

BIS - Overview and basic package V2.5

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BOSCH
Invented for life



- ▶ Complete enterprise management for efficient, integrated building and security management in a single solution
- ▶ Consistent use of world-wide open IT standards for configuring, interfacing and displaying makes BIS extremely user and installer friendly
- ▶ Provides a seamless integration of Bosch or 3rd party systems through OPC compliance
- ▶ Provides alarm information easily linked to user-defined action plans and existing location maps
- ▶ Modular structure makes it easy to build up a security solution which meets your requirements exactly

The state-of-the-art building management generation

The Building Integration System (BIS) is a flexible building management system which can be configured to suit the user's specific, individual needs.

It contains a huge range of applications and features which enable both the integration and coupling as well as the monitoring and control of all major technical building systems.

The new generation builds on Bosch's many years of experience in management systems and was considerably influenced by the following market trends:

- Increasing complexity of technical building equipment
The increasing complexity of technical equipment inside buildings requires a powerful management system which combines the most varied functions (e.g. fire and intrusion alarm systems, access control, video systems and building automation... etc.) in the best possible way. The open interface standard used in BIS allows information from security as well as non-security devices that meet this standard to be included and processed in combination with other information.

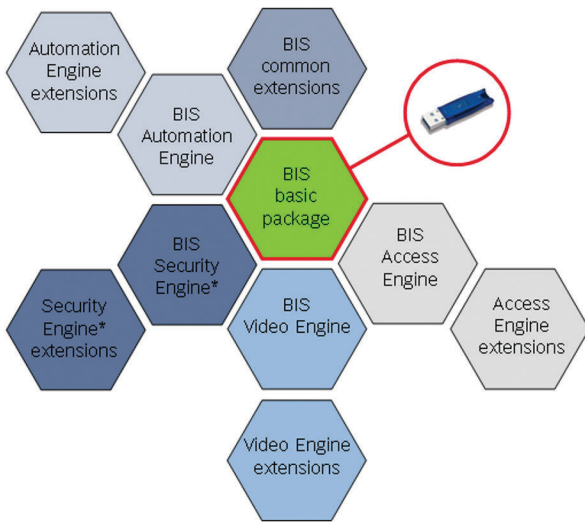
- Using new technologies and standards
While the strict regulations in the field of security technology ensure a very high degree of reliability in security matters, they hinder the integrated use of new technologies from the IT world. BIS has succeeded in harnessing the benefits of non-security-based technologies (e.g. OPC interfaces, Internet technologies, etc.) and harmonizing them with the world of security technologies.
- Customers want complete solutions
Facility managers and customers are increasingly demanding complete system solutions. Thanks to the high level of integration within the system, a comprehensive, easy-to-use range of project planning and technological systems and services can be offered.

System Overview

The Building Integration System is essentially a product family made up of various main modules (also known as engines) which are based on a common software platform. These main products are:

- Automation Engine
- Access Engine

- Video Engine
- Security Engine



* not available in all countries

The features of these engines are described in greater detail in separate chapters.

In principle, the engines can be combined together in an unlimited number of ways. This allows you to assemble a management system which meets your specific requirements.

You will need the BIS basic package on a one-off basis in order to license your system. The basic package contains a dongle key. The features can be activated using an activation key file. A later re-fitting of single features or an additional engine is easily done by replacing this file, which is delivered by e-mail.

Functions

System architecture

Building Integration System consists of the BIS platform software and specific function modules, called engines. These modules, the Automation Engine, Access Engine, Video Engine and Security Engine are described in separate chapters. They provide specific features for fire, intrusion, access control, video and public address, plus the surveillance of HVAC or other vital systems.

BIS is based on a performance-optimized three-tier architecture especially designed for use in Intranet and Internet environments.

Subsystems are connected via the world-wide open standard OPC which has been well established for over 15 years.

