 2 MT8001 Summary bar

2.1.2 Event list

The event list (Fig. 3) displays a list of all open events. For each event, the list displays the time when the event occurred, information about the nature of the event, and the exact location where it occurred.

From this list, you can directly execute commands to treat the event: you just need to touch the event line you want to select and then start treating it.








	Alarm 09-08-2005 11:28 Please select	Subsystem, Fire CC11, Logical Tree, Bank , Second Floor Room 201 President's Office
	Alarm 09-08-2005 11:29 Please select	Subsystem, Fire CC11, Logical Tree, Bank , Second Floor Room 202 Conference Chamber
	Alarm 09-08-2005 11:29 Please select	Subsystem, Fire CC11, Logical Tree, Bank , Second Floor Room 203 Chief Cashier
	Fault 09-08-2005 11:31 Please select	Subsystem, Fire CC11, Logical Tree, Bank , Second Floor, Corridor Corridor 001
	Fault 09-08-2005 11:34 Please select	Subsystem Intrusion, Physical tree, Control unit Remote transmission
	Off 09-08-2005 11:29 Please select	Subsystem, Fire CC11, Logical Tree, Bank , Second Floor Room 204 Secretary
	Off 09-08-2005 11:29 Please select	Subsystem, Fire CC11, Logical Tree, Bank , Second Floor Room 205 Accountant

Fig. 3 MT8001 Event list

The Event list can be easily filtered by selecting one of the event counters in order to show only one category of events. Filters are useful when there are a high number of open events, and you need to identify events of a certain type (such as Severe alarms or Alarms that are waiting to be treated).

2.1.3 Menu bar

At the bottom of the screen, the Menu bar (Fig. 4) presents the general user functions. The specific menu contents may vary depending on the interface status and on previous commands. In general, you can:

- Open a menu of more advanced functions
- Display the User Log-out window
- Toggle the Help mode
- Silence the buzzer



Fig. 4 MT8001 Menu bar

2.1.4 Plant browser

The Plant browser (Fig. 5) presents a tree-structured display of all detectors and alarming/control devices of your site. From the tree, you can review the status of the site, select and change the state of a detector, a group of detectors, or an entire area.

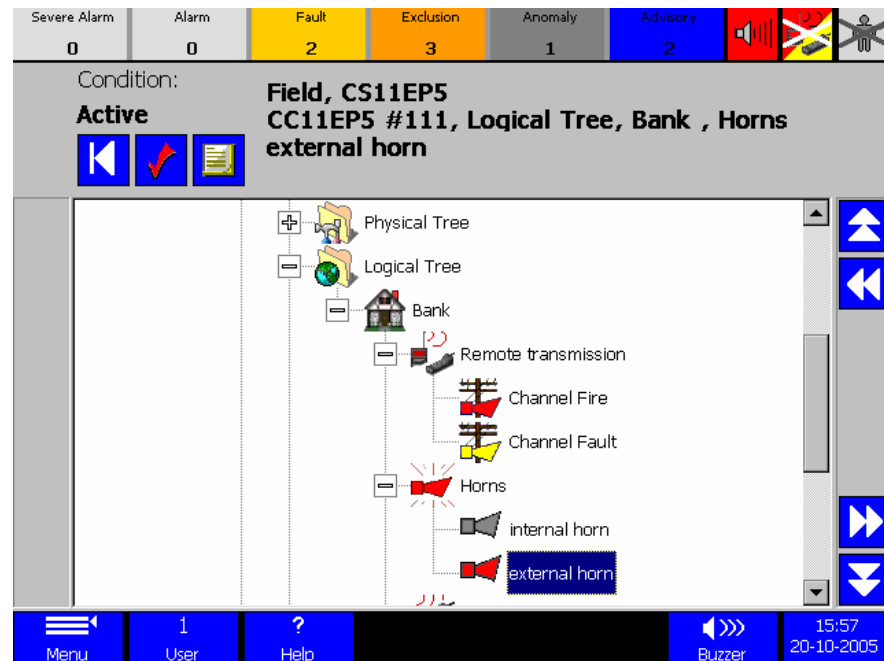


Fig. 5 MT8001 Plant browser

2.1.5 History browser

The MT8001 records and stores the events and actions relating to them as they occur. The History browser provides access to that data, which is shown in the form of a scrollable event list. If required, the history archive can be uploaded for an external analysis.

