

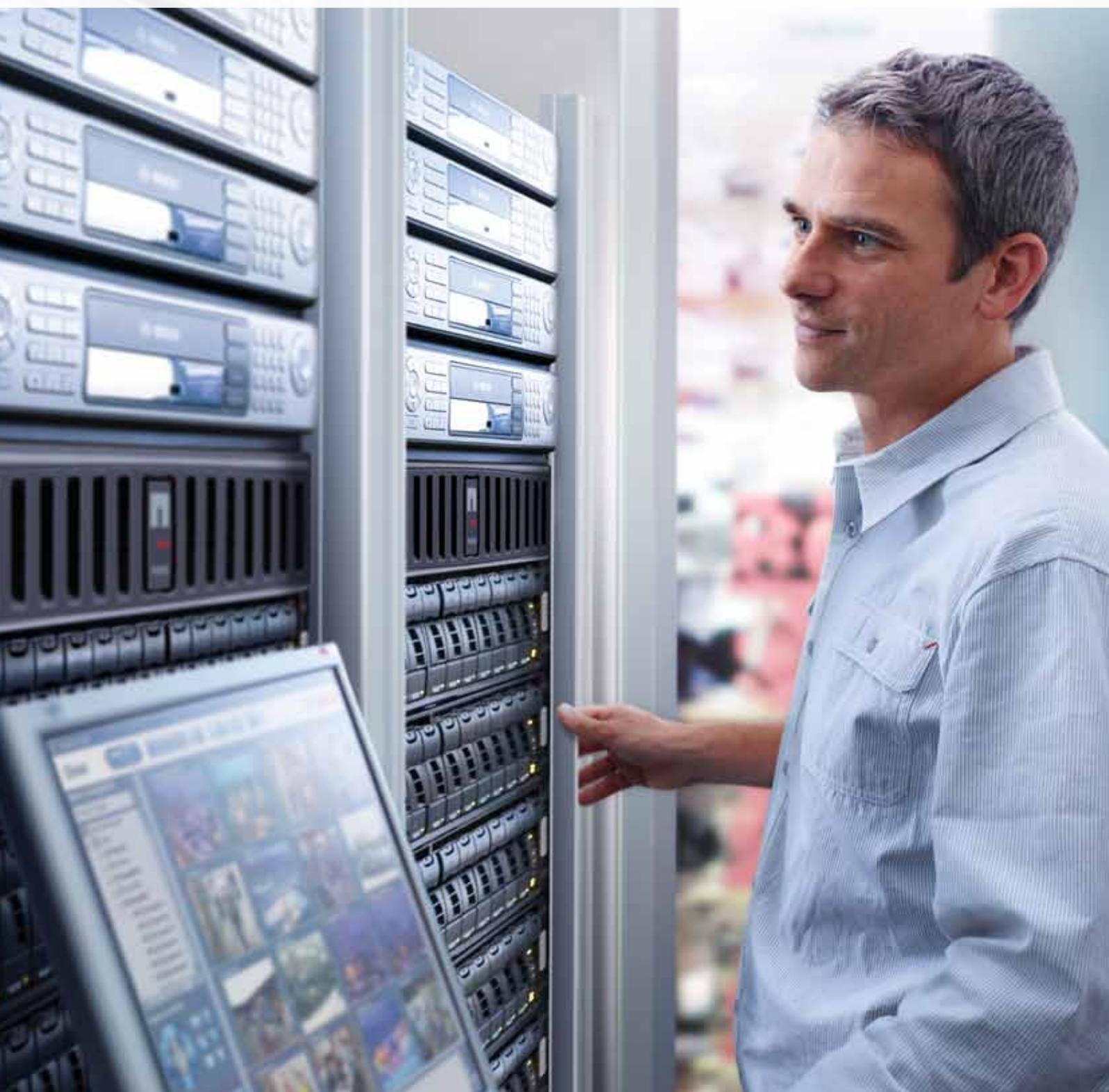
# Qualified to bring you peace of mind

Professional video recording and management



**BOSCH**

Invented for life



# High quality solutions **for everyone**

Choose the solution that fits your application from our comprehensive range of recording solutions. Our recording solutions cover small businesses with a single camera to enterprise networks operating several hundreds, and everything in between. No system is too small, or too big!

