

VideoNetBox III

SMAVIA appliance for the recording of up to 16 video streams, compact, fanless, energy efficient, 2x 2.5" HDD



The VideoNetBox III appliance combines the proven recording software SMAVIA Recording Server (V9) with a compact, fanless and energy efficient server hardware. Perfectly tuned components ensure excellent passive cooling and allow for the recording of up to 16 high-definition video streams at a frame rate of 30 fps. This appliance is therefore ideally suited for video security systems in shops, petrol stations or private houses, which require the highest recording quality and minimum space without any noise development.

Storage System

The VideoNetBox III has two lockable bays for 2.5" hard disk drives on the front side. These are used exclusively for recording. The hardened Linux operating system and the SMAVIA Recording Server application are installed on a separate flash module. Equipped with two of the optionally offered 4 TB SSDs, a storage capacity of 8 TB is available.

SeMSy® Compact

SeMSy® Compact allows independent and convenient evaluation of the recordings over the network. The software can be installed on workstations with Windows operating system and adjusted individually. Two licenses for access with clients are already included in the scope of delivery of the appliance.

DMVC Server

The optional DMVC Server function provides access with the mobile Dallmeier Mobile Video Center app, 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.

PRemote-HD

The optional PRemote-HD function transcodes high-definition video streams (live and playback) for transmission in low-bandwidth networks. This allows the resource-conserving access with Dallmeier Client Software which is independent of the recording settings. The license for PRemote-HD also includes the license for the DMVC Server function.

VCA Data Base

The appliance is equipped with a database for the analysis results of Dallmeier network cameras with VCA technology. The events, objects and classes sent by the camera are stored with the relevant metadata almost in real-time. Dallmeier Client Software is available for the targeted search and evaluation of the events with the Smart-Finder function.

SmartBackfill

Dallmeier network cameras are equipped with RAM memory that is used by the EdgeStorage function to store the video stream in case of a network failure (e.g. Spanning Tree, Bursts). When the network is restored, the SmartBackfill feature ensures fast transfer to the SMAVIA recording system. This stores the video stream at high speed and then seamlessly continues recording the live stream.

Open Platform

The pre-installed SMAVIA Recording Server software 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









- Compact and fanless server hardware
- Passive cooling over aluminium housing
- Flash module for operating system and application
- Two lockable HDD bays on the front side
- Highly efficient system with low power consumption
- Mounting rails and power supply included in delivery

Features SMAVIA Recording Server

- Recording of up to 16 high-resolution video streams
- Licenses for the recording of 2 video streams included
- Licenses for access with 2 clients included
- Licenses for the update of the software for 24 months included
- Recording of 3rd party network cameras optional
- Direct evaluation with LocalViewing optional
- Evaluation with DMVC App over WAN/LAN optional
- Evaluation with SeMSy® Compact/Workstation over WAN/LAN
- Basic license for integrated data protection and data security module (GDPR-compliant) included

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Appliance	
	006769 VideoNetBox III SMAVIA appliance for the recording of up to 16 video streams, licenses for the recording of 2 video streams included, licenses for the access with 2 clients included, without HDDs
Options Hardware	
	000178 Mounting of a HDD Mounting of a HDD, incl. function, long-term-, and final test, acceptance and approval
	008356 HDD 1000 GB, SATA, 2.5"
	006248 HDD 2000 GB, SATA, 2.5"
	008601 SSD 960 GB, SATA, 2.5"
	008391 SSD 2000 GB, SATA, 2.5"
	008279 SSD 4000 GB, SATA, 2.5"
Option Network Contacts	
	005142 DLC - Ethernet I/O Interface License for the use of the software interface for the connection of the Ethernet I/O interfaces MOXA ioLogik E1210 (16 contacts), E1212 (8 contacts, 8 DI/Os) or E1214 (6 contacts, 6 relays)
	001739 Remote Ethernet I/O Interface Ethernet I/O Interface, 2x Ethernet, 6x contact, 6x relay (MOXA ioLogik E1214)
Option DNI Interface	
	007522 USB to Serial Adapter Programmed and certified adapter cable for the connection of a Dallmeier DNI interface to a VideoNetBox III or to a DMS 2400, USB 2.0 type A, RS232 D-Sub 9 pins, length 1m

