

DVS 1600 II IPS

SEDOR® Video Analysis Server Appliance, up to 24× IP Channels, supports up to 8× Analysis and 24× Recording

SEDOR®

SEDOR® is a high-performance and self-learning video analysis system which provides outstanding analytical results due to state-of-the-art image analysis algorithms and the constant adjustment of the system parameters to the current surrounding conditions (auto-adaptation). If used together with the different **analysis applications**, it can serve a variety of surveillance and counting purposes.



The **DVS 1600 II IPS** is a high-performance SEDOR® video analysis server appliance for the **analysis of up to 8** and the **recording of up to 24** IP-based video streams.

The dedicated analysis server software **DVS Analysis Server** is installed ex factory and can be configured using the integrated **SEDOR® WebGUI** with a browser via Ethernet. Together with the optional licenses for the various **SEDOR® analysis applications** (Intruder, Object Counting, Art) up to 8 IP-based video streams can be used for video analysis according to demand.

The integrated video server software **SMAVIA Recording Server** is suitable for the recording and playback of up to 24 IP-based video channels. The basic version with 8 IP-based recording channels can be expanded by up to 16 further IP-based recording channels with a license code. The corresponding software **SMAVIA Viewing Client** for Windows XP or 7 operating systems allows for the independent and convenient evaluation of the recordings over Ethernet (LAN/WAN).

The **DVS 1600 II** is a stand-alone device and can be installed and operated in a 19" rack using the optionally available 19" bracket.

Features DVS Analysis Server

- Up to 8 analysis channels supported
- Supports Dallmeier network cameras¹⁾
- SEDOR® analysis application Intruder optional
- SEDOR® analysis application Object Counting optional
- SEDOR® analysis application Art optional
- SEDOR® WebGUI for the analysis configuration via Ethernet integrated
- SEDOR® DiViStic display module for counting analyses optional
- SEDOR® camera sabotage protection optional
- Ethernet I/O Interface optional
- Ethernet 3D People Counter optional

Features SMAVIA Recording Server

- Licenses for **8 channels** included, expandable to up to 24 channels
- **Basic license** for the access of a **SMAVIA Viewing Client** included
- **Free conversion** of the **basic license** to a **floating license** on acquisition of additional access licenses
- License for **updating the SMAVIA software** for 12 months integrated
- License for **PRemote-HD** in real-time optional
- License for **ViProxy** optional
- License for the **recording of multicast video streams** included
- License for **real-time recording** included
- **Recording of 3rd-party IP cameras with motion detection** optional²⁾
- **Configuration of 3rd-party IP cameras via ONVIF protocol** optional²⁾
- Connection to **Active Directory** over LDAP
- Evaluation with **SMAVIA Viewing Client** over Ethernet

Hardware	
004781	DVS 1600 II IPS SEDOR® video analysis server appliance, up to 24× IP channels, supports up to 8× analysis and 24× recording

1) Please note the white paper **DVS Analysis Server & Camera Settings**.
 2) Please note the white paper **SMAVIA & 3rd Party IP Cameras**. Version 8.2.3 is equivalent to DMS 2400 version 8.1.3.

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Optional Licenses DVS Analysis Server	
004247	DLC - 1 Analysis Channel SEDOR® Art License for the simultaneous use of the applications SEDOR® Art and SEDOR® Camera Sabotage Protection for one channel
004248	DLC - 1 Analysis Channel SEDOR® Intruder License for the simultaneous use of the applications SEDOR® Intruder and SEDOR® Camera Sabotage Protection for one channel
004249	DLC - 1 Analysis Channel SEDOR® Object Counting License for the simultaneous use of the applications SEDOR® Object Counting and SEDOR® Camera Sabotage Protection for one channel
004210	DLC - 1 Analysis Channel SEDOR® Camera Sabotage Protection License for the detailed configuration, detection and reporting of covering, defocusing and twisting of the camera for one channel
000595	DLC - SEDOR® Event Matrix License for the use of the software interface for the connection of Ethernet I/O Interfaces
004192	DLC - SEDOR® 3D Counting License for the use of the software interface for the connection of an Ethernet 3D People Counter for 1 channel
004137	DLC - SEDOR® DiViStic License for the use of the module for the display of the results of up to 8 counting applications or devices