## **Lowering the cost of ownership**

It's a global truth that if you want a quality product, you expect to pay a little more. But in the long term you actually save, thanks to longer product lifetime and lower maintenance costs. For a video management system, less maintenance is critical as it means more up-time and less disruption to your security operations.

You also get the benefits of a more professionally designed product – everything from rugged manufacture to sensible functionality, and of course superior quality performance.

Our dedication to quality and high system availability is also reflected in the way our products interact with each other. Our high-end

Bosch Security Systems test and research facilities in Eindhoven, The Netherlands



video storage arrays utilize their raw power together with our Video Recording Management software or in combination with our 700 Series Recorders. In both cases interfaces can be set up quickly, easily and with the highest reliability.

**Making it easy**

Bosch digital recorders focus on ease-of-use. We know how important it is to you that they are simple to set up and straightforward to use. Our recorders are simple to install and operate, without any complicated set up and configuration. And our latest generation of user-interfaces is better than ever.

Ease of use extends to system management. At every level you will find management functionality to suit the size or complexity of your application. There's no hassle for smaller installations while larger systems can easily take advantage of our recorders' flexibility and power.

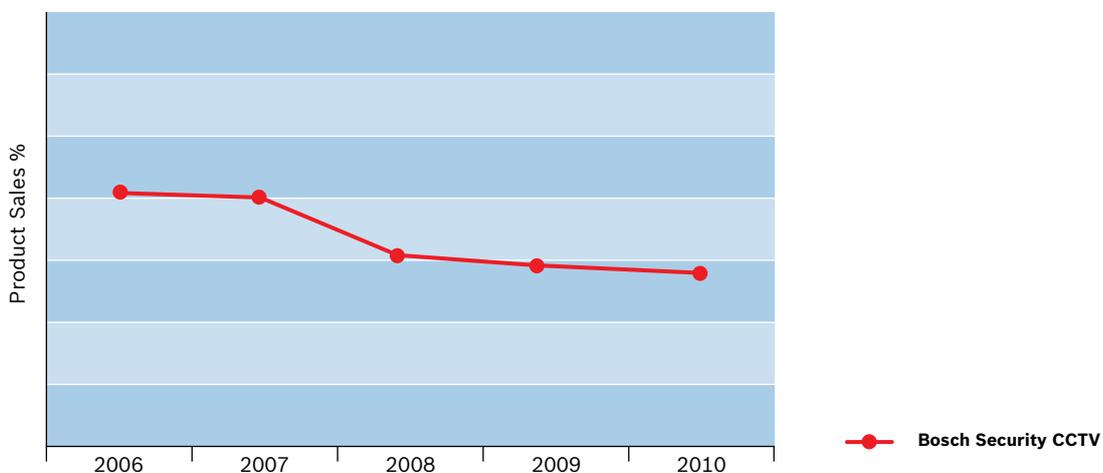
Take our Hybrid and Network Recorder 700 Series for example. Ideal for medium-sized and expanding systems, it offers a scalable video management solution which grows with your application. For ultimate scalability and control of your CCTV recording, they can be used in conjunction with Bosch iSCSI Video Storage Arrays.

**Quality made to fit**

Ensuring the utmost availability, all our systems use certified Bosch hard-drives that have been thoroughly tested to comply with our 24/7 operation standards for CCTV recording both by us and the hard drive manufacturer.

Delivering reliability well above industry standards, Bosch Recording Solutions are also cost-effective and easy to use, meeting all your security needs.

**Warranty Claim Rated** as a percentage of product sales  
2006 to 2010



Due to continuous investment in quality improvement and outstanding reliability engineering, the warranty claim rate of all Bosch Security CCTV systems is continually decreasing.

# Taking professional CCTV recording **seriously**

More than just video recorders, our recording solutions are business tools for overall video management. They manage your video in a way that's easy to access, and provide you with convenient, centralized control of your surveillance system.

Every Bosch recording solution delivers exceptional video performance, whether it's real-time viewing or recording and playback. And they allow you to tailor video quality to your particular needs. Capture the detail you want, while you save on storage space and reduce costs.

For demanding storage applications our Video Storage Arrays, combined with the Video Recording Manager software, extend storage capability, as well as adding extra dimensions of control and scalability to your IP system.

