

IPS 10 000

SMAVIA Appliance for up to 100 Channels, 8x 3.5" HDD, 3 RU



Up To 100 Channels

Storage System

SeMSy® III Integration

Open Platform

The appliance **IPS 10 000** combines the proven and extended VideoIP software **SMAVIA Recording Server** with a reliable and high-performance **server hardware**. Best matched components ensure high storage speed and thus allow the recording of **up to 100 HD video channels in real-time**. The integrated RAID 6 storage system already provides a high storage capacity and can be expanded by an external RAID 6 JBOD system. Thereby this appliance is the optimal recording system for large video installations in **stadiums, shopping malls, casinos or convention centres**.

Storage System

The **IPS 10 000** has **eight HDD bays** on the front side. Equipped with eight of the optionally offered 8 TB server hard disk drives, already a **RAID 6 storage capacity of 48 TB** can be achieved for the recordings. In connection with the external RAID 6 system **SMAVIA Enterprise JBOD - 12/24**, the capacity can be expanded by **additional 80/176 TB**.

SeMSy® III Integration

The appliance is factory fitted with the license **SeMSy® Flat**. Thus, it is optimally equipped for the integration into the storage system of a **SeMSy® III video management system**. The appliance supports the complete SeMSy® III functional range including the convenient evaluation of the recordings on a **SeMSy® III Workstation**.

SMAVIA Viewing Client

The software **SMAVIA Viewing Client** allows for the independent and convenient evaluation of the recordings over the network. It can be run on workstations with Windows operating systems and is included in the **scope of delivery of the appliance with two access licenses**.

DMVC Server

The integrated **DMVC Server Software** permits the access with the mobile app **Dallmeier Mobile Video Center**, that is available for iOS or Android operating systems. The display of live images and playback of recordings follow a special procedure which is **independent of the recording settings** of the appliance.

Open Platform


The pre-installed software **SMAVIA Recording Server** is designed as an open platform. Together with the according licenses, **third-party network cameras** can be recorded with **motion detection** and configured over the **ONVIF protocol**.

Features Hardware

- High performance server hardware with **multi-core CPU**
- **Flash module** for operating system and application
- Suitable for up to 100 SD, HD or megapixel video channels
- High storage capacity due to integrated RAID 6 storage system
- Extended capacity with optional RAID 6 JBOD system
- High recording speed due to concerted components
- Components optimized for **SMAVIA Recording Server**
- Brackets for 19" rack included in delivery
- Redundant power supply units optional¹⁾

Features SMAVIA Recording Server

- Recording of up to **100 HD channels** or **Panamera® Channels**
- **Licenses** for the recording of **32 channels** included
- **Two licenses** for the access with **SMAVIA Viewing Client** included
- License for **updating the SMAVIA software** for 24 months included
- License for **SEDOR® Camera Sabotage Protection** included
- License for **EdgeStorage & SmartBackfill** included
- License for **multicast recording** included
- Recording of **third-party IP cameras** with **motion detection** optional
- Configuration of **third-party IP cameras** via **ONVIF protocol** optional
- Evaluation with **SMAVIA** or **SeMSy®** over the network (WAN/LAN)
- Evaluation with **DMVC App** over the network (WAN/LAN)²⁾

Appliance	
005753	 <p>IPS 10000 SMAVIA appliance for the recording of up to 100 channels, licenses for 32 channels included, two licenses for the access with SMAVIA Viewing Client included, without HDDs</p>

1) PSU 1 and 2 included in scope of delivery (no redundant operation). PSU 3 for redundant operation optionally available (hardware 004064).
2) Optional license **PRemote-HD** (004762) required.

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Integrated SMAVIA Recording Server Licenses	
DLC - 32 Recording Channels	License for the use of 32 channels for the recording of HD cameras or Panomera® Channels
DLC - 2 Client Accesses	License for the simultaneous access of two SMAVIA Viewing Clients to SMAVIA Recording Server (floating license)
DCP - Software Maintenance 24 Months	License for the update of the SMAVIA software for 24 months
DLC - SEDOR® Camera Sabotage Protection	Detection and reporting of covering, defocusing and twisting of cameras
DLC - EdgeStorage & SmartBackfill	License for the storage of video streams that have been buffered by Dallmeier IP cameras with EdgeStorage
DLC - SNMP	License for the integration into a central SNMP device management system
DLC - SeMSy® Flat	License for the integration into a SeMSy® III video management system
DLC - Multicast Streaming	License for the transmission of video streams via multicast in a SeMSy® III video management system
DLC - Multicast Recording	License for the recording of video streams of Dallmeier IP cameras using multicast transmission
DLC - Real-Time Recording	License for real-time recording for all IP channels (depending on the camera)
DLC - RAID 6	License for the recording with RAID 6