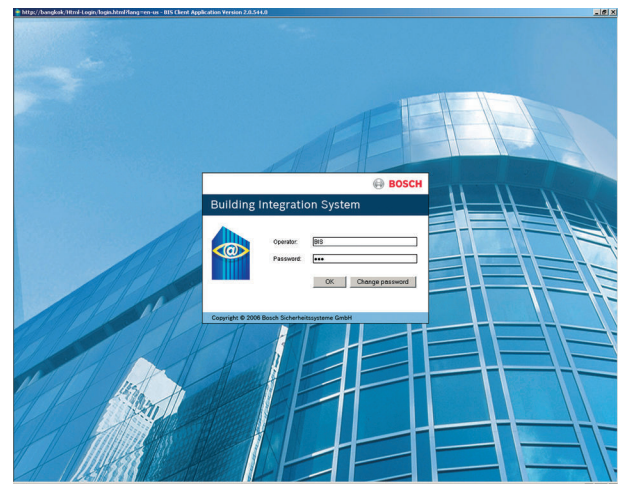
BIS can operate on a standalone PC or in a client/server structure using the standard LAN/WAN network infrastructure.

Organizational structure and configuration

A number of automatic functions and easy-to-use tools make the configuration of BIS extremely installer-friendly and save much time and money.

Through the direct import/use of existing CAD data (standard DWF vector format) containing the information for layers, named views or detector location you are able to create a location tree by scanning the drawing. You work with one drawing for e.g. a complete floor. Sub-locations (rooms, areas) are defined by the named view feature. Zooming and panning allows easy navigation through the building's architecture.

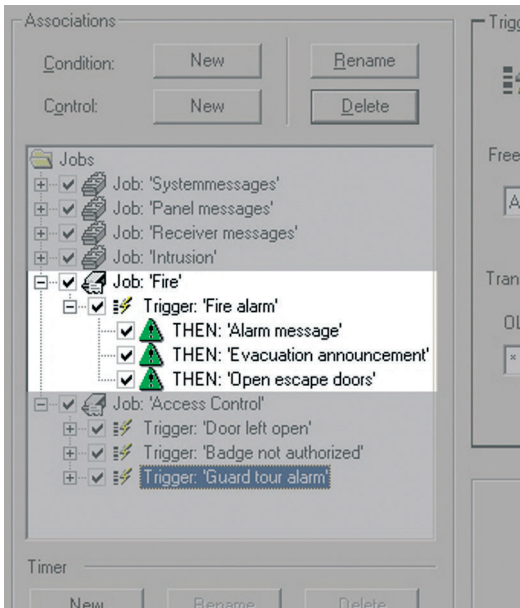
The BIS user interface is web-server-based using dynamic HTML pages with modern web and script technologies. Default pages for different screen resolutions for 4:3 and 16:9 formats are included in the installation.



BIS automatically detects the monitor resolution and provides the appropriate user interface. The default pages can easily be customized using a standard editor such as Microsoft Sharepoint Designer. Existing configurations of OPC compliant subsystems can be easily imported into BIS through this open interface standard. An OPC server (driver) can be installed on a PC anywhere in the entire network and BIS will connect to it.

Operation

BIS's main task is to operate as a central alarm and security management system for all the various systems inside an enterprise. Therefore it provides a number of display features inside its user interface. Permissions, placement and contents, can easily be customized. A clear and precise overview of every incoming alarm or event is presented to the operator.



Example for configuring associations

The heart of the system, the State Machine (Rule Engine), coordinates all incoming events or operator requests and processes e.g. automatic controls to unburden operators.

BIS workstations require only Windows and the Internet Explorer. No additional software is required.

System security

An AES-approved 128 bit encryption between BIS central server and workstations give additional security beside the detailed definable user rights. If PCs inside a corporate network are to be used, further security restrictions can be imposed by assigning operators to dedicated workstations/IP-addresses.

Basic package

In addition to the basic license authorized by the dongle key, the Building Integration System basic package provides many common features and provides optional accessories which can be used in all specific stages of extension (engine structure).

