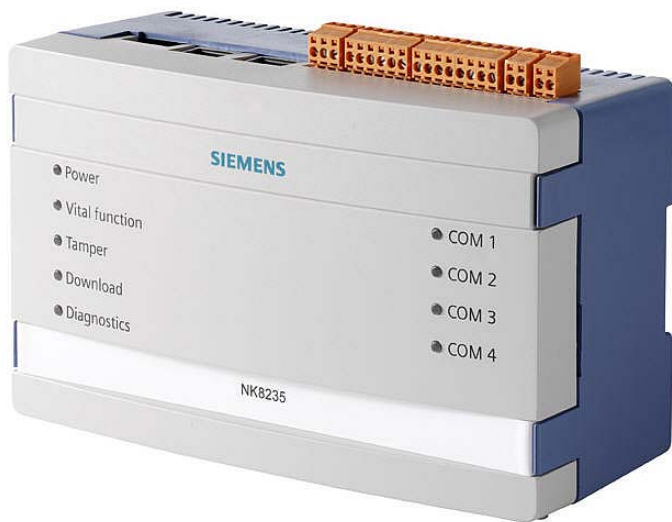


SIEMENS



NK8000 MP4.60

NK8231 DMS8000 CEI Interface for a single subsystem

NK8232 DMS8000 Ethernet Port for a single subsystem

NK8235 DMS8000 Ethernet Port

NK8237 Modbus Gateway for Sinteso™ and Cerberus® PRO Fire Detection Systems

Release Notes

Building Technologies

Fire Safety & Security Products

Data and design subject to change without notice. / Supply subject to availability.
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1 Introduction

NK8000 **MP4.60** is now available.

These release notes provide the characteristics of the new NK8000 network products, including bug corrections and known issues. We recommend reading this document carefully before installing and using the software.

1.1 NK8000 family

The new NK8000 product list includes:

- **NK8231 CEI Interface for a single subsystem**
- **NK8232 Ethernet port for a single subsystem**
- **NK8235 Ethernet port**
- **NK8237 Modbus Gateway for FS20/FS720**

Obsolete products:

- **NK8222 Ethernet port for a single subsystem**
- **NK8223 Ethernet port**
- **NK8225 Ethernet port**

These units are to be used as network units for the DMS8000 hosts listed below.

- MM8000 management station MP4.60 as well as earlier MP4.20, MP4.30, MP4.40 and MP4.50
- MK8000 OPC server MP4.60 as well as earlier MP4.20, MP4.30, MP4.40 and MP4.50
- MT8001 management terminal MP4.30
- MM2000 management station MP7.x

2 What's new in MP4.60

Group	Description	System(s)
FS20 support	Sinteso FS20 MP5.2 / Cerberus PRO FS720 IP 5.2 in NK823x	NK8000
FS20 support	STT20 support in NK8000 Ethernet Ports and Modbus Gateway	NK8000
NK8000 Logging	Support and management of NK823x SD card memory expansion	NK8000
NK823x Support	Improvements of firewall functions for Sinteso and Cerberus PRO systems	NK8000
NK823x Support	Improve diagnostics on NK823x	NK8000
NK823x Support	Status information for logging, firewall and routing	NK8000
NK823x Support	Option for enabling the PING command through NK823x Firewall	NK8000
NK823x Support	NK823x MP4.60 backward compatibility with older DMS8000 installations	NK8000
NK823x Support	Support of large Sinteso/Cerberus PRO/STT20 systems, up to 64 panels	NK8000
Subsystem Enhancements	NK823x: Support of Firefinder XLS MP7 extensions; VESDA HLI, GLC card and devices	NK8000

2.1 Defect correction

Various defects have been corrected in this software release. For a detailed report, please refer to the FS-DMS support site (see 7.1 at p.16).