Optional SMAVIA Recording Server Licenses (Access)	
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)

Optional SMAVIA Recording Server Licenses (Channels)	
005754	DLC - 1 Additional Recording Channel License for the use of one additional channel for the recording of HD cameras or Panomera® Channels
005755	DLC - 3rd Party Package for 1 Recording Channel License for the use of one existing channel for the recording (permanent, contact triggered or with motion detection) of third-party network cameras






Optional SMAVIA Recording Server Licenses (General)	
003801	DLC - PRemote-HD License for the transmission of SD and HD video with low bandwidth, including a dedicated access license ³⁾ and the function for bidirectional audio transmission (intercom) via LAN/WAN
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
004685	DLC - LAN Interface for Data Reception License for the reception of the data from third-party systems (AWEK POS systems and NPC II protocol converter) over the network interface; includes linking, storing and displaying the data with the video recordings
006293	DLC - High-Speed Recording >30 fps License for the recording of Dallmeier network cameras with a frame rate of more than 30 fps.


Maintenance and Warranty	
005974	DCP - Software Maintenance 12 Months (IPS 10 000) License for the update of the SMAVIA software for further 12 months
005975	DCP - 36 Months Bring-in Hardware Warranty and Software Maintenance (IPS 10 000) Extension of the bring-in warranty period (without HDDs) to 36 months in total, incl. license for the update of the SMAVIA software
005976	DCP - 48 Months Bring-in Hardware Warranty and Software Maintenance (IPS 10 000) Extension of the bring-in warranty period (without HDDs) to 48 months in total, incl. license for the update of the SMAVIA software
005977	DCP - 60 Months Bring-in Hardware Warranty and Software Maintenance (IPS 10 000) Extension of the bring-in warranty period (without HDDs) to 60 months in total, incl. license for the update of the SMAVIA software





3) 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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Options Hardware	
000178	Mounting of a HDD Mounting of a HDD, incl. function, long-term-, and final test, acceptance and approval
006664	 HDD 2000 GB, SATA, 3.5"⁴⁾
006158	 HDD 4000 GB, SATA, 3.5"⁴⁾
006569	 HDD 6000 GB, SATA, 3.5"⁴⁾
006632	 HDD 8000 GB, SATA, 3.5"⁴⁾
004064	 DPM-150W Power supply module 150 W, 115/230 V AC ±5%, 50/60 Hz

Option Network Contacts	
005142	DLC - Ethernet I/O Interface for SMAVIA License for the use of the software interface for the connection of the Ethernet I/O interfaces MOXA ioLogik E1210 (16 contacts) or MOXA ioLogik E1214 (6 contacts, 6 relays).
001739	 Remote Ethernet I/O Interface Ethernet I/O Interface, 2× Ethernet, 6× contact, 6× relay (MOXA ioLogik E1214)

Option Storage Extension	
005756	DLC - JBOD Storage Extension License for the use of the software interface for the connection of a SMAVIA Enterprise JBOD storage extension
006245	 MegaRAID Controller Kit RAID controller board for the connection of a JBOD storage extension, Battery Backup Unit (BBU) for the power supply of the cache in case of short-term power outages includes, available ex factory only
006193	 BBU-08 for MegaRAID Controller⁵⁾ Battery Backup Unit (BBU) for the power supply of the cache on the RAID Controller Board in case of short-term power outages
004959	 SMAVIA Enterprise JBOD - 12 ⁶⁾ Storage extension, 2RU rack-mount, for up to 12 hard disks, RAID 6, 1× cable SFF-8088, 2× PSUs, without hard disks
004960	 SMAVIA Enterprise JBOD - 24 ⁶⁾ Storage extension, 4RU rack-mount, for up to 24 hard disks, RAID 6, 1× cable SFF-8088, 2× PSU, without hard disks

4) The appliance has to be equipped with at least 6 identical SATA hard disk drives in order to ensure the required storage speed.
 5) The Battery Backup Unit (BBU) has to be replaced after 36 months. The BBU is essential for the proper operation of the RAID controller.
 6) The SMAVIA Enterprise JBOD has to be equipped with at least 6 identical SATA hard disk drives in order to ensure the required storage speed. The JBOD system has its own RAID system. A RAID array with the internal hard drives of the appliance is not supported.

