



# Bosch Recording Station



- ▶ **Recording and Management Software for IP video**
- ▶ **Connect up to 32 video sources per station**
- ▶ **Supports Bosch H.264/MPEG-4, third-party MPEG-4 and JPEG devices**
- ▶ **HD / Megapixel camera support**
- ▶ **Connect to and from any station**
- ▶ **Unlimited remote receiver stations**
- ▶ **Web browser remote access and viewing**
- ▶ **Low bandwidth (WAN) support**
- ▶ **Interfaces with Bosch intrusion, fire and access solutions**

Building on DiBos technology the Recording Station uses Bosch's proven video management, recording and communications technology and takes IP based video surveillance to a new level. It forms an integral part of overall security solutions for many applications – including banks, large retailers, railway stations, city centers, industrial facilities and office buildings.

With Recording Station you can retrieve live and recorded video from anywhere in the network. Whether they are on site or at a remote network location, authorized personnel have quick, convenient access to all information making Recording Station the perfect solution for surveillance over distributed networks.

Recording Station supports live viewing and recording at any resolution up to 2048 x 1536 pixels (3 Megapixel) including HD widescreen resolutions. It manages up to 32 IP video sources (Bosch and 3rd party) that are compatible to the following video compression standards:

- Bosch H.264
- Bosch MPEG-4
- Axis MPEG-4
- MJPEG via HTTP and TFTP

The unique, scalable GUI allows live and recorded images from multiple remote stations to be viewed from a single PC (receiver station). With this powerful function, security managers can monitor and supervise multiple locations simultaneously even if remote stations are connected through a WAN.

Each camera offers in-window pan/tilt/zoom functionality from local or remote facilities. Images are displayed with date/time, location, camera name and the status of connected devices such as detectors and sensors.

Recording Station can be programmed to respond to specific situations and events automatically. In response to alarms, the system can be programmed to record at a higher quality and to transmit images or messages to security personnel.

Playback is easy thanks to familiar search and navigation functions using a graphical timeline control. Users can playback recordings from multiple stations simultaneously and synchronously on one interface. Fast, powerful image search functions like the Smart Motion Search eliminate time consuming manual searches.

Export the video to an archive with the push of a single button - all digitally watermarked to ensure the credibility of your recordings. You can even export multiple cameras from different recorders. Use the scheduled export to recurrently backup your recordings on various storage devices, such as external disk arrays and NAS (network attached storage).

To ensure the highest security, all system access is controlled by multiple user authorization levels which determine individual permissions for each user to a very high level of detail. These authorization levels determine what a user can do in the system. Elements such as camera viewing and control, playback and export of recordings, as well the types of system configuration settings that are allowed can be individually configured.

Events, such as login, log-off, status changes, image transmission, video export, and system shutdown are logged in a database and can be easily imported to spreadsheet programs like MS Excel. Video authentication is built-in to detect any attempt to alter the recorded images.

Recording Station provides various interfaces to other systems such as Bosch access solutions and alarm panels, as well as external systems like ATM and POS terminals, fire alarm systems, number plate capture equipment and video content analysis solutions.

Integration with other security and building management systems is accomplished using OPC (OLE for Process Control). When even tighter integration is required, our VideoSDK provides you with a complete toolbox of modules for playback, searching, viewing and much, much more.

Use Recording Station in a LAN environment with Bosch Video Management System to advance to a true enterprise solution which provides a comprehensive feature set such as centralized user, event and alarm management, multi-monitor workstations with zoom able sitemaps and CCTV keyboard control.

## Technical Specifications

|  |  |
|--|--|
| Recording resolutions  | QCIF, CIF, 2CIF, 4CIF, HD 720p, HD 1080p<br>Megapixel (arbitrary JPEG resolution up to 2048 x 1536 pixels)   |
| Recording rates per channel  | PAL: 0,5 - 25 IPS<br>NTSC: 0,5 - 30 IPS  |
| Supported video codecs / protocols   | Bosch MPEG-4<br>Bosch H.264<br>Axis MPEG-4,<br>JPEG/MJPEG via HTTP/TFTP  |
| Supported Bosch MPEG-4 IP cameras  | Dinion IP, AutoDome IP, FlexiDome IP, Megapixel IP, Extreme IP   |
| Supported Bosch H.264 IP cameras   | NBC/NDC-225/255-P<br>Dinion NBC-455-P, NBN-498-P<br>FlexiDome NDC-455-P, NDN-498-P<br>AutoDome Easy II<br>AutoDome VG4 IP  |
| Supported Bosch H.264 and MPEG-4 encoders (video servers)                  | VIP X1 XF, VIPX1600 XFM4,<br>VideoJet X10/20/40<br>VIP X1600<br>VIP X1/X2, VIP 10<br>VideoJet 8004/8008<br>VideoJet 10S, VideoJet 1000   |
| Supported and tested AXIS MPEG-4 IP cameras                                | 211, 211A, 211M, 221, 223M   |
| Supported Bosch JPEG IP cameras  | NWC-0700/0800 Megapixel IP camera<br>NWC-0900 Day/Night Megapixel IP camera  |
| Supported JPEG IP cameras from other manufacturers                         | IP cameras from Arecont Vision, Axis, Mobotix, Sony and other compatible cameras that support HTTP/TFTP and provide fixed path to JPEG image   |
| Maximum number of configured remote station at one receiver station        | 200 (can be configured, visible in devices list)   |
| Number of simultaneously connected remote stations at one receiver station | Maximum: 32<br>4 connections included free of charge<br>Expansion possible with BRS-XREM-01A / BRS-XREM-04A  |
| Supported Languages  | Czech, Danish, Dutch, German, Greek, English, Finnish, French, Hungarian, Italian, Norwegian, Polish, Portuguese, Russian, Spanish, Swedish and Turkish  |
| HTTP Browser Access (WAN)  | IIS must be installed and configured on the Bosch Recording Station. A custom HTTP port is possible.<br>ActiveX required on browser.<br>Maximum number of connections to one station: 3  |
| Supported operating systems  | <b>Windows XP Professional SP3</b> , 32-bit versions, .NET Framework 3.5 SP1 installed<br><b>Windows 7</b> , 32-bit versions (NetLimiter not supported)<br><b>Windows Server 2003</b> , 32-bit versions, .NET Framework 3.5 SP1 installed<br><b>Windows Server 2008</b> , 32-bit versions, Desktop Experience installed (NetLimiter not supported) |