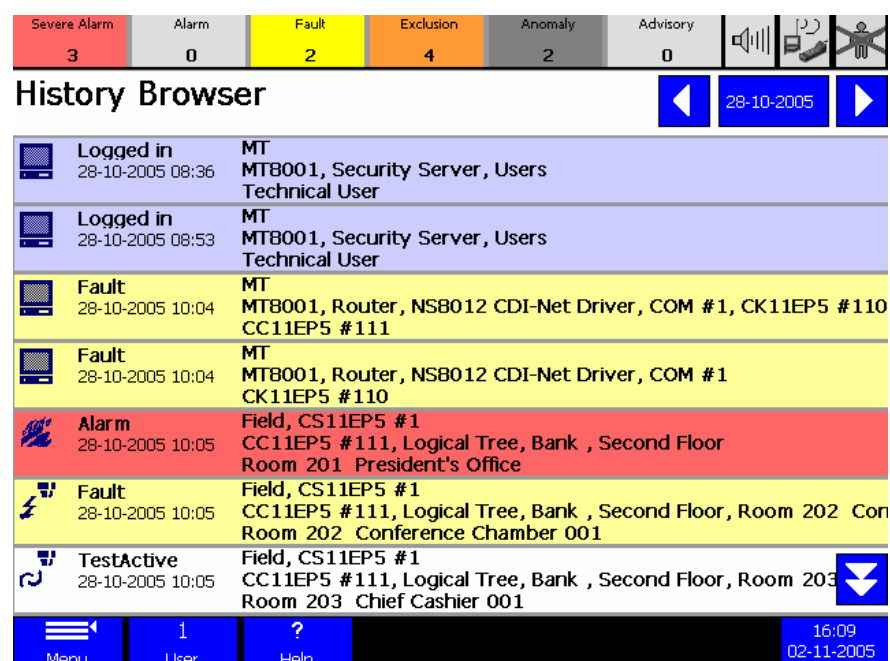


Fig. 6 MT8001 History browser

2.2 Event treatment

2.2.1 Event announcement

The following occurs when a new event is triggered:

- The MT8001 buzzer sounds.
- The event counter that corresponds with the event category becomes active and flashes.
- A new event icon and event description displays in the event list.
- If the screen saver is active, an Event page is shown full screen (Fig. 7). Just touch any point of the screen to show the event list.



Fig. 7 MT8001 Alarm Page

In the event list, the event messages are clearly visible and they are listed in order of severity, with the highest on the list being the most critical. After an event has been treated, its level of severity decreases. When this occurs, its position in the list changes as well.

All events do not have the same level of urgency. To help the operator easily distinguish the level of criticality of an event, events are colour coded by their level of severity.

EVENT TYPE	COLOUR
Severe Alarm (highest Level)	Red
Alarm	Magenta
Fault	Yellow
Exclusion	Gold-Orange
Anomaly	White
Advisory	Light Blue

2.2.2 Event treatment

To select and treat an event, touch the corresponding line in the event list on the terminal screen.

Treatment tools

When an event is selected, a command bar provides quick access to a basic set of commands for treating the event: you can quickly acknowledge, suspend, and re-set events, as well as correct temporary exception situation.

Depending on the MT8001 configuration, an advanced set of treatment tools can also be available, to use as you deem appropriate in the situation.

The treatment tool list includes:

- Displaying an assistance text and/or graphic.
- Showing the dynamic graphic map associated to the source of the event (Fig. 8).
- An event protocol report, including the detailed logs of changes of state and control commands.
- Providing a report form that must be completed by the operator.