Bosch Recording Station software and integrated video appliances for comprehensive IP video management applications



Video Recorder 600 Series  
for medium-sized applications



Video Recorder 400 Series  
for applications up to 8 cameras



Divar Hybrid and Network Recorder 700<sup>2)</sup> Series  
for demanding system applications

<sup>2)</sup>Formerly called Divar XF

So whatever your requirements, Bosch has the best video recording and management solution to meet your needs. Delivering continuous, assured operation, Bosch recording solutions are qualified to bring you complete peace of mind.

- ▶ Bosch quality you can rely on
- ▶ Continuous, reliable operation
- ▶ Exceptional video performance
- ▶ Intuitive and easy-to-use
- ▶ Tailored to your exact needs



DLA 1200 Series IP Video Storage Appliance  
for zero-fuss recording and storage



DSA Series iSCSI Video Storage Arrays  
for highest data availability



DLA 1400 Series IP Video Storage Appliance  
for zero-fuss recording and storage



Video Recording Manager (VRM) software  
for maximum control and scalability

## **Video Recorder 400 Series** for applications up to 8 cameras



# Manage your security with **ease**

As a small business owner, you don't want to waste time trying to set-up or operate your video management solution. You need an integrated, stand-alone unit that works straightaway – just connect and go.



### **Video Recorder 400 Series**

- ▶ Perfect for small systems up to 8 analog cameras
- ▶ Ready to go 'straight out of the box'
- ▶ Hassle-free operation
- ▶ Minimal maintenance and operational costs
- ▶ Supports viewing on smartphones
- ▶ Manage your system from anywhere using built-in web interface or provided Control Center software

Once it's recording, you want a highly reliable solution that operates continuously with superior image quality. And, if an incident does happen, you need to be able to find the recording easily and quickly.

Additionally, you can't afford to have someone monitor your security system all the time. Your video management solution should have an easy-to-use web interface that offers you the flexibility to watch video from any location.

You also need to keep storage costs down with advanced H.264 compression technology that reduces video data size without sacrificing image quality.

## Video Recorder 600 Series for medium-sized applications



# Giving you complete **control**

If you have a medium-sized security application – such as school, hotel or business premises, even across multiple sites – you need a video management solution that gives you complete control without taking up all your time.

Easy installation is essential, so a recording solution that works ‘out of the box’ makes perfect sense. You want to simply plug it in and begin recording immediately with no configuration required.

You need an easy to manage solution that operates continuously, with high quality images and requiring little or no maintenance.

You want a simple, no-nonsense video management solution that offers the flexibility and convenience of remote monitoring and management from any location in the world via the Internet.



### Video Recorder 600 Series

- ▶ Ideal for small to medium-sized systems
- ▶ Easy to set up with no special training required
- ▶ Manage your system from anywhere using built-in web interface or provided Control Center software
- ▶ Embedded design reduces maintenance and operational costs
- ▶ Supports viewing on smartphones



# Security that **grows** with your needs

What ingredients do you look for in a scalable video management solution? Despite your system's size, it must still be easy to set up and use, yet powerful and flexible enough to meet your growing security needs.

## Divar Hybrid Recorder 700\* Series for demanding system applications



You want a solution that grows as your system expands, supports multiple locations as well as large numbers of analog and IP cameras. It must also allow you to monitor all your facilities from a single location.

The recorder must capture all the details in images and offer detailed recording capabilities. Nonetheless, storage requirements should be kept to a minimum, with advanced H.264 compression technology reducing data while maintaining the highest image quality. Alternatively, the option to attach an external video storage array allows extensive storage capability for applications requiring continuous recording at the highest resolution, frame rate and retention times.

Comprehensive alarm management lets you create a fully automated surveillance solution.

\*Formerly called Divar XF

You save time and money by giving operators a powerful tool to promptly react to security alerts.