2.2 Subsystem compatibility summary

Control units	Notes about version supported	Connectivity and configuration notes	Further info. in DMS8000 documentation
FS20 Sinteso™	MP1.3, MP2.1 MP3.0; MP3.0 SR2; MP3.0 SR3 MP4.0 MP5.2	LAN; NK8000/LAN	Fire Connectivity Guide: A6V10359481
FS720 Cerberus® PRO	MP1XS IP2; IP3/IP3 SR2; IP3.0 SR3 IP4.0 IP5.2	LAN; NK8000/LAN	Fire Connectivity Guide: A6V10359481
CS11 AlgoRex® EP5 and EP7 FC700A	EP7F Z1, Z2, Z3, Z4, Z5	Direct link, Cerloop, and NK8000	Fire Connectivity Guide: A6V10359481
CS1115 Phase 4 FC330A Phase 4	CISxx8.86	Direct link, NK8000	Fire Connectivity Guide: A6V10359481
SIGMASYS C and M, D100	SIGMASYS V3.5, V3.7, V3.8 D100 V40-2 PLAN D100 export tool V7.2	NK8000	Fire Connectivity Guide: A6V10359481
STT11		Cerloop and NK8000/Cerloop	Fire Connectivity Guide: A6V10359481
STT2410		Cerloop and NK8000/Cerloop	Fire Connectivity Guide: A6V10359481
STT20	STT20 V2 (for CS11 Cerloop)	NK8000/Cerloop	Fire Connectivity Guide: A6V10359481
	STT20 V2.02 (for FC20 BACnet)	LAN NK8000	
CZ10	Eprom on communication board: CZAX22.41 (Cerban) CZAX23.41 (Cerloop)	Cerloop and NK8000	Fire Connectivity Guide: A6V10359481
CC60	Eprom in U2 position: CCG001.05 (-19)	Cerloop and NK8000	Fire Connectivity Guide: A6V10359481
CZ12	Eprom on communication board: BKB002.08	Cerloop and NK8000	Intrusion Connectivity Guide: A6V10359489

CS4	Eprom on communication board: CK402 V6B – CKP003.01 (BCD) CK430 V9 – CKP041.01 (HEX)	Cerloop and NK8000	Intrusion Connectivity Guide: A6V10359489
CS440	Eprom on communication board: CK440 V9 – CKP041.01 (HEX)	Cerloop and NK8000	Intrusion Connectivity Guide: A6V10359489
XLS	V6.00.21, Zeus Tool V6.0 V7.00.2245, Zeus Tool V7.0	NK8000	Intrusion Connectivity Guide: A6V10359489
CS6 Guarto™	MP3 MP3+	NK8000 (NK822x only)	Intrusion Connectivity Guide: A6V10359489
SI410/420 Intrunet (no encryption)	Firmware F8-04, F8-05, F8-07, F09- 22, and G1 (F9-22 or G1 is required for SMN42/43)	Direct link, NK8000, and IP connection	Intrusion Connectivity Guide: A6V10359489
DMS7000 units including MM- IE2		Cerloop and NK8000	Network Connectivity Guide: A6V10359485
SIMATRIX 164; 648; SYS, SIMATRIX NEO		NK8000	Video Connectivity Guide: A6V10062457
DF8000 I/O (DF8003 or CF9003 + F8020/8040/8045/8046)		NK8000	Network Connectivity Guide: A6V10359485
MF7033/MM7033		Cerloop and NK8000	Network Connectivity Guide: A6V10359485
Philips/Burle CCTV (LTC 8x00)		NK8000 (not tested with new NK823x)	Video Connectivity Guide: A6V10062457
SIMATIC S7		LAN / OPC	OPC Connectivity Guide: A6V10065253
Autronica BSxxx	V3.20	NK8000 - Add-on package is required	Autronica BS Add-on manual A6V10238656
LIST SCU 2000 (field test only)	SCU 2000	NK8000 - Add-on package is required	LIST Add-on manual A6V10238692
MAXSYS PC6010	V2.11	NK8000 - Add-on package is required	MAXSYS Add-on manual A6V10238694
CP100	Cpa402c	NK8000 - Add-on package is required	CP100 Add-on manual A6V10238690
Modbus-based subsystems	V1.1a. One connection (no cluster) in RTU mode (no ASCII).	NK8000 - Add-on package is required	Modbus Add-on manual A6V10067800
Fibrolaser II Modbus		NK8000 - Add-on package is required	Modbus Add-on manual A6V10067800
CDDL/CDSF-based subsystems	CDDL V1.0 CDSF all variants	NK8000 - Add-on package is required	CDDL/CDSF Add-on manual A6V10067787
Modbus Station (FS20/FS720 gateway)	LAN or RTU mode (no ASCII).	NK8000	NK8237 ICC manual A6V10316241
Analog Modem	Siemens NK8021 Analog modem. Siemens M20 or MC35i GSM mo- dem		

3 Network connectivity options

The following matrix shows the connectivity options currently available for DMS800 MP4.60 systems.