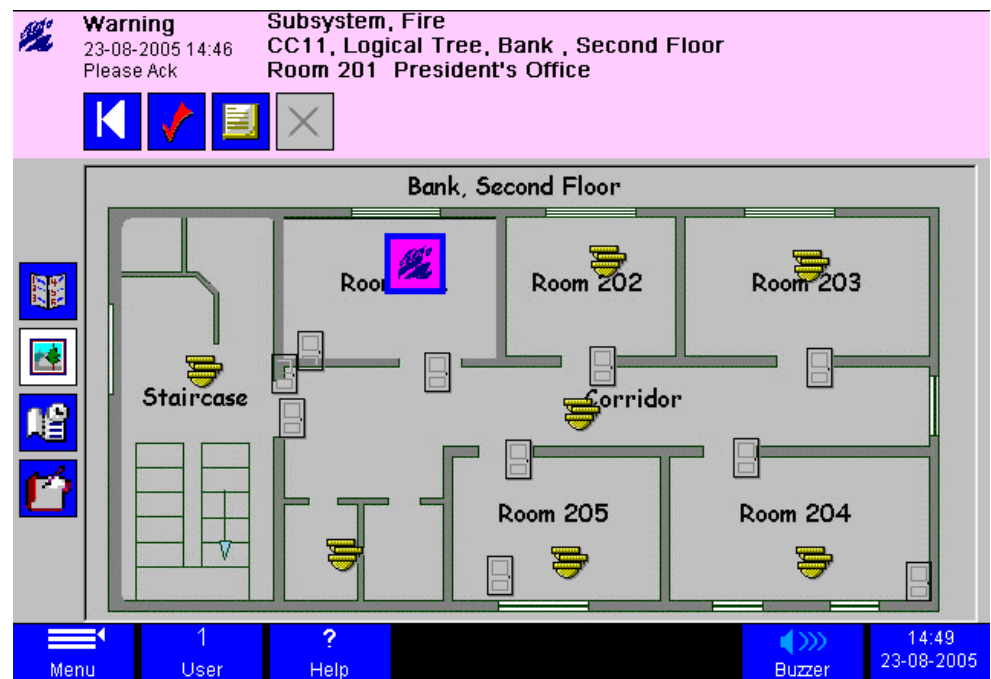


Fig. 8 Event treatment: graphic tool

3 Product set-up & configuration

When the MT8001 is installed at your site, it needs to be configured for your specific facility. The WW8000 Composer[®] was developed for this purpose. Composer is an easy-to-use configuration tool that makes the process of customising the MT8001 for a site fast and easy.

3.1 Composer[™] : the integrated configuration tool

The configuration tool named WW8000 Composer is used to configure all FSP-DMS systems.

WW8000 Composer enables configuration of both the general MT8001 user interface appearance and behaviour, and system functionality. Configuration data from existing control units can be quickly imported into Composer providing configuration personnel a single uniform tool for all configuration activities. New or additional functionality can be quickly added for each product configuration.

Also, Composer enables you to:

- Filter for disciplines, objects and object types to permit you to focus on that information you're interested in (e.g.: a detector, or zone of a certain type).
- Zoom to concentrate only on needed details.
- Search for key words, like descriptions or CSX numbers.
- Sort text and properties.

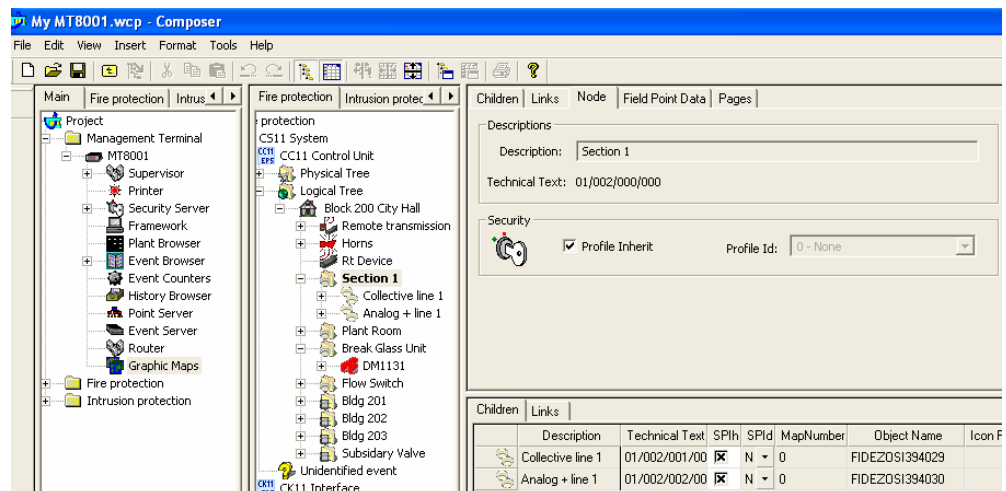


Fig. 9 A multiple tree view in Composer

Flexible data views

A site can include hundreds or thousands of objects, like detectors, zones, maps, etc. For easy orientation, you can choose between different data views as you work with a project. The following is a list of the views from which you can choose:

- *Tree View*: Shows the hierarchical structure of the project, (in a similar way to MS-Explorer[®]). You can choose between a general view, technical view, or both.
- *Edit Grid*: Shows a group of nodes and allows a fast configuration similar to an MS-Excel[®] spreadsheet. You can display or hide columns according to your needs.
- *Node View*: Shows the properties of a single node.
- *Links View*: Displays all linked nodes, and allows navigation between linked objects.