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Components	
CPU	Multi-Core
RAM	16 GB
Flash module	8 GB (for operating system and application)
Hard disks	Up to 8× 3.5" HDD (optional)
Max. storage capacity	Currently up to 48 TB (RAID 6)
Fan	3× with automatic speed adaptation
Power supply unit 1	Integrated
Power supply unit 2	Integrated
Power supply unit 3	Optional (hardware 004064, required for redundant operation)

Interfaces	
Video OUT	2× DisplayPort, only for configuration 1× DVI, only for configuration
AUX / Line IN	1× 3.5 mm phone jack
Microphone IN	1× 3.5 mm phone jack (for intercom, license 003801 required)
Audio OUT	1× 3.5 mm phone jack (for intercom, license 003801 required)
USB	2× USB 3.0 (rear side) 6× USB 2.0 (rear side) 1× USB 2.0 (front side)
Ethernet 1	RJ45, 10/100/1000 Mbps
Ethernet 2	RJ45, 10/100/1000 Mbps (optional, license 003803)
Ethernet protocols	IPv4, TCP, UDP, ARP, ICMP, DHCP, NTP, HTTP
Contact IN	4×, with galvanic isolation, only for switch / push button (dry contact), with 4 functions each
Relay OUT	4×, with galvanic isolation, max. 12 V DC / 24 V AC / 0,5 A, 150 mOhm, as NC or NO
SATA interface	RAID controller board for SMAVIA Enterprise Storage JBOD storage extension (optional)
PS/2	Mouse, keyboard

Electrical Data	
Voltage supply	115/230 V AC ±5%, 50/60 Hz
Power consumption	Max. 230 W
Thermal output	Max. 785 BTU/h

Mechanical Data	
Dimensions (W × H × D)	Approx. 483 × 133 × 533 mm (19.0 × 5.3 × 21.0 inches)
Weight	Approx. 20 kg (44 lbs) with 8 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	
Type	CE, UL, FCC, ACA, LGC Forensics, DIN EN 50130-4

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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, SeMSy® III Workstation Software DMVC App (optional, license for PRemote-HD 003801 required)
External configuration software	PService ⁷⁾
ONVIF compliance	Profile S ⁸⁾

Performance in connection with IPS 10 000	
Channels	Up to 100x IP channels (SD, HD, megapixel)
Supported cameras	Dallmeier Panomera® multifocal sensor systems Dallmeier IP cameras over TCP/DaVid (Dallmeier video protocol) Third-party IP cameras with RTSP streaming over UDP/RTP or TCP ⁸⁾
Track mode	Automatic
Video/Audio compression	H.264 / G.722.1
Resolutions SD IP	QCIF (176 x 144), CIF (352 x 288), Half D1 (352 x 576), 2CIF (704 x 288), 4CIF (704 x 576), D1 (720 x 576)
Resolutions HD IP	720p (1280 x 720), SXGA (1280 x 960), 2 MP (1600 x 1200) 1080i (1920 x 1080), 1080p (1920 x 1080)
Resolutions megapixel	3 MP (2048 x 1536), 4 MP (2336 x 1744), 5 MP (2592 x 1944), up to 12 MP
Frame rate per channel	Up to 25/30 fps, depending on the camera
Bit rate per channel	Up to 50 Mbps, depending on the camera
Max. total bit rate	Up to 400 Mbps

Recording ⁹⁾	3rd Party IP Camera	Dallmeier IP Camera
Transport protocol	RTP over UDP	TCP
Communications protocol	RTSP	DaVid
Recording control with timer	integrated	integrated
Recording mode Constant	integrated	integrated
Recording mode Contact	integrated	integrated
Recording mode Motion	integrated	integrated
Recording mode Motion/Contact	integrated	integrated
Switching mode by timer	--	integrated

Functions ⁹⁾	3rd Party IP Camera	Dallmeier IP Camera
Motion detection	integrated	integrated
SmartFinder	integrated	integrated
Appliance as video proxy	integrated	integrated
Appliance as SeMSy® III multicast streamer	integrated	integrated
PRemote-HD	integrated	integrated
DMVC Server	integrated	integrated
PTZ control with SMAVIA Viewing Client	integrated	integrated
Audio recording	integrated ¹⁰⁾	integrated
Camera configuration	integrated	integrated
Locking the camera configuration	--	integrated
Recording of multicast video streams	--	integrated
EdgeStorage&SmartBackfill	--	integrated
Network scan (IP Finder)	--	integrated
VCA database	--	integrated

7) A monitor with a minimum resolution of 1200x800 pixels is required for the configuration with PService/NetConfig 3.