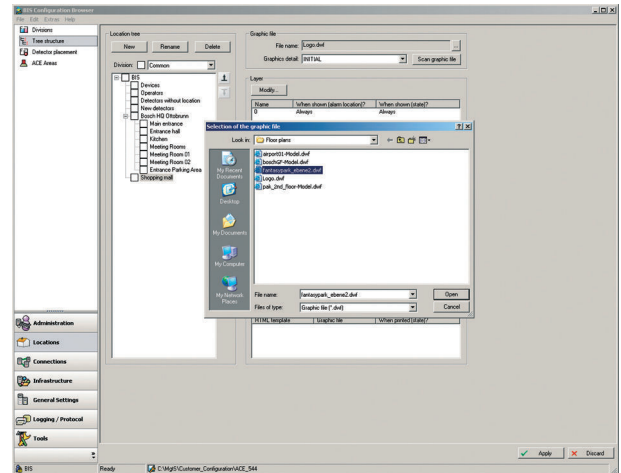
- Customizable device condition counters to provide overview of subsystem/alarm conditions within the entire BIS system
- Message processing and alarm display using different user interfaces features
- Alarm queue with up to 5000 simultaneous alarm events and detailed alarm information

State	Current state	Message	Address	Time	Location
ACCEPTED	Not Free	Ext.Fire	LEZ2000_100_2	11/16/2007 4:03:35 PM	BIS Security center, Bosch HQ, Ottobrunn, Kitz...
ACCEPTED	Ext. Message	Ext. Situation	Backhoff DDC, Alarm inputs, In04	11/16/2007 4:29:40 PM	BIS Security center, Detectors without location
ACCEPTED	Card not authorized	Card not authorized	AccessControl, Revolver, ZOCCL	11/16/2007 4:30:03 PM	BIS Security center, GIGAC, Revolver, P...

Alarm queue with three active alarm messages

- Fixed assignment of operators to workstations for higher security
- State machine for detailed definition of alarm processing in the means of automatic display or control functions

- Web-server-based platform allows connection of workstation via just the Internet Explorer
- Direct support of standard AutoCAD DWF vector format for the use as location maps minimizes configuration. No splitting or conversion is necessary.

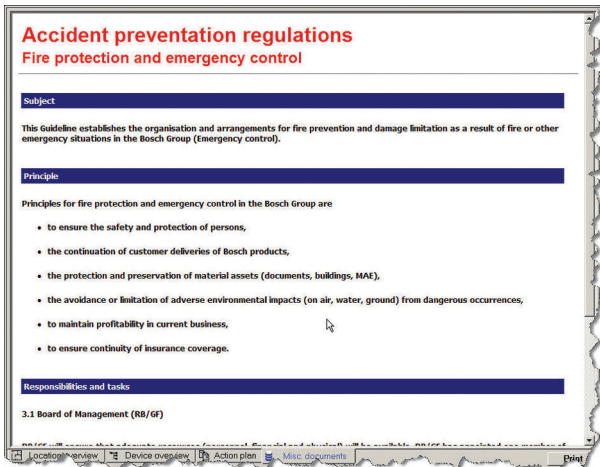


Assign AutoCAD DWF to location

- Changes to architecture within a graphic (new walls, moving a door, etc.) can be implemented on-the-fly. It is not necessary to change the BIS configuration, simply import a new plot file from the architect.
- Workflow with message distribution and detailed escalation scenarios
- Huge library of almost all standardized detector icons in standard vector format including color, event and control definitions
- Detector icons within a location map can be used for direct detector control. Depending on the detector type BIS provides the assigned control commands by simply right-clicking on the icon
- The structure of a site or an enterprise is visualized in a tree structure (e.g. building – floor – room). This tree can be used for graphical navigation. Alarm conditions in the locations are indicated by colored spheres.
- Location tree can be generated automatically from the "named views" within the AutoCAD graphic
- Action management for automatic and manual control into connected subsystems and their peripherals
- Device overview for all connected subsystems, and their peripherals (detectors) and internal virtual devices (operator, server, ...) in the form of a tree structure with detailed information about address, status, type, location and notes. You are able to control the peripherals directly by mouse click.

