

# DVS 1600 II

SEDOR® Video Analysis Server Appliance, up to 16× Analog Channels, supports up to 16× Analysis and 16× 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** is a SEDOR® video analysis server appliance for the **analysis of up to 16** and the **recording of up to 16** analog video channels.

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 16 analog 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 16 analog video channels. The recording licenses are integrated according to the selected hardware variant.

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 16 analysis channels
- 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

- Channel licenses integrated according to hardware variant
- **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
- Connection to **Active Directory** over LDAP
- Evaluation with **SMAVIA Viewing Client** over Ethernet

## Hardware

004780.401	<b>DVS 1600 II</b> SEDOR® video analysis server appliance, 8× analog channels, supports up to 8× analysis and 8× recording, without HDDs
004780.402	<b>DVS 1600 II</b> SEDOR® video analysis server appliance, 16× analog channels, supports up to 16× analysis and 16× recording, without HDDs

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Optional Licenses DVS Analysis Server	
004247	<b>DLC - 1 Analysis Channel SEDOR® Art</b> License for the simultaneous use of the applications SEDOR® Art and SEDOR® Camera Sabotage Protection for one channel
004248	<b>DLC - 1 Analysis Channel SEDOR® Intruder</b> License for the simultaneous use of the applications SEDOR® Intruder and SEDOR® Camera Sabotage Protection for one channel
004249	<b>DLC - 1 Analysis Channel SEDOR® Object Counting</b> License for the simultaneous use of the applications SEDOR® Object Counting and SEDOR® Camera Sabotage Protection for one channel
004210	<b>DLC - 1 Analysis Channel SEDOR® Camera Sabotage Protection</b> License for the detailed configuration, detection and reporting of covering, defocusing and twisting of the camera for one channel
000595	<b>DLC - SEDOR® Event Matrix</b> License for the use of the software interface for the connection of Ethernet I/O Interfaces
004192	<b>DLC - SEDOR® 3D Counting</b> License for the use of the software interface for the connection of an Ethernet 3D People Counter for 1 channel
004137	<b>DLC - SEDOR® DiViStic</b> 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	
<b>DLC - 8/16 Recording Channel<sup>1)</sup></b> License for the use of 8/16 channels for recording with SMAVIA Recording Server	
<b>DLC - 1 Basic Client Access</b> License for the access of a SMAVIA Viewing Client to a SMAVIA Recording Server (basic license)	
<b>DCP - DVS Software Maintenance 12 Months</b> License for the update of the DVS Analysis Server software for 12 months	
<b>DLC - SNMP</b> License for the integration into a central SNMP device management system	

Optional Licenses SMAVIA Recording Server	
003782	<b>DLC - 1 Additional Client Access</b> License for the simultaneous access of a further SMAVIA Viewing Client on SMAVIA Recording Server (floating license)
004068	<b>DLC - 5 Additional Client Access</b> License for the simultaneous access of five further SMAVIA Viewing Clients on SMAVIA Recording Server (floating license)
004069	<b>DLC - 10+ Additional Client Access (Unlimited)</b> 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)
004588	<b>DLC - PRemote-HD for DVS Analysis Server</b> License for the transmission of SD and HD video at low bandwidth, including a dedicated access license <sup>2)</sup> and the function for bidirectional audio transmission (intercom) via LAN/WAN
003800	<b>DLC - RAID 1</b> License for the recording with RAID 1, 2× HDDs of the same capacity required (ex factory only)

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

1) The number of the integrated recording channels depends on the variant.  
 2) The first PRemote client (master) is assigned active control over the PRemote stream; further PRemote clients (slaves) receive the stream passively.  
 3) Daily prices for hard disks can be found in the Dallmeier Partner Forum.  
 4) License 000595 required.  
 5) License 004192 required.

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

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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 IN	16× BNC/CVBS with loop-through
Video OUT	4× BNC/CVBS with loop-through 1× Mini-D-SUB (resolution 1920 × 1080) 1× DVI-D (resolution 1920 × 1080)
Audio IN	16× via D-SUB/Cinch adapter
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 analogue 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	Variant with 8 channels: Max. 155 W (529 BTU/h) Variant with 16 channels: Max. 165 W (563 BTU/h)
Thermal output	Variant with 8 channels: Max. 529 BTU/h Variant with 16 channels: Max. 563 BTU/h