Integrated Licenses SMAVIA Recording Server	
DLC - 8 Recording Channel License for the use of 8 channels for recording with SMAVIA Recording Server	
DLC - 1 Basic Client Access License for the access of a SMAVIA Viewing Client to a SMAVIA Recording Server (basic license)	
DCP - DVS Software Maintenance 12 Months License for the update of the DVS Analysis Server software for 12 months	
DLC - SNMP License for the integration into a central SNMP device management system	
DLC - Multicast Recording License for recording the video streams of Dallmeier IP cameras transmitting over multicast	
DLC - Real-Time Recording License for real-time recording for all IP channels (depends on the camera)	

Optional Licenses SMAVIA Recording Server	
003782	DLC - 1 Additional Client Access License for the simultaneous access of a further SMAVIA Viewing Client on SMAVIA Recording Server (floating license)
004068	DLC - 5 Additional Client Access License for the simultaneous access of five further SMAVIA Viewing Clients on SMAVIA Recording Server (floating license)
004069	DLC - 10+ Additional Client Access (Unlimited) License for the simultaneous access of an unlimited number of SMAVIA Viewing Clients on SMAVIA Recording Server, depending on system load and bandwidth (floating license)
003783	DLC - 1 Additional Recording Channel License for the use of 1 additional channel for recording with SMAVIA Recording Server
003784	DLC - 2 Additional Recording Channel
003785	DLC - 4 Additional Recording Channel
003786	DLC - 8 Additional Recording Channel
004079	DLC - 12 Additional Recording Channel
004080	DLC - 16 Additional Recording Channel
004412	DLC - 3rd Party Package for 1 IP Channel License for recording (permanent or motion detection ³⁾) of the video stream of third-party IP cameras for 1 IP channel
004413	DLC - 3rd Party Package for 2 IP Channels
004414	DLC - 3rd Party Package for 4 IP Channels
004415	DLC - 3rd Party Package for 8 IP Channels
004416	DLC - 3rd Party Package for 12 IP Channels
004417	DLC - 3rd Party Package for 16 IP Channels
004418	DLC - 3rd Party Package for 24 IP Channels
004588	DLC - PRemote-HD for DVS Analysis Server License for the transmission of SD and HD video at low bandwidth, including a dedicated access license ⁴⁾ and the function for bidirectional audio transmission (intercom) via LAN/WAN
003800	DLC - RAID 1 License for the recording with RAID 1, 2× HDDs of the same capacity required (ex factory only)
003803	DLC - ViProxy License for the connection of a physically separate network for IP cameras, including authorisation management. In conjunction with SeMSy® III multicast streaming can also be used.

3) Please note the white paper **SMAVIA & 3rd Party IP Cameras**. Version 8.2.3 is equivalent to DMS 2400 version 8.1.3.

4) The first PRemote client (master) is assigned active control over the PRemote stream; further PRemote clients (slaves) receive the stream passively.

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Optional Hardware	
000077	HDD 1000 GB, SATA, 3.5" ⁵⁾
000084	HDD 2000 GB, SATA, 3.5" ⁵⁾
004551	HDD 4000 GB, SATA, 3.5" ⁵⁾
000178	Mounting of a HDD Mounting of a HDD, incl. function, long-term-, and final test, acceptance and approval
004429	DVD-RW Drive SATA (Teac) Writer DVD-RW, SATA, slimline, tray load (ex factory)
003877	DVD-RW Drive SATA (Teac) Retrofit Kit Writer DVD-RW, SATA, slimline, tray load (retrofit kit)
001739	Remote Ethernet I/O Interface ⁶⁾ Ethernet I/O Interface, 2× Ethernet, 6× relay (Moxa E1214)
004130	3D People Counter X6-PoE ⁷⁾ Ethernet 3D People Counter X6 installation height 2.5–6 m
004131	3D People Counter X6 ⁷⁾ Ethernet 3D People Counter X6 installation height 2.5–6 m
004139	3D People Counter X4 Kit ⁷⁾ Ethernet 3D People Counter X4 installation height 2.2–4 m, cable and power supply unit included

