



Building Integration System

Selection Guide for V4.0



BOSCH

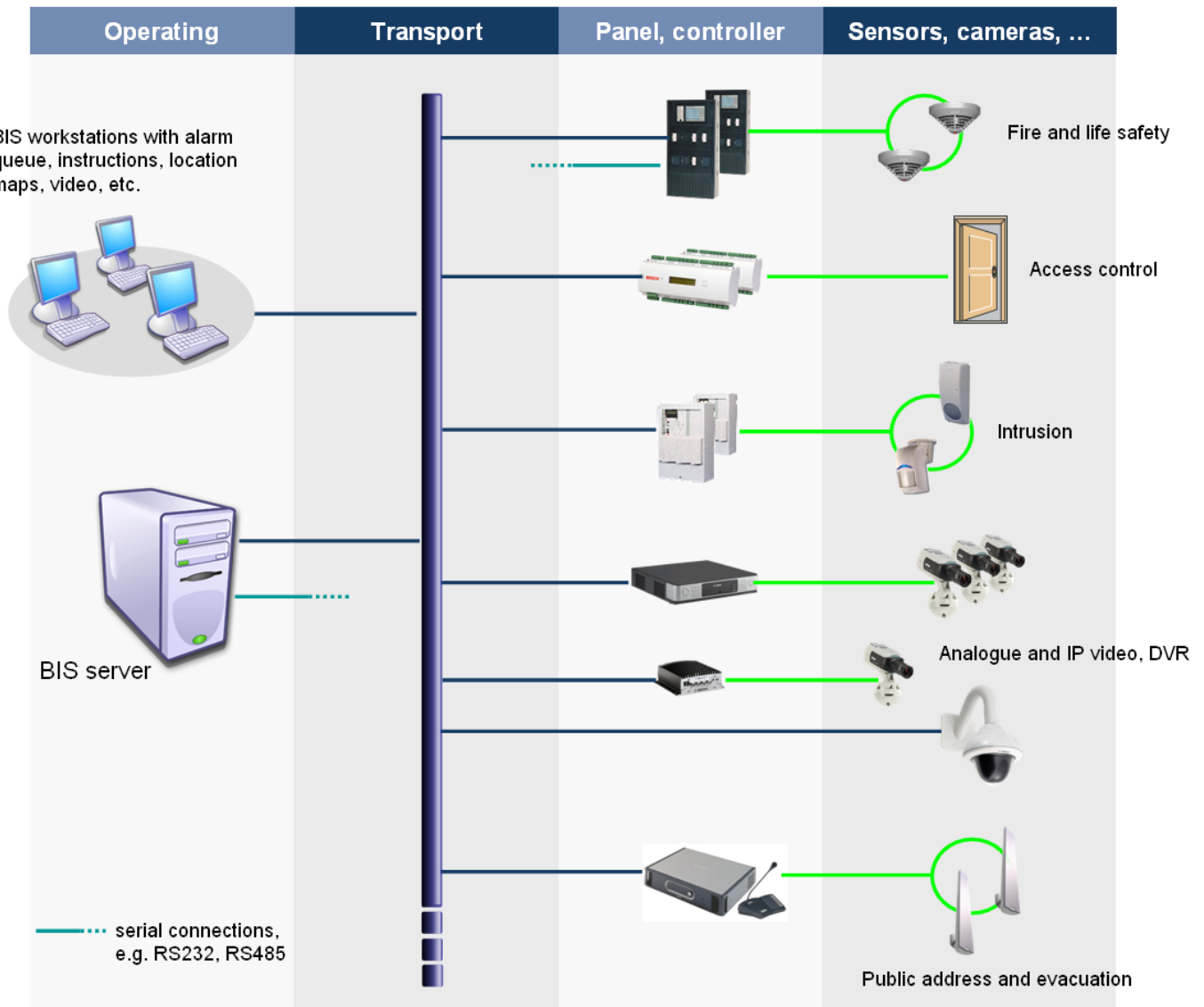
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System overview

The Building Integration System (BIS) is a state-of-the-art security management system running on standard computers with Microsoft Windows operating system. The software is able to manage and control a wide range of security and safety applications under one common platform, giving the operator better control and faster response. The modular licensing concept of BIS, consisting of a basic software license and a pool of additional options, helps you tailor systems to the exact requirements of any customer.