### Hybrid Recorder 700 Series

- ▶ Perfect for medium to large demanding surveillance environments
- ▶ Detailed, real-time H.264 HD and SD recording capabilities, IP streams up to 60 IPS at 720p and 30 IPS at 1080p resolution
- ▶ Supports up to 16 analog and 16 IP video sources
- ▶ Up to 8TB internal storage with optional RAID-4 protection
- ▶ Integrate text data from an IP source or using a bridge device
- ▶ Embedded design delivers lower cost of ownership
- ▶ Software development kit and technical support for third-party integration



## Dedicated to IP

Are you looking for excellent image quality and convenience in your security system? Then take advantage of a dedicated IP video recording solution that maximizes both camera potential and networking capability.

## Divar Network Recorder 700 Series for dedicated IP systems



While typical IP solutions consist of many separate components – NVR server, PC client, external RAID storage array and software – our Network Recorder 700 Series is an all-in-one IP video management solution.

Bosch IP solutions are inherently scalable, making it easy to expand your system when required. You can increase storage whenever you need it, through in-field updates without having to call out an engineer. Storage capacity can easily be expanded by adding Bosch disk arrays.

You want a highly reliable recorder that allows a single operator to monitor security from anywhere in the world. The fully automated comprehensive alarm management saves time and money by giving operators a powerful tool to react promptly to security alerts.

### Network Recorder 700 Series

- ▶ Perfect for medium and multi-site IP environments
- ▶ Detailed, real-time H.264 HD and SD recording capabilities, IP streams up to 60 IPS at 720p and 30 IPS at 1080p resolution
- ▶ Supports up to 32 IP video sources
- ▶ Install and operate a complete IP surveillance system in minutes using automated IP camera assignment and management
- ▶ Up to 8TB internal storage with optional RAID-4 protection
- ▶ Integrate text data from an IP source or using a bridge device
- ▶ Embedded design delivers lower cost of ownership
- ▶ Software development kit and technical support for third-party integration



# **Manage** your connections from anywhere

Whatever the scale of your distributed network surveillance application, you need a recording solution that is versatile and powerful enough to manage your entire security infrastructure.

## Bosch Recording Station makes all the best connections



You need a comprehensive solution system that combines recording and video management with distributed communications technology. With support for third-party equipment, it needs to interface with your other security systems – everything from fire and access panels to ATM and POS terminals, as well as number plate capture and video content analysis solutions.

The solution has to provide quick and easy access to information from anywhere in the network, even from remote, low bandwidth WAN connections. You need the convenience of a scalable, user-friendly interface that allows various locations to be monitored simultaneously.

The solution must support high definition (HD) and standard definition (SD) video sources. It must also offer easy playback and fast, powerful search functions to eliminate time consuming manual searches. You also need a simple way to extend the solution to provide a comprehensive

feature set that includes centralized user and alarm management.

### Bosch Recording Station

- ▶ Available as either a software-based IP video recording and management solution or an all-in-one IP video management appliance
- ▶ IP video recording and management for up to 64 sources per recording station
- ▶ Supports H.264, MPEG-4 and JPEG devices and HD/Megapixel cameras
- ▶ Flexible network access options including web browser remote access and viewing
- ▶ Compatible with Bosch Video Management System



# Making your recording **hassle-free**

Whether you have only a few IP cameras for a highly specific task, or hundreds of cameras covering different locations, you need a flexible and easily expandable video recording and storage solution that's easy to use.

## DLA 1200 Series and 1400 Series for zero-fuss recording and storage



You need a simple and reliable all-in-one solution for your network surveillance system. A solution that eliminates the cost of a separate network video recorder (NVR) by combining this functionality with extensive storage capacity in a single integrated design.

Ease-of-use is also a must. You want a solution that has all components pre-installed and preconfigured so you can simply connect it to your network, power it up and it is ready to record, straight out-of-the-box.

It also needs to provide simple, powerful control for your entire system, either from your control room or remotely from anywhere in the world. And you want to be able to expand it easily to meet your growing surveillance requirements, from support for more cameras or extra storage to an easy upgrade to a complete video management solution.

### DLA 1200 and 1400 Series

- ▶ No fuss network CCTV recording for up to 64 channels (DLA 1200) or up to 128 channels (DLA 1400)
- ▶ Low maintenance embedded design combining NVR server capability with intelligent video storage
- ▶ Powerful, user-friendly software options cover a wide range of system control capability
- ▶ Reduces hardware costs by up to 45% and installation costs by up to 50%



## Manage **every** detail

If your system demands extensive storage capacity – due to large numbers of cameras, high camera resolutions, long data retention policies or security through data replication – then you need a flexible, highly scalable video storage solution for your IP surveillance system.