Standard print reports

The Composer offers three different kinds of standard reports you can print:

- *Project Structure Report*: Outlines the project tree;
- *Brief Report*: Shows the project tree with the properties contained in the first sheet of the Edit Grid;
- *Complete Report*: Contains all detailed information contained in a project.

Download

Once you have configured the project off-line, download the configuration to the MT8001 terminal. During the download process, all the information needed for the MT8001 is transferred from the configuration PC to the terminal.

3.2 The MapMaker™: Creation of graphical pages

To handle the advanced geographic display available through the MT8001 user interface (during event treatment), the configuration environment comes equipped with a graphical tool called MapMaker.

With MapMaker you can work directly with your company's AutoCAD (or similar) drawings creating layers of information which will then be presented to the end-user as different levels of detail, as different types of information (for example, a fire layer or an intrusion layer), or a combination of both. One view at the time can be available on the MT8001 terminal.

3.3 Software protection

Composer and its Plug-ins are software protected with a single hardware key, and one or more PAKs (Program Authorization Key). For ordering details, refer to the price list.

4 System solutions

4.1 Small fire system

An AlgoRex C-Bus cluster or FC700A fire system can be directly connected to the MT8001 via the ISO1745 interface protocol.

EN54

The following configuration is approved for fire detection applications by the VdS-Approval Authority (based on the European Standard EN54-2)¹.

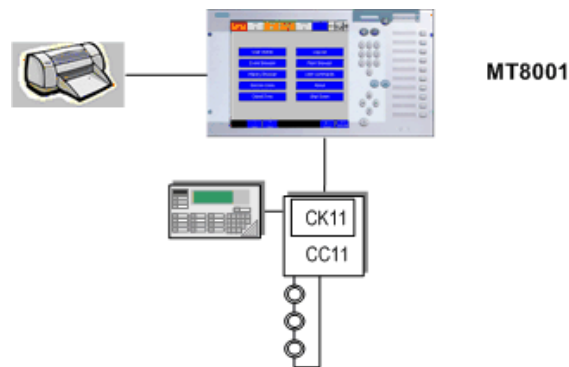


Fig. 10 AlgoRex CC11 (FC700A) via ISO1745 interface protocol.

4.2 Cerloop

The MT8001 Management Terminal supports the Cerloop network type. It may be used either as a stand-alone system, or as part of a larger decentralised configuration.

The following subsystems are supported on the Cerloop network:

- CS11 AlgoRex (EP5 and EP7F), FC700A, and CZ10 fire detection systems
- CS440 Intrusion detection systems
- CC60 Gas detection systems
- MF7033/MM7033 Mux/Demux systems
- STT11 (Système de Télécommande et Télésignalisation)

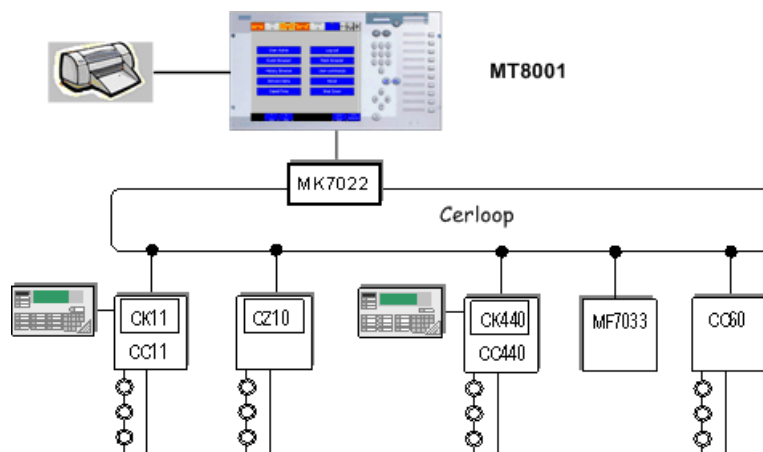


Fig. 11 Cerloop architecture example

Note: Up to four data acquisition devices (MT8001, MM8000, MF7033, etc.) can be connected to the Cerloop.