KEY: **DMS** MM8000, MK8000, and MT8001 **MM/MT** MM8000 and MT8001
MM/MK MM8000 and MK8000 **MM** MM8000 only

Connection	Network		LAN IP			NK8000												CDI-Net GWxx	
	Direct RS232	Cerloop				NK822x						NK823x						GW00 / 01	
						NK8222 / NK8223 / NK8225		NK8225		NK8232 / NK8235 / NK8237 (*)		CMSDL serial		CMSDL/IP, CEI79-5		BACnet/IP		CMSDL serial	
Upstream data-link protocol	Propriet.	ISO1745	BACnet/IP	OPC	Propriet.	CMSDL serial	CMSDL/IP, CEI79-5	BACnet/IP	CMSDL serial	CMSDL/IP, CEI79-5	BACnet/IP	CMSDL serial	CMSDL/IP, CEI79-5	BACnet/IP	CMSDL serial	CMSDL serial	CMSDL serial		
Downstream network	Direct	Cerloop	LAN	LAN	LAN	Direct	Cerloop	Direct	Cerloop	Direct	Cerloop	Direct	Cerloop	Direct	Cerloop	Direct	Cerloop		
Downstream interface device	-	MK7022	-	-	-	-	MK7022	-	MK7022	-	MK7022	-	MK7022	-	MK7022	-	MK7022		
FS20 Sinteso, FS720 Cerberus PRO			MM/MK																
CS11 AlgoRex EP5 & EP7	DMS	DMS				DMS	DMS	MM/MK	MM/MK	MM/MK	MM/MK	DMS	DMS	MM/MK	MM/MK	MM/MK	MM/MK		
FC700A	DMS					DMS		MM/MK		MM/MK		DMS		MM/MK		MM/MK			
CS1115 / FC330A	MM/MK											MM/MK		MM/MK		MM/MK			
CZ10, CC60		DMS				DMS	DMS	MM/MK	MM/MK			DMS	DMS	MM/MK	MM/MK		MM/MK		
XLS						MM/MT		MM		MM		DMS		MM/MK		MM/MK			
STT11		DMS					DMS		MM/MK				DMS		MM/MK		MM/MK		
STT20 / STT2410 (BACnet/IP STT20 only)			MM/MK				MM/MK		MM/MK	MM/MK			MM/MK		MM/MK	MM/MK			
SIGMASYS/D100						MM/MK		MM/MK		MM/MK		MM/MK		MM/MK		MM/MK			
SPC5000/6000 Intrunet					MM/MK														
CS440		DMS				DMS	DMS	MM/MK	MM/MK			DMS	DMS	MM/MK	MM/MK		MM/MK		
CZ12 / CS4		MM/MK				MM/MK	MM/MK	MM/MK	MM/MK			MM/MK	MM/MK	MM/MK	MM/MK		MM/MK		
CS6 Quarto (via LON interface)						DMS		MM/MK		MM/MK									
SI410 / 420 / Plus Intrunet	MM/MK				MM/MK	DMS		MM/MK		MM/MK		DMS		MM/MK		MM/MK			
MF7033 / MM7033		DMS				DMS	DMS	MM/MK	MM/MK			DMS	DMS	MM/MK	MM/MK		MM/MK		
DF8000 / CF9000 I/O						DMS		MM/MK		MM/MK		DMS		MM/MK		MM/MK			
SIMATIC S7 Modbus						MM		MM		MM		MM		MM		MM			
SIMATIC S7 OPC				MM															
SIMATRIX / SIMATRIX NEO						MM/MK		MM/MK				MM/MK		MM/MK			MM/MK		
Philips-Burle video matrices						MM/MK		MM/MK		MM/MK		MM/MK		MM/MK		MM/MK			
SISTORE AX/CX/MX/SX/Vectis HX					MM/MK														
TELSKAN / IP cameras (**)					MM/MK														
SiPass ACC, CerPass CC30					MM/MK														
DESIGO PX			MM																
ESPA Pager	MM																		
Analog Modem								MM/MK						MM/MK					
Bosch DVR, encoder/decoder, IP cameras					MM														
NICE DVR					MM														
M5 R-card				MM															
Autronica BSxxx																			
LIST SCU 2000 (field test only)						MM		MM		MM		MM		MM		MM			
MAXSYS PC601																			
CP100																			
CDDL/CDSF units																			
Modbus units																			