### Mechanical Data

Dimensions (W × H × D)	Approx. 425 × 130 × 446 mm (16.7" × 5.1" × 17.6") with feet Approx. 425 × 122 × 446 mm (16.7" × 4.8" × 17.6") without feet
Weight	Approx. 12 kg (26 lb) with 2 HDDs

### 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	8/16× analog video channels
Supported cameras	Analog Dallmeier and 3 <sup>rd</sup> -party cameras

### 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

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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

Channels	Licenses for 8/ 16 channels integrated <sup>6)</sup>
Supported cameras	Analog Dallmeier and 3 <sup>rd</sup> -party cameras
Track mode	Automatic
Video / audio compression	H.264 / G.722.1
Resolutions	QCIF (176 × 144), CIF (352 × 288), DCIF (528 × 384), 2CIF (704 × 288), 4CIF (704 × 576)
Frame rate per channel	Up to 12 fps at 4CIF Up to 16 fps at DCIF Up to 16 fps at 2CIF Up to 25 fps at CIF Up to 25 fps at QCIF
Max. total bit rate	Up to 48 Mbps
Bit rate per channel	Up to 2 Mbps

### Features

Privacy Zones	Integrated
iPhone Server	Integrated (license for PRemote-HD 004588 required)

	Analog Camera
<b>Recording<sup>7)</sup></b>	
Transport protocol	CVBS
Communications protocol	--
Recording control with timer	integrated
Recording mode Constant	integrated
Recording mode Contact	integrated
Recording mode Motion	integrated
Recording mode Motion/Contact	integrated
Switching recording mode by timer	--

### Functions<sup>7)</sup>

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

6) The number of the integrated recording channels depends on the variant.

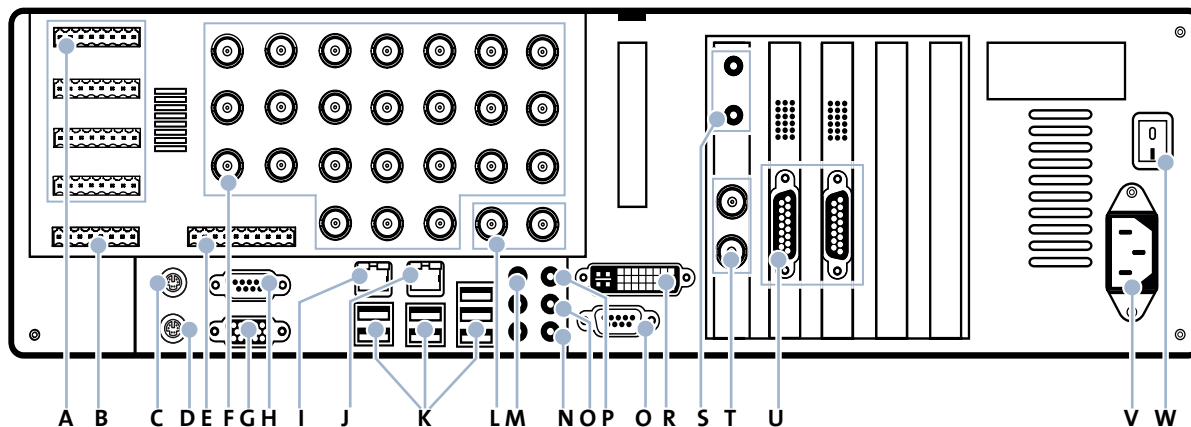
7) Data refer to a fully equipped appliance. Optional licenses are required.