Maintenance and Warranty	
004193	DCP - DVS Software Maintenance 12 Months License for the update of the DVS Analysis Server software for further 12 months
003794	DCP - 36 Months „Bring-in“ Warranty Extension of the „Bring-in“ warranty period (without HDDs) to 36 months in total
003795	DCP - 48 Months „Bring-in“ Warranty Extension of the „Bring-in“ warranty period (without HDDs) to 48 months in total
003796	DCP - 60 Months „Bring-in“ Warranty Extension of the „Bring-in“ warranty period (without HDDs) to 60 months in total

5) Daily prices for hard disks can be found in the Dallmeier Partner Forum.

6) License 000595 required.

7) License 004192 required.

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Specifications

Components

CPU	Multi-Core
RAM	4 GB
Flash module	2 GB (for operating system only)
Hard disks	Max. 2× 3.5" HDD (optional)
Max. storage capacity	Currently up to 8 TB (without RAID)
Fan	3× with automatic speed adaptation
Power supply module	Integrated

Interfaces

Video OUT	1× Mini-D-SUB (resolution 1920 × 1080) 1× DVI-D (resolution 1920 × 1080)
AUX/Line IN	1× 3.5 mm phone jack
Microphone	1× 3.5 mm phone jack (for intercom, license 004588 required)
Audio OUT	1× 3.5 mm phone jack (for intercom, license 004588 required)
USB	8× USB 2.0 (7× rear side, 1× front side)
Ethernet 1	RJ45, 10/100/1000 Mbps
Ethernet 2	RJ45, 10/100/1000 Mbps (optional)
Ethernet protocols	IPv4, TCP, UDP, ARP, ICMP, DHCP, NTP, HTTP
Contact IN camera	24×, with 4 functions each (for IP cameras)
Contact IN global	6×, with 4 functions each
Relay OUT	5×, as NC or NO
Serial	2× RS232
PS/2	Mouse, keyboard

Electrical Data

Voltage supply	115/230 V AC ±10%, 50/60 Hz
Power consumption	Max. 145 W
Thermal output	Max. 495 BTU/h

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Ambient Data

Temperature	+ 5°C up to +40°C (41°F – 104°F)
Recommended temperature	+20°C up to +25°C (68°F – 77°F)
Humidity	5 – 70% RH, non-condensing
Atmospheric load	Dust-free

Approvals and Certifications

CE, UL, FCC, ACA, LGC Forensics, DIN EN 50130-4

Specifications DVS Analysis Server Software

Max. analysis channels	8 IP-based video channels
Supported cameras	IP cameras from Dallmeier ⁸⁾

Software

Operating system	Linux (proprietary, hardened)
Application	DVS Analysis Server Software
Application Language	English, German (others on request)
External configuration software	SEDOR® WebGUI

Licenses Applications

SEDOR® Art	optional
SEDOR® Intruder	optional
SEDOR® Object Counting	optional
SEDOR® Camera Sabotage Protection	optional

Licenses Functions

SEDOR® Event Matrix	optional
SEDOR® 3D Counting	optional
SEDOR® DiViStic	optional

8) Please note the white paper [DVS Analysis Server & Camera Settings](#).

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Specifications SMAVIA Recording Server

Software

Operating system	Linux (proprietary, hardened)
Application	SMAVIA Recording Server
Application language	English, German, French, Spanish, Italian (others on request)
External management software	SMAVIA Viewing Client
External configuration software	DMVC iPhone App (optional, license for PRemote-HD 004588 required) PService, NetConfig3