You want the assurance of the highest level of RAID redundancy to prevent loss of video in the event of disk failures. Also, should you need to add or remove storage disks; you want to do it without interrupting the system.

Then the Bosch Video Recording Manager (VRM) combined with Bosch iSCSI Video Storage Arrays is the ideal solution. It allows you to manage every detail of your system and enables you to add storage easily as your video surveillance system grows.

The redundancy and automatic fail-safe capabilities deliver unmatched reliability. If a storage array fails, VRM immediately redirects camera traffic to the remaining active disk arrays. Also, during a network outage, embedded automatic network replenishment (ANR) ensures video data is preserved safely on local storage and automatically uploaded when the network is restored.

## VRM and Video Storage Arrays for maximum control and scalability



### Ultimate flexibility and storage capacity

The Bosch range of video storage arrays is tailored to meet the unique demands of CCTV and video surveillance. Optimized for 24/7 operation, our NetApp RAID-DP technology delivers 'peace of mind' video storage without compromise.

A RAID 6 implementation, NetApp RAID-DP offers greatly enhanced data protection against any two disk failure events occurring in the same RAID group.

Additionally, you can combine our storage arrays with the Bosch Video Management System (BVMS), which incorporates VRM. This gives you an easy-to-use, software-based, comprehensive recording management solution.

### Bosch VRM and video storage arrays

- ▶ High 'in-the-box' scalability, servicing and centralized management
- ▶ Detailed, control of each video-stream
- ▶ Network-based recording even during temporary network outages
- ▶ RAID-DP provides enhanced data protection for up to two disk failure events



# Giving you a **simple view** on surveillance

Whether you have only a few IP cameras for a highly specific task, or hundreds of cameras covering different locations, you need a flexible and easily expandable video recording and storage solution that's easy to use.

## Bosch Video Client software for intuitive surveillance video viewing



If you're running an entry-level installation up to 128 channels, you want a straightforward viewing solution that's easy to install, configure and use. To save costs it needs to operate with up to 16 IP channels free-of-charge; expandable with an additional low-cost license up to 128 channels.

You want the convenience of viewing a mix of up to 20 live SD and HD channels simultaneously, and playback should display up to 4 channels, allow you to search for alarm and motion events, and export relevant video footage.

You want to control video recording, either locally on a camera's memory card or via the Bosch VRM (Video Recording Manager) or using Divar 700 Series recording devices. Also, an electronic zoom can help you examine critical areas of live and recorded scenes more closely.

### BVC software

- ▶ Free for up to 16 IP channels, maximum capacity 128 channels
- ▶ Live view of up to 20 SD or HD IP channels and playback up to 4 SD and HD channels simultaneously
- ▶ Convenient 10-minute direct recording for two sources
- ▶ Locate events quickly using motion, alarm and forensic search



Type	400 Series	600 series	700 series
Number of analog camera inputs	Max 8	Max 16	Max 16
Number of MPEG-4 IP cameras	N.A.	N.A.	No
Number of H.264 IP cameras	N.A.	N.A.	Max 32
HD/Megapixel camera support	No	No	Yes, HD
Video compression	H.264	H.264	H.264
Maximum frames at 4CIF/D1	25 (PAL) 30 (NTSC)	100 (PAL) 120 (NTSC)	800 (PAL) 960 (NTSC)
3rd Party dome control	Yes	Yes	Yes
ATM/POS integration	No	No	Yes
Software Development Kit (SDK)	Coming Soon	Coming Soon	Yes
Audio output	1	2	2
Maximum Audio input	4	4	16
Web browser access	Yes	Yes	Yes

Automatic Network Replenishment	No	No	No
Maximum recording bandwidth	9 Mbit/s	35 Mbit/s	72 Mbit/s
Onboard Gigabit Ports	0	0	Max 2
Dual power supply	No	No	No
Internal RAID support	No	No	Yes
Field replaceable hard drives	N.A.	Yes	Yes
Hot Swap Hard Drives	No	No	No
Maximum number of internal disks	1	2	4
Internal + External	1	2	Unlimited
External storage support	No	No	Yes