**Minimum requirements for Workstation PCs running Bosch Recording Station (Recorder and Receiver)**

|                        |   |
|------------------------|---|
| Maximum recording rate | 50 Mbit/s   |
| CPU                    | Core 2 Duo CPU  |
| RAM                    | 2 GB  |
| Graphic Card           | 32-Bit color depth (DirectX 9 Hardware Support, no shared memory) |
| Free disk space        | 2 GB on system partition  |
| Recording partition    | Dedicated partition (e.g. D:) for recording                       |
| Network adapter        | 1000 Base-T, Gbit   |

**Graphic adapter recommendations**

|                      |   |
|----------------------|---|
| standard performance | NVIDIA FX380<br>NVIDIA FX580                    |
| high performance     | NVIDIA FX1700<br>NVIDIA FX1800<br>NVIDIA FX4800 |

**Minimum Requirements for server platforms running Bosch Recording Station (Recorder only)**

|                        |  |
|------------------------|--|
| Maximum recording rate | 100 Mbit/s (no local viewing)  |
| CPU                    | quad-core Intel Xeon 5504 processor (2.0 GHz)  |
| RAM                    | 4 GB   |
| Recording partition    | Dedicated partition (e.g. D:) for recording, storage expansion possible with disc arrays directly attached to internal SCSI port |
| Reference type numbers | MHW-S360xx-xx, MHW-S380xx-xx   |
| Reference HP servers   | DL360/DL380  |

**Device Compatibility / Integration features**

|   |  |
|---|--|
| Bosch Video Management System                     | Version 2.20 or later. Requires 1 Gbit/s connections to central server and workstation; communication via TCP Port 135 plus 4 TCP ports and 4 UDP ports dynamically assigned in the range from 1025 to 65535 |
| ATM integration                                   | DTP3N via RS232 (only EMEA)  |
| ATM/POS integration                               | Bosch ATM/POS bridge via TCP/IP  |
| IP server integration                             | Any IP server using socket connections for communication   |
| Alarm panel integration (intrusion, fire, access) | Integration via RS232: AZ1010, BZ500, BZ1012, BZ1060, FPA5000, G-Series Panels, NZ500, NZ1008, NZ1012, NZ1060, UEZ, UGM2020  |
| OPC server  | The DiBos 8 OPC server (v8.7) also supports Bosch Recording Station and must be installed separately. The installation file is included on the Setup DVD   |
| Virtual inputs                                    | External software can trigger events via virtual inputs over TCP/IP  |

**Ordering Information**

|   |                     |
|---|---------------------|
| <b>DVD Box + Manual 32 IP cameras</b><br>Recording Station DVD Box and Manual, Base License for 32 IP Cameras included        | <b>BRS-DVD-32A</b>  |
| <b>DVD Box + Manual 16 IP cameras</b><br>Recording Station DVD Box and Manual, Base License for 16 IP Cameras included        | <b>BRS-DVD-16A</b>  |
| <b>DVD Box + Manual without license</b><br>Recording Station DVD Box and Manual, without License                              | <b>BRS-DVD-00A</b>  |
| <b>Software Options</b>   |                     |
| <b>Base License 32 IP cameras</b><br>Recording Station Base License for 32 IP Cameras   | <b>BRS-BASE-32A</b> |
| <b>Base License 16 IP cameras</b><br>Recording Station Base License for 16 IP Cameras   | <b>BRS-BASE-16A</b> |
| <b>Base License 8 IP cameras</b><br>Recording Station Base License for 8 IP Cameras   | <b>BRS-BASE-08A</b> |
| <b>Base License 4 IP cameras</b><br>Recording Station Base License for 4 IP Cameras   | <b>BRS-BASE-04A</b> |
| <b>Expansion License 4 IP cameras</b><br>Recording Station Expansion License for 4 additional IP Cameras                      | <b>BRS-XCAM-04A</b> |
| <b>Expansion License 1 Remote Station</b><br>Recording Station Expansion License for 1 additional Remote Station Connection   | <b>BRS-XREM-01A</b> |
| <b>Expansion License 4 Remote Stations</b><br>Recording Station Expansion License for 4 additional Remote Station Connections | <b>BRS-XREM-04A</b> |
| <b>Feature License ATM POS bridge</b><br>Recording Station Feature License for ATM/POS Bridge Integration                     | <b>BRS-FATM-A</b>   |
| <b>Feature License IP Server</b><br>Recording Station Feature License for IP Server Socket Connections                        | <b>BRS-FIPS-A</b>   |
| <b>Feature License Alarm Panel</b><br>Recording Station Feature License for Security Panel Integration                        | <b>BRS-FPAN-A</b>   |
| <b>Feature License CD/DVD writing for Receiver</b><br>Receiver Station Feature License CD/DVD Writing                         | <b>BRS-FWRI-A</b>   |
| <b>30 day Demo License</b><br>Recording Station Demo License for 32 IP Cameras (expires after 30 days)                        | <b>BRS-DEMO-32A</b> |

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