Performance in Connection with DVS 1600 II IPS

Channels	Licenses for 8 channels included, expandable to up to 24 channels
Supported cameras	Dallmeier IP cameras via TCP/DaVid (Dallmeier video protocol) Third-party IP cameras with RTSP streaming over UDP/RTP ⁹⁾
Track mode	Automatic
Video/Audio compression	H.264 / G.722.1
Resolutions SD IP	QCIF (176 × 144), CIF (352 × 288), Half D1 (352 × 576), 2CIF (704 × 288), 4CIF (704 × 576), D1 (720 × 576)
Resolutions HD IP	720p (1280 × 720), SXGA (1280 × 960), 2MP (1600 × 1200) 1080i (1920 × 1080), 1080p (1920 × 1080)
Resolutions megapixel	3MP (2048 × 1536), 4MP (2336 × 1744), 5MP (2592 × 1944), up to 8MP
Frame rate per SD IP channel	6.25 / 12.5 fps / 25 fps
Frame rate per HD IP channel	6.25 / 12.5 fps / 25 fps
Frame rate per RTSP IP channel	Up to 25 fps
Max. total bit rate	Up to 120 Mbps
Bit rate per SD IP channel	Up to 4Mbps
Bit rate per HD IP channel	Up to 6Mbps
Bit rate per RTSP IP channel	Up to 6Mbps

Features

Privacy Zones	Integrated (directly in Dallmeier IP cameras)
iPhone server	Integrated (PRemote-HD license 004588 required)

	3rd Party IP Camera	Dallmeier IP Camera
Recording¹⁰⁾		
Transport protocol	RTP over UDP	TCP
Communications protocol	RTSP	DaVid
Recording control with timer	integrated	integrated
Recording mode Constant	integrated	integrated
Recording mode Contact	in preparation	integrated
Recording mode Motion	integrated	integrated
Recording mode Motion/Contact	in preparation	integrated
Switching recording mode by timer	--	integrated

Functions¹⁰⁾

Motion detection	integrated	integrated
SmartFinder	integrated	integrated
Appliance as video proxy	integrated	integrated
Appliance as multicast streamer	integrated	integrated
PRemote-HD	integrated	integrated
iPhone Server	integrated	integrated
PTZ control local	in preparation	integrated
PTZ control with SMAVIA Viewing Client	in preparation	integrated
Camera configuration	integrated	integrated
Locking the camera configuration	--	integrated
Audio recording	--	integrated
Recording of multicast video streams	--	integrated

9) Optional licenses required: **3rd Party Package** 004412 to 004418. Please note the white paper **SMAVIA & 3rd Party IP Cameras**.

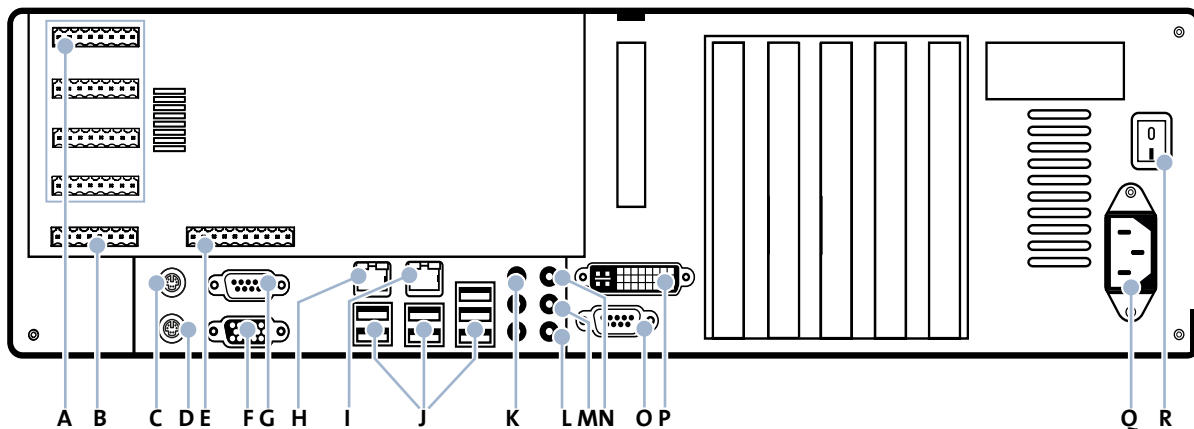
10) Data refer to a fully equipped appliance. Optional licenses are required.