Typical applications

Among many others the following applications can be realized with BIS:

- ▶ Management and control of Bosch fire panels
- ▶ Management and control of Bosch intrusion panels
- ▶ Management and control of Bosch AMC access controllers along with cardholders, doors and readers
- ▶ Management and control of analog and IP video devices, complete with video verification of alarm scenes
- ▶ Management and control of Bosch Praesideo public address devices
- ▶ Management and control of 3rd party security, safety and building-automation systems
- ▶ Any combination of the above with tight integration of the applications involved: e.g. video verification with access control, evacuation announcements in case of fire, etc.

For more information see also *Applications* and *Project-specific adaptations and expansions* at the end of this document.

Connection types and licensing basics

BIS provides enormous flexibility in configuration and licensing. The following table provides a basic introduction to the BIS engines, all of which are optional.

Automation Engine (AUE)	Compatible with selected Bosch fire and intrusion panels, Bosch public address systems, and OPC compliant 3 rd party devices
	Sufficient number of detector points for devices
Access Engine (ACE)	Compatible with Bosch AMC access controller, doors, readers, cards
	Door licenses in steps of 32, where a door can consist of up to four readers. Multiple cards permissible per employee or visitor.
Video Engine (VIE)	Compatible with Bosch analog and IP video devices and 3 rd party IP video devices
	<p>Analog Allegiant matrix switch: One detector point per camera or alarm input</p> <p>IP video devices: One video channel license required per IP video camera, such as DinionIP, AutoDome, VIP camera input or DiBos/Divar camera input (VIE is shipped with 20 free channel licenses)</p>
Security Engine (SEE)	Compatible with Bosch G/GV2/GV3 intrusion panels, D6x00 alarm receiver
	<p>G-series panels: Panel licenses in steps of 2 panels</p> <p>D6x00: Account licenses in steps of 500 up to a maximum of 3200 per receiver (SEE is shipped with 500 free account licenses)</p>

Selection Guide – Four steps to your new management system

Step 1	Choose the basic license item for a new system
	Choose the basic license for one of the language variants to start the system software configuration
Step 2	Select the main modules
	Select the main modules (engines) to meet your technical requirements
Step 3	Select BIS platform options
	Select from a variety of alarm-handling options to extend the system's monitoring and control capabilities
Step 4	Select engine related options
	Choose engine-related options to extend their functionalities

Step 1: Choose the basic license item for a new system

Start by selecting a suitable BIS basic package in the language of your choice. Each basic package consists of a box containing the installation medium and a quick installation guide. Many features are already activated in the basic package. For details refer to the BIS datasheet.

You want your BIS in ...	... then you order (once per system)
German, English, Russian, Hungarian, Dutch, French, Spanish, Portuguese, Simplified Chinese, Traditional Chinese	BIS-BGEN-B40



Step 2: Select the main modules

Next add main modules (engines) depending on the kinds of subsystems you wish to control.

If you want to manage and control then you need and you have to order ... (once per entire system)
... Bosch Fire panels UGM2020, UEZ2000, FPA5000, FPA1200, BZ500	Automation Engine (AUE)	BIS-FAUE-BPA40
... Bosch Intrusion panels UGM2020, UEZ2000, NZ300, MAP5000		
... Bosch Allegiant matrix switch ¹		
... Bosch Praesideo public address		
... OPC compliant 3 rd party systems ²		
... Bosch AMC access controller with Wiegand or RS485 reader bus	Access Engine (ACE)	BIS-FACE-BPA40
... Bosch Allegiant matrix switch	Video Engine (VIE)	BIS-FVIE-BPA40
... Bosch Dibos V8.x		
... Bosch Divar DVR 400, 600, 700, XF		
... Bosch DVR 3000, 5000		
... Bosch BRS		
... Bosch Dinion, FlexiDome, AutoDome		
... Bosch VIP-X, VideoJet encoders		
... Bosch VIP-X decoders		
... Bosch VRM / DLA	Security Engine (SEE)	BIS-FSEE-BPA40
... 3 rd party NVR, DVR or IP camera ³		
... Bosch G/GV2/GV3 series panels (D7xxx/9xxx)	Security Engine (SEE)	BIS-FSEE-BPA40
... Bosch Conettix D6100/6600 alarm receiver		

¹ Allegiant matrix switches are also supported by BIS Video Engine

² Check with your sales representative what devices are already supported as standard, or can be integrated via the inbuilt OPC connector tool.