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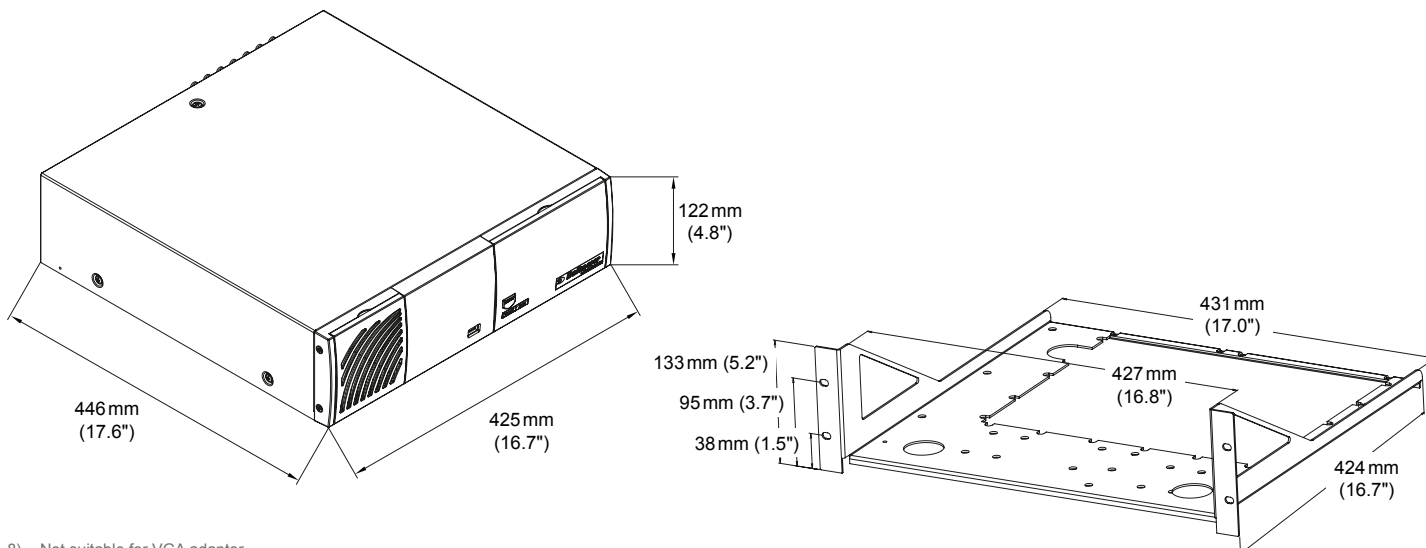
## Connections

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



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| <p><b>A Contact IN Cameras (1-6/7-12/13-16)</b><br/>4× Weidmüller, 8 pins</p> <p><b>B Contact IN global (1-6)</b><br/>Weidmüller, 8 pins</p> <p><b>C Mouse</b><br/>PS/2, green</p> <p><b>D Keyboard</b><br/>PS/2, violet</p> <p><b>E Relay OUT (1-5)</b><br/>Weidmüller, 10 pins</p> <p><b>F Video IN (1-16)</b><br/>BNC, 75 Ohm, 1 V<sub>pp</sub>, with loop-through, CVBS</p> <p><b>G Video OUT</b><br/>Mini-D-SUB, 15-pole, 1920 × 1080 (configuration and LocalViewing)</p> <p><b>H Serial Interface COM 1</b><br/>D-SUB, 9 pins, 1× RS232</p> <p><b>I Ethernet Interface 2</b><br/>RJ45, 10/100/1000 Mbps (optional)</p> <p><b>J Ethernet Interface 1</b><br/>RJ45, 10/100/1000 Mbps</p> <p><b>K USB Interface</b><br/>7× USB 2.0, type A</p> <p><b>L Video OUT (1-2)</b><br/>BNC, 75 Ohm, 1 V<sub>pp</sub>, CVBS (only LocalViewing, no configuration)</p> | <p><b>M 3,5 mm Phone Jack</b><br/>3×, not active</p> <p><b>N Microphone IN</b><br/>3,5 mm phone jack, red, 4,3 kOhm, 2,828 V<sub>pp</sub></p> <p><b>O Audio OUT</b><br/>3,5 mm phone jack, green, 1 kOhm, 2,828 V<sub>pp</sub></p> <p><b>P AUX / Line IN</b><br/>3,5 mm phone jack, blue, 16 kOhm, 2,828 V<sub>pp</sub></p> <p><b>Q Serial Interface COM 2</b><br/>D-SUB, 9 pins, 1× RS232</p> <p><b>R Video OUT DVI<sup>8)</sup></b><br/>Dual-Link (24 + 5), DVI-D, 1920 × 1080 (configuration and LocalViewing)</p> <p><b>S 3,5 mm Phone Jack</b><br/>2×, not active</p> <p><b>T Video OUT (3-4)</b><br/>BNC, 75 Ohm, 1 V<sub>pp</sub>, CVBS (same signal as Video OUT 1 and 2 (L))</p> <p><b>U Audio IN (1-8/9-16)</b><br/>D-SUB, 15-pole, 1 kOhm, 2,828 V<sub>pp</sub> (for D-SUB/Cinch adapter cable)</p> <p><b>V Mains Connection</b><br/>IEC C14 socket, 115/230 V AC ±10%, 50/60 Hz</p> <p><b>W Mains Switch</b></p> |
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## Dimensions



8) Not suitable for VGA adapter.