Adresse	Unteradresse	Adresse	Status	Typ	Beschreibung
Schalter1		Schalter1	Green	Brandmelder	Brandmelder
Schalter2		Schalter2	Green	Alphanumer. Melder	Melder in Funktion
Schalter3		Schalter3	Green	Erdrückmelder	Erdrückmelder Hilfe
Schalter4		Schalter4	Green	Melder	Melder in Stellung
Schalter5		Schalter5	Green	Speichermelder	Speichermelder
Schalter6		Schalter6	Green	Speichermelder	Speichermelder
Schalter7		Schalter7	Green	Speichermelder	Speichermelder
Schalter8		Schalter8	Green	Speichermelder	Speichermelder
Schalter9		Schalter9	Green	Speichermelder	Speichermelder
Schalter10		Schalter10	Green	Speichermelder	Speichermelder
Schalter11		Schalter11	Green	Speichermelder	Speichermelder
Schalter12		Schalter12	Green	Speichermelder	Speichermelder
Schalter13		Schalter13	Green	Speichermelder	Speichermelder
Schalter14		Schalter14	Green	Speichermelder	Speichermelder
Schalter15		Schalter15	Green	Speichermelder	Speichermelder
Schalter16		Schalter16	Green	Speichermelder	Speichermelder
Schalter17		Schalter17	Green	Speichermelder	Speichermelder
Schalter18		Schalter18	Green	Speichermelder	Speichermelder
Schalter19		Schalter19	Green	Speichermelder	Speichermelder
Schalter20		Schalter20	Green	Speichermelder	Speichermelder
Schalter21		Schalter21	Green	Speichermelder	Speichermelder
Schalter22		Schalter22	Green	Speichermelder	Speichermelder
Schalter23		Schalter23	Green	Speichermelder	Speichermelder
Schalter24		Schalter24	Green	Speichermelder	Speichermelder
Schalter25		Schalter25	Green	Speichermelder	Speichermelder
Schalter26		Schalter26	Green	Speichermelder	Speichermelder
Schalter27		Schalter27	Green	Speichermelder	Speichermelder
Schalter28		Schalter28	Green	Speichermelder	Speichermelder
Schalter29		Schalter29	Green	Speichermelder	Speichermelder
Schalter30		Schalter30	Green	Speichermelder	Speichermelder
Schalter31		Schalter31	Green	Speichermelder	Speichermelder
Schalter32		Schalter32	Green	Speichermelder	Speichermelder
Schalter33		Schalter33	Green	Speichermelder	Speichermelder
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Schalter35		Schalter35	Green	Speichermelder	Speichermelder
Schalter36		Schalter36	Green	Speichermelder	Speichermelder
Schalter37		Schalter37	Green	Speichermelder	Speichermelder
Schalter38		Schalter38	Green	Speichermelder	Speichermelder
Schalter39		Schalter39	Green	Speichermelder	Speichermelder
Schalter40		Schalter40	Green	Speichermelder	Speichermelder
Schalter41		Schalter41	Green	Speichermelder	Speichermelder
Schalter42		Schalter42	Green	Speichermelder	Speichermelder
Schalter43		Schalter43	Green	Speichermelder	Speichermelder
Schalter44		Schalter44	Green	Speichermelder	Speichermelder
Schalter45		Schalter45	Green	Speichermelder	Speichermelder
Schalter46		Schalter46	Green	Speichermelder	Speichermelder
Schalter47		Schalter47	Green	Speichermelder	Speichermelder
Schalter48		Schalter48	Green	Speichermelder	Speichermelder
Schalter49		Schalter49	Green	Speichermelder	Speichermelder
Schalter50		Schalter50	Green	Speichermelder	Speichermelder

- Multi-Client capability to define permissions that allow operators to access only to subsystems or detectors they are authorized for.
- Display of miscellaneous dynamic HTML-based alarm documents. Create and provide specific information on any event/alarm to the operator, including text, bitmaps, video images, check boxes, action buttons etc.