³ See Video Compatibility Matrix on Bosch Extranet

Step 3: Select BIS platform options

BIS provides a pool of generic options with which you can extend the system's core coverage and responsiveness.

If you want to ...	... then you need ...	... and you have to order...
... add the display of alarm documents and site maps including graphical navigation and layer control to the operator's UI	Alarm document package once per entire system	Since v4.0 included in the Basic Package
... add timer function for scheduled controls, opportunity to generate manual alarms in case of e.g. telephone calls, alarm message distribution and to start launch of external applications like backups	Alarm management package once per entire system	1 x BIS-FGEN-AMPK40
... increase the number of concurrent operators	Operator license per concurrent logged in operator	N x BIS-XGEN-1CLI40
... compartmentalize the administration/control of devices, cardholders, etc. by dividing sites into distinct logical entities (divisions) governed by their own operator groups	Additional Division per group of people which should operate individually	N x BIS-XGEN-1DIV40
... increase the number of detector points to be monitored and controlled by Automation Engine	Nx100 or Nx1000 detector points regarding to the total number of sensors in the scope	N x BIS-XGEN-100P40 N x BIS-XGEN-1KP40
... connect BIS servers together for distributed alarm handling	1xBIS Multi Server Connect for each connected BIS server	1 x BIS-FGEN-MSRV40

Step 4: Select engine-related options

Additional options are available per engine, which extend the size or functionality of the specific module and the respective application.

Automation Engine (AUE) options

If you want to ...	... then you need ...	... and you have to order...
... add detector points for 3 rd party devices to be monitored and controlled by AUE	Nx100 or Nx1000 detector points regarding to the total number of sensors in the scope	N x BIS-XGEN-100P40 N x BIS-XGEN-1KP40
... add another fire or intrusion panel, a Praesideo PA system, an Allegiant matrix switch or a 3 rd party system to the AUE	Step 3 'Common options'	... additional detector points

Access Engine (ACE) options

If you want to ...	... then you need ...	... and you have to order...
... add cards for employees or visitors beyond the 1000 included in the ACE basic license	N times Additional 100 or 1000 cards regarding to the total number you want to add	N x BIS-XACE-100C40 N x BIS-XACE-1KC40
... add 32 doors ³ beyond the 32 included in the ACE basic license	N times 32-Door-Upgrade	N x BIS-XACE-32DR40
... extend the ACE with video verification, which allows operators to verify the identities (via camera and database image) of persons requesting access, and decide whether to grant or deny admission	Video Verification (once per system)	Since v4.0 included in the ACE Basic Package
... use the opportunity to manage and control parking lots in the ACE	Parking lot management (once per system)	Since v4.0 included in the ACE Basic Package
... add another MAC to extend the number of AMCs beyond the limit of 120 AMCs per MAC or to install AMCs in a different time zone	N times ACE Additional 1 MAC regarding to the total number you want to add	N x BIS-XACE-1MAC40

³ A door in the means of ACE can consist of one (standard door) up to four readers (mantrap). The door configuration and the amount of hardware used is up to the customer. Licensing of doors are not done per device used.

Video Engine (VIE) options

If you want to ...	... then you need ...	... and you have to order...
... add video channels ⁴ beyond the 20 included in the VIE basic license	Additional one Video Channel	N x BIS-XVIE-1CHA40
... extend the system with one or more 3 rd party camera channels	VIE one 3rd Party Channel	N x BIS-XVIE-1VRE40
... extend the system with one or more Allegiant matrix switch	Step 3 'Common options'	... additional detector points

⁴ A video channel can be an IP video camera or a camera port at an IP video device, such as Divar, Divar IP or VIP-X. A video channel provides typically live streaming and depending on the device type archiving, alarming and controlling additionally. Camera ports at analogue Allegiant matrix switches are not in the scope of this licensing model.