(*) NK8237 Modbus Gateway: BACnet connectivity limited to FS20/FS720, STT20, and 3rd party Modbus devices.
(**) IP cameras with TELSKAN protocol are supported. IP cameras can also be connected via SISTORE MX.

4 NK823x firmware

The NK8000 firmware files are distributed in the following sets of files:

- NK822x files
- NK823x files

The firmware is pre-loaded in the NK82xx units and also distributed in the Composer tool environment in compressed (ZIP) files.

Units installed with previous versions can be updated with the latest release using standard Composer commands (see the DMS8000 Network and Subsystem Connectivity Guide). Make sure to download the correct set of files.

NK822x Hardware Upgrades

Upgrading from NK8222/3 to NK8225 requires hardware modifications (CPU unit).

Upgrading from NK822x to NK823x requires a complete hardware replacement.

If required, check details with FS DMS customer support.

NK822x Firmware Upgrades

Upgrading NK822x units from MP4.15/MP4.20/MP4.30/4.40/4.50 to MP4.60 requires a firmware update.

→ Refer to the Network Connectivity Guide (A6V10359485).

NK823x Firmware Upgrades

Upgrading NK823x units from MP4.15/MP4.20/MP4.30/4.40/4.50 to MP4.60 requires a firmware update and then a kernel update.

→ Refer to the Network Connectivity Guide (A6V10359485) and to the NK8000 ICC (A6V10062437).

NK823x MP4.60 on existing (older version) DMS8000 installations

You can safely use MP4.60 NK823x units to maintain or extend existing DMS8000 MP4.20/4.30/4.40/4.50 installations. Earlier DMS8000 installations must be upgraded.

NK823x Kernel	NK823x Mainboard
Linux 2.6.32.41 #149 Thu Dec 20 08:12:06 CET 2012 ppc	NKM8001-A1
Linux 2.6.32.41 #150 Thu Dec 20 08:32:18 CET 2012 ppc	NKM8001-A2

Tab.1. NK8000 MP4.60 Kernel editions

Secure download

The use of the secure download option implies a modification in the NK8000 configuration and possibly a change in the TCP ports allowed to be used on the IP network. The following ports are required:

- TCP Ports 20 and 21 for standard FTP download
- TCP Port 20500 for new secure download

Software tools

NK8000 products are supplied with a set of Composer-based engineering tools, either integrated into MM8000/MK8000, or installed separately. The software is distributed on the CD and the setup allows the installation of Composer framework and all the required tools. A software license is required to run Composer. The license includes a hardware key and a product authorisation code.

5 Known problems & bugs

This is a list of known problems and limitations present in the current version.

Limitations in NK8231, NK8232, NK8235

CS6/LON connectivity is not supported by NK823x units.

NK823x units cannot properly support the **dial-up connection** when the redundant network configuration is used on the two LAN lines.

If BACnet is used for both downstream and upstream connections, the NK823x BACnet connections must work on the same Ethernet port because the low level driver can only be instantiated on one Ethernet interface. This is discussed in the relevant NK823x technical and sales support documents.

New in MP4.60

Interaction problem on NK822x restart

Sometimes, during the start up phase, the interactions configured may not work. The problem is caused by the different start up times for the protocols configured on the NK822x. For example, the ISO1745 protocol takes up to 30-40 seconds to establish communication, and in this time the trigger messages generated by NK822x are lost. The problem is related to sending commands to devices still not connected. In this case, commands are thrown away. In order to avoid this problem, you may want to add a check on the COM port in the interaction program.

NK8225 connected in BACnet mode

If NK8225 is connected to MM8000 over a BACnet link, then a communication fault is displayed on the MM8000 even if everything is working properly.