Example for a miscellaneous document display in case of fire

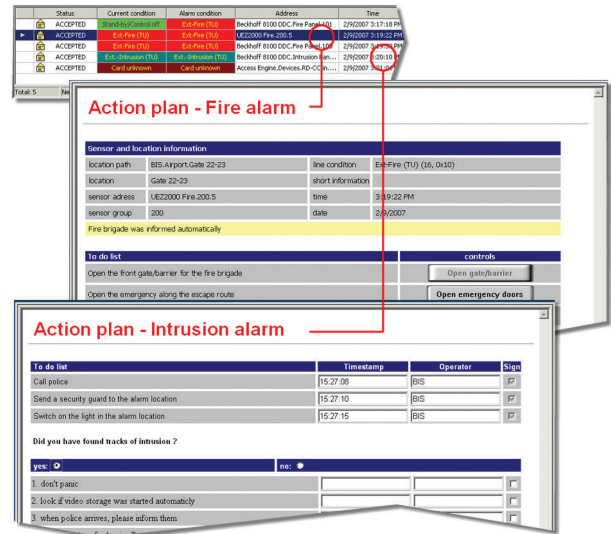
- Reporting services to quickly generate analyses of past events in varying degrees of detail
- Open URL by simply mouse click directly from location overview to show fotos, manuals, instructions
- Detailed permissions and user rights for the access, display and control of subsystems and their peripherals and all corresponding information is definable
- Event log to ensure all events are completely documented (including messages and controls) for the entire system
- Linking and embedding of OPC servers from any computer in the network
- Online Help
- One operator license included
- One OPC server license included

BIS optional accessories

The optional features listed below can be added to the BIS system to meet specific customer requirements. They are usable with all the BIS Engines (Automation, Access, Video and Security Engine).

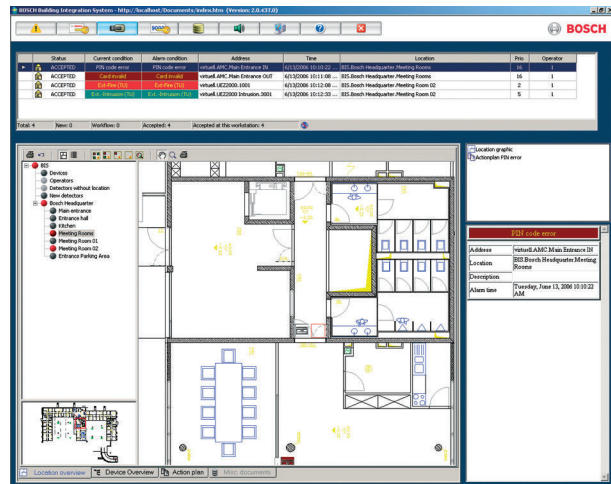
Alarm document package

This package extends the standard alarm handling of your BIS system with the capability of displaying action plans and location maps as well as the graphical navigation and the alarm-dependent visualization of layers inside those maps. This ensures optimal guidance to operators especially in stress situations, such as fire or intrusion alarms.



Typical action plans for a fire or intrusion alarm guide the operator through the alarm situation. Alarm-dependent action plans or workflows provide detailed event-dependent information such as standard operating procedures, live images, control buttons, etc. to the operator. Simply create and assign one action plan to each possible alarm type in your system, e.g. fire alarm, access denied, technical alarms, etc.

With the deletion of an alarm message an unmodifiable snapshot of the displayed action plan is attached to the event log. This ensures accountability by providing a trace of all steps performed by the operator during the alarm response.