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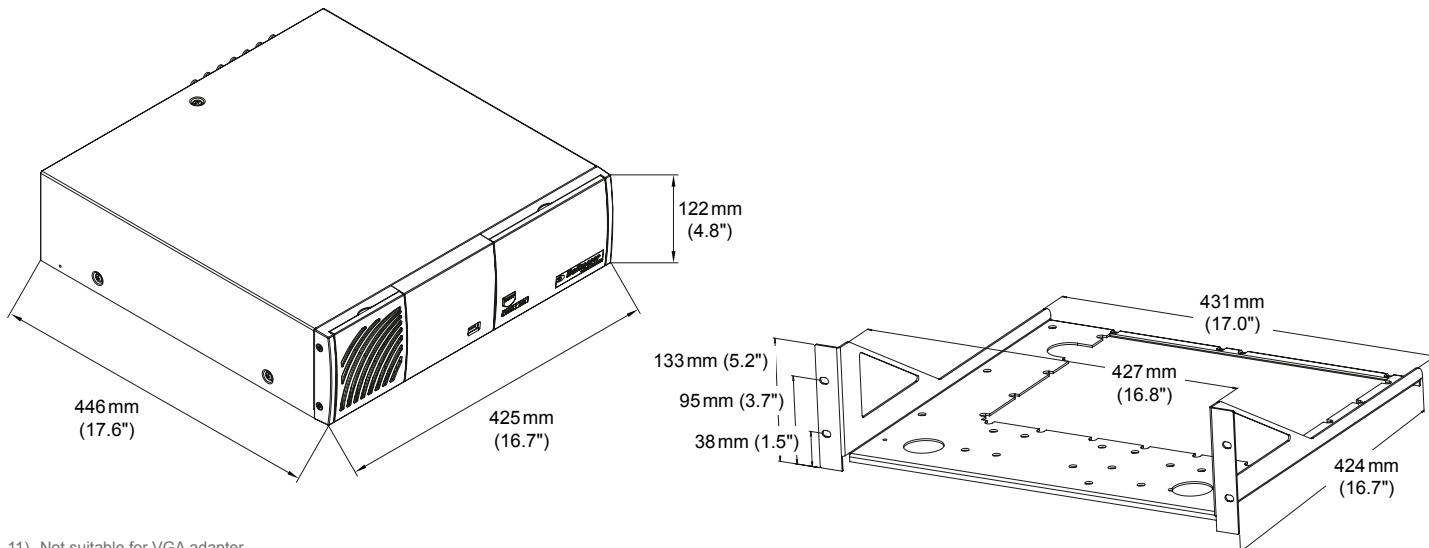
Connections

The following illustration shows hardware with optional components (full range of equipment).



- | | |
|--|---|
| <p>A Contact IN Cameras (1-6/7-12/13-16)
4× Weidmüller, 8 pins</p> <p>B Contact IN global (1-6)
Weidmüller, 8 pins</p> <p>C Mouse
PS/2, green</p> <p>D Keyboard
PS/2, violet</p> <p>E Relay OUT (1-5)
Weidmüller, 10 pins</p> <p>F Video OUT
Mini-D-SUB, 15-pole, 1920 × 1080 (configuration and LocalViewing)</p> <p>G Serial Interface COM 1
D-SUB, 9 pins, 1× RS232</p> <p>H Ethernet Interface 2
RJ45, 10/100/1000 Mbps (optional)</p> <p>I Ethernet Interface 1
RJ45, 10/100/1000 Mbps</p> | <p>J USB Interface
7× USB 2.0, type A</p> <p>K 3,5 mm Phone Jack
3×, not active</p> <p>L Microphone IN
3,5 mm phone jack, red, 4,3kOhm, 2,828V_{pp}</p> <p>M Audio OUT
3,5 mm phone jack, green, 1 kOhm, 2,828V_{pp}</p> <p>N AUX / Line IN
3,5 mm phone jack, blue, 16 kOhm, 2,828V_{pp}</p> <p>O Serial Interface COM 2
D-SUB, 9 pins, 1× RS232</p> <p>P Video OUT DVI¹¹⁾
Dual-Link (24 + 5), DVI-D, 1920 × 1080 (Configuration and LocalViewing)</p> <p>Q Mains Connection
IEC C14 socket, 115/230 V AC ±10%, 50/60 Hz</p> <p>R Mains Switch</p> |
|--|---|

Dimensions



11) Not suitable for VGA adapter.