As a work-around, we suggest to remove the fault event generation in the "Ethernet" node of the NK8225 or set the node "out-of-scan". Note that if a real communication problem occurs, it will be displayed as NK8225 unit not reachable on the main NK8225 node.

Ack/Reset commands in NK8000 Interactions

NK8000 interactions do not support Acknowledgment and Reset commands to any subsystem.

NK822x interactions involving Ethernet LAN status

The NK822x interaction programs based on the Ethernet fault triggering event do not work.

Untested NK823x with Burle-Philips video matrix

Due to unavailability of hardware for testing, the support of Burle-Philips video matrix on NK823x could not be verified.

BACnet device ID range

In all NK8000 units used on BACnet networks, the BACnet Device IDs of the connected devices cannot be higher than 65533.

NK82xx network-wide interactions involving NK82xx using different upstream protocols

NK82xx network-wide interactions do not work properly across NK82xx using two different upstream protocols (e.g. one is using CMSDL/IP and the other BACnet/IP).

Fault events on unconnected Ethernet lines

On existing NK823x Ethernet nodes with no configured connection, faults events are reported, thus indicating the missing network link (no cable or no hub/switch). If that event is not necessary, **Ethernet line 2 should not be added if it is not required**. Ethernet line 1 is predefined and cannot be removed, but you can disable the related event on the data point in the Composer configuration.

Web server not supported on 64-bit Windows

The NK8000 Web server does not work on Windows 64-bit versions.

Missing time stamp in some NK823x logs

No time stamp is provided in the NK823x logs concerning Firewall events. The same occurs for technical logs such as FTP, BACstack, and possibly others. For such events, date & time information may be estimated using other data messages that are time-stamped.

Faulty NK823x in case dial-up modem is not properly configured

An erroneous LAN communication fault (*Not Reachable*) is reported for NK823x units that have a dial-up modem which is not properly configured with the link to the corresponding NS8210 modem. If dial-up is required, pay attention to fully configure the modem connection.

Station fault missing in dual CEI 79-5 connection with backup

Dual CEI 79-5 connection systems with dial-up backup on one station fail to report a LAN connection fault on the backed-up station. In such a case, the fault condition is not reported on the other station.

Open SintesoWorks link not immediately stopped when NK823x firewall is enabled

Enabling the firewall does not block a previously opened SintesoWorks connection. Closing the SintesoWorks connection will cause the firewall to become effective and block any further SintesoWorks connection.

USB memory devices on NK823x

Removing the USB key while the logging is enabled (without using the safely remove command) may cause the NK823x to restart or block (a manual restart is then needed). **Always use the Safe Remove command before removing the USB memory device.**

Some specific USB memory models may not be compatible with NK823x.

Note: File system: FAT32; 2-64 GB. For a list of supported devices refer to PSP at <https://psp.sbt.siemens.com/>.

In one case, **a presumably faulty USB pen caused a low memory condition and the NK8000 unit to stop operating.** In general, we recommend using supported USB memories and checking for their correct operation with NK8000 before installing them on site.

The **Vendor ID** of the USB device may not display correctly in Composer depending on the device that is used.

In rare cases, presumably related to specific USB devices and intensive logging operations, a memory access problem might occur, which prevents the NK823x from writing on the device. This condition is promptly reported by a **Logging Error** event. In such cases, if the error persists, we recommend to replace the USB device.

Updated in MP4.60

6 Documentation

All documents were updated to include the new features added in MP4.40.
Note the document numbers related to the new STEP numbering.

Documentation resource information

The *DMS8000 Documentation Resource Information and Glossary Guide* assembles important information regarding documentation resources. This document contains the following:

- Comprehensive definitions of the target audiences for Siemens FS DMS documents
- Training program information including the Siemens intranet link
- A complete list of all available DMS8000 documents
- Instructions for how to obtain a document via the Siemens intranet using the Siemens Asset Portal
- A map of relevant documents for each target audience group
- Customer Support links & resources
- A glossary containing definitions of all terms and acronyms used in DMS8000 documentation

To access the *DMS8000 Documentation Resource Information and Glossary Guide* (document no. A6V10089056), go to the link and follow the document search instructions below:

<http://assetportal.bt.siemens.com/portal/index.html>

1. In the Search column on the left, set:
 - Segment: **04 Fire -3F**
 - Document Type: **All**
 - Image Type: **All**
 - Advanced search criterias: Select **Brochure No.** and enter the document number to search for (e.g. A6V10062415). Alternatively, select **Title** and enter the product name (e.g. MM8000).
2. Click **Search** to start.
3. In the resulting area on the right, select the document type (e.g. Contacts, Data Sheet, etc).