Location map example with active alarm and animated detector icon

- Location maps are a perfect visualization of a premises based on the popular AutoCAD vector-graphics format and displaying e.g. floors, areas or rooms. Detectors are displayed by icons. Each icon provides the detectors-specific commands and allows direct control of the detector, such as open/close

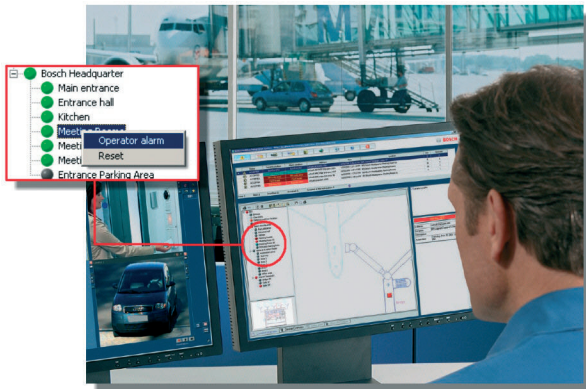
door, switch on/off light, etc. In case of an alarm the corresponding icon is animated with the defined event color. BIS automatically zooms in to the assigned alarm location.

- A location tree, which can be created automatically, and the zoom/pan function allow a seamless graphical navigation within the premises' structure.
- An alarm-dependent layer control allows the display of additional graphical information in specific situations, e.g. escape routes in case of fire alarms, etc. layers can also be switched on or off manually.

Alarm management package

This package extends the standard alarm operating of your BIS system with some additional intelligent alarm management features.

Message distribution allows the definition of escalation scenarios which are activated automatically when an operator or operator group doesn't acknowledge an alarm message within a defined period. BIS will then forward the message automatically to the next authorized operator group. The timer feature allows the setup of time schedules which can be used to perform automatic control commands, such as closing a barrier at 8:00 pm, as well as for time-dependent display of alarm messages, e.g. within time period 1 show message to operator group 1 else to operator group 2.



Operator alarm, triggered by right mouse click on location

The operator alarm feature allows the manual generation of alarms on a location inside the location tree, for example, an operator is getting a phone call which is informing him about a dangerous situation. Such manual alarms are processed in the same way as those coming from a real detector, meaning assigned documents are shown and all steps are recorded in the event log.

The application launcher allows to start executables (.EXE applications) automatically at a defined time using predefined parameters. A typical application of this would be an automatic and regular system backup.

Additional Division

The division feature allows you to divide large sites/buildings between autonomous parties, giving each division its individual views (user interface, event log), system access and control possibilities. You may increase the number of divisions in steps of one. Members/devices in the common division are seen by everybody. Divisions are visible only to their designated operator groups.

Additional Operator license

The number of operator licenses determines how many operators can work simultaneously in the system. For example, if three operators (security guard, technician, receptionists) are to work simultaneously in the system, you will need three licenses. The BIS basic package already includes one license.

Additional OPC server license

Activation or license that is required in order to operate an additional OPC server (OPC driver) of any type at all on the BIS. The BIS basic package already contains one OPC server license. This can be used e.g. to connect an OPC server for a fire panel. A separate license is needed for each additional subsystem/OPC server to be connected, with the exception of Access Engine and Bosch VMS.

N x 100 Bosch detector points

Activates detector points for the entire Building Integration System and the supplementary packages Automation Engine, Access Engine and Video Engine in steps of 100. Bosch detector points are represented by peripherals of Bosch subsystems, e.g. LSN detectors for fire or intrusion, Allegiant (LTC) cameras and inputs.

Please note that a certain number of Bosch detectors is activated by default with specific supplementary packages, e.g. 500 in the case of the Automation Engine.

N x 1000 Bosch detector points

Activates detector points for the entire Building Integration System and the supplementary packages Automation Engine, Access Engine and Video Engine in steps of 1000. Bosch detector points are represented by peripherals of Bosch subsystems, e.g. LSN detectors for fire or intrusion, Allegiant (LTC) cameras and inputs or loudspeakers for PA systems.