¹ Approval expected by 2Q 2006

4.3 NK8000 network

The MT8001 also supports an NK8223 to allow common support for subsystems handling various disciplines.

The following subsystems are supported via an NK8223:

- CS11 AlgoRex (EP5 and EP7F), FC700A, and CZ10 fire detection systems
- CS6 Guarto (MP3) intrusion detection systems
- CS440 intrusion detection systems
- SI410 Sintony intrusion detection systems
- CC60 Gas detection systems
- CF9000 Input/Output systems

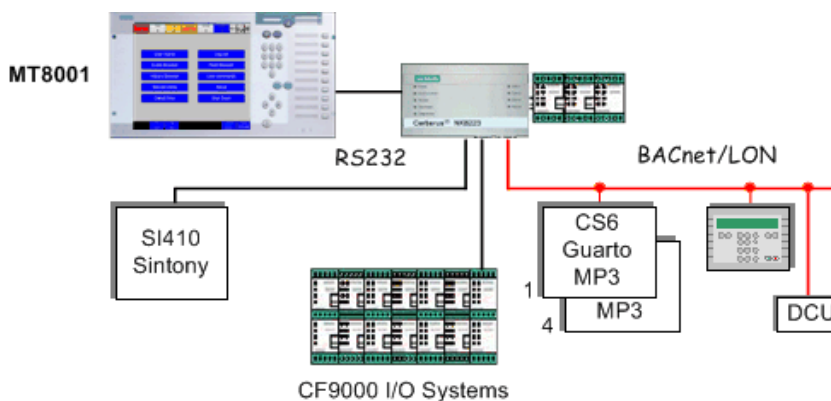


Fig. 12 NK8000 architecture example

4.4 DMS8000 decentralised solution

In large architectures, including a central Danger Management System (e.g. MM8000), the MT8001 can be used as local terminal, e.g. at floor or building level, and thus addressing the demand of a distribution of the safety and security operations.

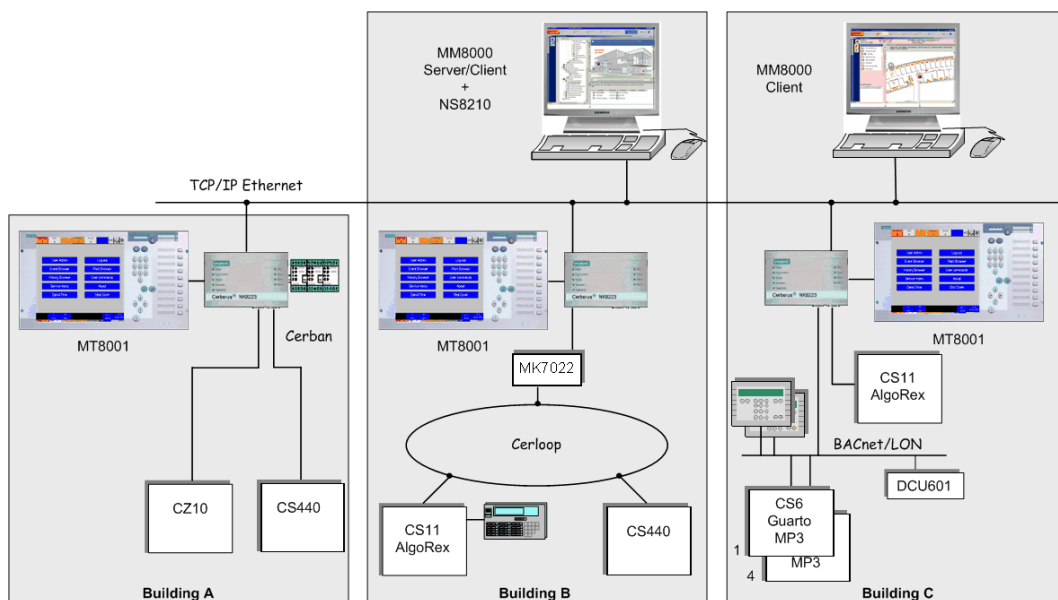


Fig. 13 Large architecture example

Siemens Switzerland Ltd
Building Technologies Group
International Headquarters
Fire Safety & Security Products
Gubelstrasse 22
CH-6301 Zug
Tel +41 41 724 24 24
Fax +41 41 724 35 22
www.sbt.siemens.com