For more information such as Siemens news and announcements, visit the STEP Web portal at:

<https://workspace.sbt.siemens.com/content/00001123/default.aspx>

6.1 DMS8000 Documentation Resource Information & Glossary

Documentation Resource Information and Glossary (document no. A6V10089056)

This document is a guide to the following:

- Reference Documents: a complete list of all DMS8000 documents and how to access them.
- Roadmap to Documentation: target audiences can see which documents were created for them, and the purpose for each document.
- Customer Support links & resources: contact information for I BT FS Customer Support Centre and other convenient links.
- General Glossary: this contains global definitions of terms and acronyms used in DMS8000 documentation.

6.2 NK8000 Sales documentation

NK8222 Product Datasheet (document no. A6V10062433)

NK8223 Product Datasheet (document no. A6V10062431)

NK8225 Product Datasheet (document no. A6V10062445)

NK8231 Product Datasheet (document no. A6V10238662)

NK8232 Product Datasheet (document no. A6V10238667)

NK8235 Product Datasheet (document no. A6V10238669)

NK8237 Product Datasheet (document no. A6V10316240)

A brief summary of the features provided by the NK8000 units.

MM8000 System Description (document no. A6V10062417)

This document is similar to the datasheet, but very much expanded, and more detailed. It describes the MM8000 system and the user interface functionality.

Sales Guide (document no. A6V10062439)

This guide presents the most important sales arguments. Also, a FAQ section provides the answer to some typical questions.

Sales Presentation (document no. A6V10062435)

This is a PowerPoint presentation provided by the marketing department. It can be modified, or used as is to show potential customers what NK8000 units can do.

DMS8000 Application & Planning (document no. A6V10063710)

This document contains a brief discussion of product marketing strategy for all FSP-DMS products, and a moderate level of detail about the architectural configurations supported.

6.3 NK8000 Technical documentation

NK8000 Installation, Configuration and Commissioning (ICC, document no. A6V10062437)

NK8237 Installation, Configuration and Commissioning (ICC, document no. A6V10316241)

The ICC guides provides step-by-step procedures for installation and configuration of NK8000 units. Depending on the system architecture, these manual may need to be used in tandem with the DMS8000 ICC and Connectivity Configuration guides.

DMS8000 Connectivity Configuration Guides:

- **Network (document no. A6V10359485)**

- **Fire (document no. A6V10359481)**

- **Intrusion (document no. A6V10359489)**

- **Access (document no. A6V10062451)**

- **Video (document no. A6V10062457)**

The DMS8000 Connectivity Configuration guides contain information about configuring networks and subsystems supported by DMS8000 products. These guides should be used in conjunction with the ICC guide.

Composer Technical Manual document no. A6V10062401)

This guide explains how to use Composer in general. It provides a reference to commands and instructions used during the system configuration. Note that the latest edition of this manual describes the new functions that the current version of Composer provides.

NK8000 Release Notes (document no. A6V10062453)

This document. It includes all information concerning this version of NK8000.

7 Support links and resources

7.1 Siemens BT FS

Our Customer Support Center intranet site at:

https://intranet10.sbt.siemens.com/about_bt/Business_Units/fs/Customer+Support+Center/?languagecode=en

provides useful information and links. In the Online Support section of this intranet page, software downloads and known product issues can be found in the PSP (password-protected Product Support Platform).

→ The support mailbox is: fs.support.sbt@siemens.com.

7.2 Microsoft

General support about Microsoft Windows can be found at:

→ <http://support.microsoft.com/directory/>

7.3 Adobe Acrobat

To view the PDF document is necessary to install the program Adobe Acrobat Reader. You can find its free version at:

→ <http://www.adobe.com/products/acrobat/readstep.html>

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NK8000 Technical Material

Section 2