Bosch Recording Station	1200 series	1400 series	VRM and Video Storage Arrays
No, use encoders	No, use encoders	No, use encoders	No, use encoders
Max. 64	Max. 64 per appliance	Max. 128 per appliance	Max 2000 in total per VRM
Max. 64	Max. 64 per appliance	Max. 128 per appliance	Max 2000 in total per VRM
Yes	Yes	Yes	Yes
H.264, MPEG-4	H.264, MPEG-4	H.264, MPEG-4	H.264, MPEG-4
n.a. *1	1875 (PAL)/2250 (NTSC) per appliance	2500 (PAL)/3000 (NTSC) per appliance	5000 (PAL) 6000 (NTSC) per array
No	Handled by client software	Handled by client software	Handled by client software
Yes	Handled by client software	Handled by client software	Handled by client software
Yes	Yes	Yes	Yes
Yes	Handled by client software	Handled by client software	Handled by client software
Depending on decoders	Handled by client software	Handled by client software	Handled by client software
Yes	Yes (Health monitoring/remote mgmt.)	Yes (Health monitoring/remote mgmt.)	Yes (Health monitoring and remote management)
No	Yes	Yes	Yes
100 Mbit/s	150Mbit/s per appliance	200Mbit/s per appliance	400 Mbit/s per array
2	2 per appliance	2 per appliance	Max 4 per array
Yes (BRS 2U 19" Appliance)	No	Yes	Yes
Yes (BRS 1U and 2U 19" Appliance)	No	Yes	Yes
Yes (BRS 1U and 2U 19" Appliance)	Yes	Yes	Yes
Yes (BRS 1U and 19" Appliance)	No	Yes	Yes
Max. 8( BRS 2U 19" Appliance)	4	8	2
Max. 8 (BRS 2U 19" Appliance)	4	8	96 (40 arrays per VRM)
No	No	No	Yes

\*1: Depending on used encoders and amount of encoders, BRS limit is bandwidth. (max. 100 Mbit/s)

# Total system components

From cameras and encoders to mounting brackets and lenses, Bosch gives you a complete range of high quality system components to choose from. Complementing our video recording solutions, we have extended our camera and component range with several new products, delivering everything you need for your CCTV system.

## Analog cameras

Our Dinion and FlexiDome analog cameras, as well as the WZ Series of day/night cameras, are the ideal match for our Video Recorder 400 Series. For the Hybrid Recorder 700 Series, our Dinion and Flexidome 2X cameras deliver outstanding image quality. And we also offer a broad range of AutoDome Modular PTZ cameras that adapt to your changing security needs.

## IP cameras

From the plug and play Bosch IP 200 camera series to the latest Dinion 2X IP solutions, our broad range of IP cameras delivers the best image quality combined with the easy set up and control provided by IP CCTV networks.

Our Dinion and FlexiDome 2X IP cameras are the perfect match for the Network Recorder 700 Series.

## IP encoders

Add network connection and IVA (Intelligent Video Analysis) functionality to analog surveillance systems.

## AutoDome IP Cameras

A comprehensive range of IP network AutoDomes (PTZ domes) for indoor and outdoor applications.

## Extreme CCTV

Whether combining AEGIS illuminators with our Dinion 2X cameras, or utilizing Extreme and MIC Series cameras with integrated IR, use of infrared (IR) and white light sources are the perfect solution for improving low-light images. Use of intelligent illumination greatly improves image quality and recognition capabilities. Signal noise and image artifacts are also minimized, reducing storage requirements and making Bosch's intelligent illumination technology an excellent fit with any of our recording solutions.

## Bosch Video Management System

The Bosch Video Management System is a unique enterprise IP video security solution that provides seamless management of digital video, audio, and data across any IP network. Integrate Bosch CCTV products into one easy-to-manage total video security management system.



**Complete confidence**

Giving you even greater peace of mind, all Bosch recording solutions come with a minimum 3 year warranty. Our customer service team is available to help you via phone, e-mail or fax, and if you need any training please do not hesitate to contact us.

### **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](http://www.boschsecurity.com) or send an e-mail to [emea.securitysystems@bosch.com](mailto:emea.securitysystems@bosch.com)

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