Security Engine (SEE) options

If you want to ...	... then you need ...	... and you have to order...
... add G/GV2/GV3 series panels beyond the 2 included in the basic SEE license	OPC9000 2 panel Upgrade according to the total amount of panels you want to add plus one connection server hardware per 32 panels	N x BIS-XSEE-2PNL40
... add accounts ⁵ within a Conetix D6x00 alarm receiver connection beyond the 500 included in the basic SEE license	N times the OPC6600 500 panel upgrade plus one connection server hardware per 3200 accounts (i.e. per Conetix alarm receiver)	N x BIS-XSEE-500P40
... add video badging capability to SEE (used with G-series panels containing access control functionality)	Video badging for SEE once per entire system	Since v4.0 included in the SEE Basic Package
... add video verification to your G-series panel containing access control functionality	Video Verification for SEE once per entire system	Since v4.0 included in the SEE Basic Package

⁵ An account typically represents an (intrusion) panel connected via dialler or Ethernet to the alarm receiver and which provides several alarm events, such as intrusion, social alarm, etc.

Applications

Industrial site with office building



The challenge

Many Industrial sites and office buildings today require security and building management systems for their day-to-day operation such as fire and intrusion system, video surveillance and access control, IP infrastructure, etc. Malfunctions and downtimes of those systems cause additional costs and extra staff to properly and safely operate the facility. Such installations are equipped with 24/7 monitoring stations or reception desks that often contain different front-end workstations for each of these systems. Furthermore, many times, no real interaction between them is possible. In such complex installations, an alarm can cause stressful emergency situations. A fire alarm or intrusion attempt can cause operators to make mistakes or simply need more time to find the right button. Stress levels are higher and often the operator feels strained or unsure on how to proceed.

Solutions and system functionality

All those systems can be connected with a high-confidence level to a central BIS server equipped with a worldwide open interface standard. The customized or standard system configuration between the different subsystems can be set up. Specific instructions can be pre-programmed and corresponding site maps can be displayed on the operator screen in association with each alarm type to optimize decisions during such high-alert situations. Automatic and scheduled controls are also possible to allow operators to concentrate on the important things. In addition, individual operator authorizations provide a separation in access and control of the different systems to assure authorization only to specific individuals to see and manage different data available in the system.

Typical applications

- ▶ Fire detection with evacuation via public address and/or escape door management
- ▶ Intrusion detection system with integrated video live images and alarm archives
- ▶ Access to high-secure areas, e.g. computer center with entrance and exit reader, video verification and area balancing, video surveillance with storage/retrieval
- ▶ Parking lot access with normal reader, barrier and traffic light control and video surveillance or video verification
- ▶ Arming/disarming intrusion system via keypad reader
- ▶ Video surveillance of back entrance, parking lot or other locations
- ▶ Elevator control with individual floor authorizations for up to 16 floors
- ▶ Perimeter fence control and monitoring
- ▶ Technical alarms for HVAC, lighting, blinds, etc.

Recommended solutions available

Note that every industrial site or office building has its own structure and a site analysis is recommended to identify the vulnerabilities, the necessary security level at each point of interest and the amount of devices needed for a complete solution to meet the exact requirements.

Parts list – basic selection			
1	BIS-BGEN-B40 BIS-FGEN-AMPACK <i>X times</i> BIS-FGEN-1CLI40 BIS-XGEN-100P40	BIS central server and operator workstations, subsystem connections, display functions	Define the basic system size and required operating features, such as alarm documents
2 5 7 8 3	BIS-FAUE-BPA40 <i>X times</i> BIS-AUE-100P40	Monitoring and control of Bosch fire and intrusion panels and 3 rd party subsystems	Sufficient number of detector points (own and 3 rd party), used for intrusion panels if 3 rd party or Bosch other than G-series
3	BIS-FSEE-BPA40 <i>X times</i> BIS-XSEE-2PNL40	Monitoring and control of Bosch intrusion panels	If G-series panels are used, sufficient number of panel licenses
4	BIS-FVIE-BPA40 <i>X times</i> BIS-XVIE-1CHA40	Monitoring, control and display of Bosch video systems	Analog and IP video, live display and archiving based on Bosch DVR's and storage systems, sufficient video subsystem licenses
6	BIS-FACE-BPA40 <i>X times</i> BIS-XACE-100C40 BIS-XACE-32DR40 BIS-XACE-1MAC40	Monitoring and control of Bosch access control systems	Based on AMC controller family and corresponding readers (Wiegand and RS485 bus) , sufficient number of cardholders, visitors and doors