N x 10,000 Bosch detector points

Activates detector points for the entire Building Integration System and the supplementary packages Automation Engine, Access Engine and Video Engine in steps of 10000. Bosch detector points are represented by peripherals of Bosch subsystems, e.g. LSN detectors for fire or intrusion, Allegiant (LTC) cameras and inputs.

BIS Re-fitting features V2.5

If you wish to extend an existing BIS V2.5 (adding an engine or single features), you may order this item quoting the serial number of the customer's system (see dongle label). You will receive a new license file which you need to import on the target system and to load into the configuration.

Installation/Configuration Notes**Building Integration System in figures**

Addresses, detectors, control elements, cameras etc. which can be processed in the entire system	500,000
max. number of statuses	unlimited
max. number of processed events	500 per sec
max. number of network printers in the integrated network	not limited by BIS

Parts Included

Qty.	components
1	BIS Installation DVD incl. BIS platform, complete engine software and installation manuals as PDF
1	Quick installation guide
1	License file
1	Dongle key
1	Operator licence
1	OPC server license
.	Action management
.	Device overview
.	Multi-Client system
.	Display of miscellaneous documents
	MS SQL-Server 2008 Express
	Event log
	Message processing (basic alarm management)
	Permanent workstation/operator allocation
	Configuration software
	Operator administration
	Note: The Building Integration System basic package acts as the basic licence for the entire system. A minimal system nevertheless requires the purchase of at least one further Engine.

Technical Specifications

Minimum technical requirements to be met by the BIS login or connection server

No.	components
1	BIS login or connection server
	- Processor 2GHz CPU Single Core

	- 4 GB RAM
	- 40 GB of free HD space
	- DVD-ROM drive
	- 100 MBit network card (PCI)
	- 1 free USB port for dongle
	- Graphical adapter with 1280 x 1024, 32 k colors
	- Windows Server 2008 (32/64 Bit or R2), or Windows 7 (32 or 64 Bit, but not Starter/Home Edition), or Windows Server 2003 (SP2, R2, 32 Bit), or Windows XP Professional SP3 (32 Bit) including IIS
	- Keyboard, mouse

Subject to technical changes.

Minimum technical requirements to be met by the BIS client workstation PC

No.	components
1	BIS client workstation
	- Processor 3 GHz CPU Single Core
	- 4 GB RAM
	- 100 MBit network adapter
	- Graphics adapter with 1280 x 1024, 32 k colors
	- Windows XP SP3 or Windows 7 (32/64 Bit)
	- Microsoft Internet Explorer 8 or 9
	- Keyboard, mouse

Subject to technical changes.

Ordering information

One Basic Package is always required to set up a new system. For re-fitting an older version of BIS, or upgrading such a version to the current, please refer to the description of the corresponding Re-fitting Package.

Ordering Information**BIS 2.5 Basic Package DE**

Order number **BIS-GEN-B25DE**

BIS 2.5 Basic Package EN

Order number **BIS-GEN-B25EN**

BIS 2.5 Basic Package HU

Order number **BIS-GEN-B25HU**

BIS 2.5 Basic Package NL

Order number **BIS-GEN-B25NL**

BIS 2.5 Basic Package RU

Order number **BIS-GEN-B25RU**

BIS 2.5 Basic Package CN

Order number **BIS-GEN-B25CN**

BIS 2.5 Basic Package ES

Order number **BIS-GEN-B25ES**

BIS 2.5 Basic Package PT

Order number **BIS-GEN-B25PT**

BIS 2.5 Basic Package TW

Order number **BIS-GEN-B25TW**

BIS 2.5 Basic Package FR

Order number **BIS-GEN-B25FR**

Software Options

Alarm document package

Order number **BIS-GEN-ADPACK**

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