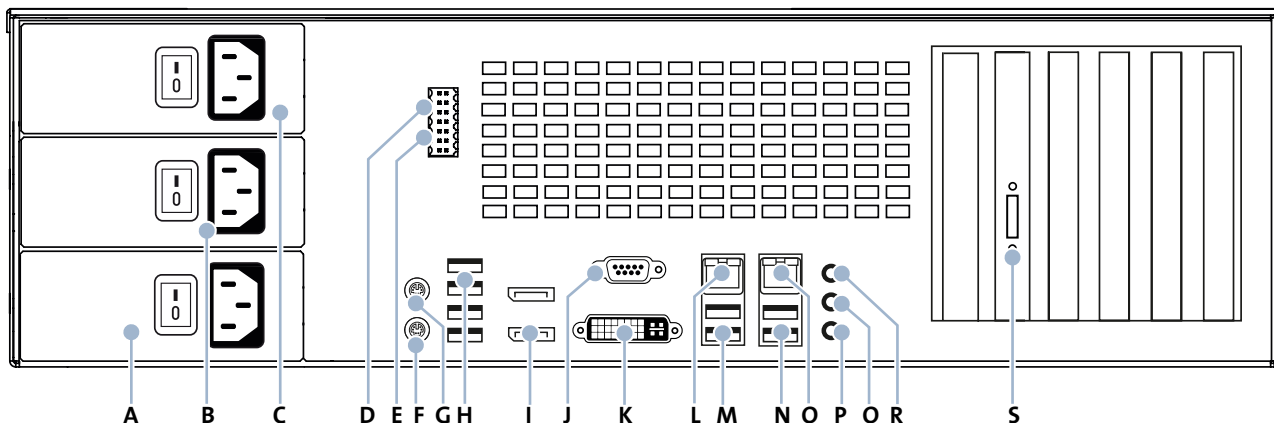
8) Optional licenses required: **3rd Party Package** 004412 to 004418.

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

10) Depending on the camera. The audio stream has to be supplied in the G.711 format.

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| <p>A Power Supply Unit 1
IEC C14 socket, 115/230V AC ±5%, 50/60 Hz</p> <p>B Power Supply Unit 2
IEC C14 socket, 115/230V AC ±5%, 50/60 Hz</p> <p>C Power Supply Unit 3
IEC C14 socket, 115/230V AC ±5%, 50/60 Hz (optional)</p> <p>D Relay OUT (1-4)
Weidmüller socket, 8 pins, max. 12V DC/24V AC/0,5A, 150 mOhm</p> <p>E Contact IN (1-4)
Weidmüller socket, 6 pins, only for switch / push button (dry contact)</p> <p>F Keyboard
PS/2, purple</p> <p>G Mouse
PS/2, green</p> <p>H USB Interface
4x USB 2.0, type A</p> <p>I Video OUT Interface
2x DisplayPort (configuration)</p> <p>J Serial Interface COM 1
D-SUB, 9 pins, 1x RS232</p> | <p>K Video OUT Interface
DVI-D, Dual Link (24 + 5), 1920 × 1080 (configuration)</p> <p>L Ethernet Interface 2
RJ45, 10/100/1000Mbps (optional)</p> <p>M USB Interface
2x USB 3.0, type A</p> <p>N USB Interface
2x USB 2.0, type A</p> <p>O Ethernet Interface 1
RJ45, 10/100/1000Mbps</p> <p>P Microphone IN
3.5 mm phone jack, red, 4.3 kOhm, 2.828 V_{pp}</p> <p>Q Audio OUT
3.5 mm phone jack, green, 1 kOhm, 2.828 V_{pp}</p> <p>R AUX / Line IN
3.5 mm phone jack, blue, 16 kOhm, 2.828 V_{pp}</p> <p>S SATA Interface
RAID controller board for SMAVIA Enterprise Storage JBOD storage extension (optional)</p> |
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