Correctional Facilities (Prisons)



The challenge

Due to their intended purpose, correctional facilities typically have high-level requirements for security solutions. Escape, violence, arson, guard safety are only some reasons why prisons need additional attention. To provide fast reaction or to prevent dangerous situations requires a high-level integration of fire systems, access control, video surveillance, fence and wall monitoring or a guard tour system under one platform to protect people and assets in such a sensitive environment.

Solutions and system functionality

All those systems can be connected with a high-confidence level to a central BIS server equipped with a worldwide open interface standard. The customized or standard system configuration between the different subsystems can be set up. Specific instructions can be pre-programmed and corresponding site maps can be displayed on the operator screen in association with each alarm type to optimize decisions during such high-alert situations. Automatic and scheduled controls are also possible to allow operators to concentrate on the important things. In addition, individual operator authorizations provide a separation in access and control of the different systems to assure authorization only to specific individuals to see and manage different data available in the system.

Typical applications

- ▶ Perimeter fence/wall surveillance
- ▶ Fire alarm system for cells and other vital areas
- ▶ Cell door control and monitoring
- ▶ Cell communication
- ▶ Visitor/inmate communication control and surveillance
- ▶ Access control to high-secure areas, e.g. 24/7 monitoring station, video verification and area balancing, video surveillance with storage/retrieval
- ▶ Access control with integrated video surveillance main gates, visitor area, etc.
- ▶ Video surveillance with motion detection of prison yard, fence/wall area, etc.
- ▶ Guard tour using standard access readers or similar sensors as checkpoints along a defined route to be passed in a defined period of time, combined with guard tracking system for immediate alerts, e.g. via Bosch paging system

Recommended solutions available

Note that each facility has its own structure and a site analysis is recommended to identify the vulnerabilities, the necessary security level at each point of interest and the number of devices needed for a complete solution to meet the exact requirements.

Parts list – basic selection			
1	BIS-BGEN-B40 BIS-FGEN-AMPACK <i>X times</i> BIS-XGEN-1CLI40 BIS-XGEN-100P40	BIS central server and operator workstations, subsystem connections, display functions	Define the basic system size and required operating features, such as alarm documents
2 4 6 7 8	BIS-FAUE-BPA40 <i>X times</i> BIS-XAUE-100P40	Monitoring and control of Bosch fire panels and 3 rd party subsystems	Sufficient number of detector points (own and 3 rd party)
3 5	BIS-FVIE-BPA40 <i>X times</i> BIS-XVIE-1CHA40	Monitoring, control and display of Bosch video systems	Analog and IP video, live display and archiving based on Bosch DVR's and storage systems, sufficient video subsystem licenses
	BIS-FACE-BPA40 <i>X times</i> BIS-XACE-100C40 BIS-XACE-32DR40	Monitoring and control of Bosch access control systems	Based on AMC controller family and corresponding readers (Wiegand and RS485 bus), sufficient number of cardholders, visitors and doors

Project-specific adaptations, expansions and additional Bosch services

- ▶ Specifications for tender
- ▶ Quotations
- ▶ Project planning
- ▶ Project-specific application development
 - Interfaces/drivers to 3rd party devices
 - Specific reporting
 - Specific administration tools
 - etc.
- ▶ Factory acceptance tests



A Tradition of Quality and Innovation

For over 100 years, the Bosch name has stood for quality and reliability. Bosch is the global supplier of choice for innovative technology, backed by the highest standards for service and support.

Bosch Security Systems proudly offers a wide range of security, safety, communications and sound solutions that are relied upon every day in applications around the world, from government facilities and public venues to businesses, schools and homes.

Bosch Security Systems

To learn more about our product offering, please visit www.boschsecurity.com or send an e-mail to emea.securitysystems@bosch.com

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