

Monitor Wall

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Invented for life



- ▶ View multiple live cameras on large screens in your surveillance center
- ▶ Multi-channel decoder with up to four screens
- ▶ Screen layout independently configurable per display
- ▶ Compatible with BVMS
- ▶ Compatible with all Bosch IP cameras and encoders, and ONVIF and RTSP video sources

Monitor Wall displays video from Standard Definition (SD), High Definition (HD), 4K Ultra High Definition (UHD), and Megapixel (MP) cameras and encoders using H.264, H.265 or MPEG-4 encoding at up to 60 frames per second over IP networks on up to four HD or 4K screens.

Its scalable decoding technology and performance management architecture makes it easy for operators to simply connect cameras, regardless of resolution, bitrate, or frame rate. It automatically scales resources, distributing them over the connected streams to produce the best possible performance. Monitor Wall can be used in combination with BVMS or other VMS to enhance display capabilities especially for large control centers.

Together with the powerful video management software tools it is ideally suited for CCTV applications of any scale.

Monitor Wall software can be configured in many ways to match view representation expectations using Configuration Manager.

It also provides the possibility to exchange background images.

It supports secure access and connection setup and is easily integrated in IT management environments.

Depending on the performance of the PC and its graphic adapter, Monitor Wall can run a single, dual or quad screen with different screen layouts, reaching from full screen to 5x5 or 6x5 view on both screens, depending on screen aspect ratio. The screen layout can be switched manually or automated by the management system or client if e.g. an alarm scenario requires a different view.



Monitor Wall is available as software only to be installed on any high-performance PC of your choice, but for added convenience there is also a choice of recommended hardware solutions.

Functions

Decoding performance

The table below shows the maximum values which provide a guideline for performance design. There are dependencies that impact the overall performance, especially when combining various streams and resolutions (for example, upscaling to monitor resolution and frame rate). In an overload situation, Monitor Wall may drop frames to display overall video as smoothly as possible.

Note that the upscaling of video, for example SD or HD video to be displayed on a 4K UHD monitor, draws performance that reduces the decoding capabilities.

Reference hardware: Z2 G4 workstation with Nvidia Quadro P620

Stream parameters	Bit rate	Display output mode	
		4x HD@60Hz	
Resolution @ frame rate	Mbps	H.264	H.265
3840x2160@30	32	6	
3840x2160@25	32		5
2992x1680@30	16	9	
1920x1080@60	12	10	10
1920x1080@30	8	24	15
1280x720@60	6	10	10
1280x720@30	4	34	26
768@x32@30	2	44	
512x288@30	1	48	

Reference hardware: Z4 G4 workstation with Nvidia Quadro P4000

Stream parameters	Bit rate	Display output mode	
		4x 3840x2160 (60 Hz)	
Resolution @ frame rate	Mbps	H.264	H.265
3840x2160@30	32	8	
3840x2160@25	32		6
2992x1680@30	16	12	
1920x1080@60	12	10	10
1920x1080@30	8	22	20
1280x720@60	6	16	16

Stream parameters	Bit rate	Display output mode	
		4x 3840x2160 (60 Hz)	
Resolution @ frame rate	Mbps	H.264	H.265
1280x720@30	4	28	22
768@x32@30	2	38	
512x288@30	1	45	

Reference hardware: Z4 G4 workstation with Nvidia RTX4000

Stream parameters	Bit rate	Display output mode	
		4x 3840x2160 (60Hz)	
Resolution @ frame rate	Mbps	H.264	H.265
3840x2160@30	32	11	
3840x2160@25	32		8
2992x1680@30	16	18	
1920x1080@60	12	15	12
1920x1080@30	8	24	21
1280x720@60	6	17	15
1280x720@30	4	30	23
768x432@30	2	40	
512x288@30	1	46	

Technical specifications

System requirements

Hardware	Management workstation Z4 G2 or Z4 G4
Operating system	Windows 10 (64 bit)
Graphic card	Nvidia Quadro P620, P4000, or RTX 4000 (others refer to VideoSDK 6.3)
Ethernet card	1000 Mbps
Sound card	Recommended
Memory (RAM) (GB)	8 GB
Free space (MB)	200 MB

Recommended software for configuration	Configuration Manager 7.10 or newer
Recommended software for operation	BVMS 4.5.5 or newer. For 3 rd party software integration, check with IPP.

System integration

Encryption	TLS 1.2; TLS 1.0; TLS 1.1; AES
Protocols and interfaces	IPv4; IPv6; UDP; TCP; HTTP; HTTPS; RTSP; RTP

Video streaming

Frame rate (fps)	60 fps
Video compression	H.264 (ISO/IEC 14496-10); H.265/HEVC; MPEG-4

Ordering information

MVS-MW-2D Monitor Wall license for two displays
 Digital software solution to view many cameras on up to two state-of-the-art monitor screens
 Order number **MVS-MW-2D**

MVS-MW-4D Monitor Wall license for four displays
 Digital software solution to view many cameras on up to four state-of-the-art monitor screens
 Order number **MVS-MW-4D**

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