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Included Licenses

DLC - 2 Recording Channels

License for the recording of two high-definition video streams

DLC - 2 Client Access

License for the simultaneous access of two clients to SMAVIA Recording Server (floating license)

DCP - Software Maintenance 24 Months

License for the update of the SMAVIA software for 24 months

DLC - SmartBackfill

License for the storage of video streams that have been buffered by Dallmeier network cameras with EdgeStorage (not available in combination with DLC - Bank Package and for cameras with recording mode Contact)

DLC - SNMP

License for the integration into a central SNMP device management system

DLC - Multicast Streaming

License for the transmission of video streams via multicast in a SeMSy® video management system

DLC - Multicast Recording

License for the recording of video streams of Dallmeier network cameras using multicast transmission

DLC - Real-Time Recording

License for real-time recording for all video streams (depending on the camera)

DLC - Data Protection and Data Security

Basic license for use of the integrated data protection and data security module (GDPR-compliant)

Optional Licenses (Access)

006770 DLC - 1 Additional Client Access (VNB III)

License for the simultaneous access of a further client on SMAVIA Recording Server (floating license)

006771 DLC - 5 Additional Client Access (VNB III)

License for the simultaneous access of five further clients on SMAVIA Recording Server (floating license)

006772 DLC - 10+ Additional Client Access (unlimited, VNB III)

License for the simultaneous access of an unlimited number of clients on SMAVIA Recording Server, depending on system load and bandwidth (floating license)

Optional Licenses (Channels)

006773 DLC - 1 Additional Recording Channel (VNB III)

License for the recording of a further high-definition video stream, maximum 16 video streams in total

006774 DLC - 3rd Party Package for 1 Recording Channel (VNB III)

License for the use of one existing channel for the recording (permanent, contact triggered or with motion detection) of third-party network cameras

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Optional Licenses (Functions)	
006775	DLC - PRemote-HD (VNB III) License for the transmission of SD and HD video with low bandwidth, including a dedicated access license ¹⁾ as well as the function for access with a mobile app (DMVC Server)
006777	DLC - SEDOR[®] Camera Sabotage Protection (VNB III) License for the detection and reporting of covering, defocusing and twisting of cameras
006778	DLC - LAN Interface for Data Reception (VNB III) License for the reception of the data from third-party systems (AWEK cash desk systems and NPC II protocol converter) over the network interface. Linking, storing and displaying the data with the video recordings included.
006779	DLC - RAID 1 Recording (VNB III)²⁾ License for the recording with RAID 1 in combination with two identical Solid State Disks (SSDs)
006780	DLC - High-Speed Recording >30 fps (VNB III) License for the recording of Dallmeier network cameras with a frame rate of more than 30 fps
006894	DLC - LocalViewing (VNB III) License for direct evaluation on a connected monitor with playback of one camera and live display of several cameras (multi-split)
006895	DLC - ViProxy Plus (VNB III) License for the use of the second network interface in conjunction with one of the functions ViProxy (physically separated network for cameras, WebConfig Routing included), Link Redundancy (redundant connection of the appliance to two switches) or Data Throughput (bundling of both network interfaces to a channel with double data throughput)
007569	DLC - Bank Package (VNB III) License for the use of the module for recording according to DGUV Test, including ATM activity monitoring (USB to Serial Adapter (007522) required) and reference image delivery via email

Maintenance and Warranty	
006781	DCP - SW Maintenance 12 Months (VNB III) License for the update of the SMAVIA software for further 12 months, maximum 60 months in total
006782	DCP - HW Warranty and SW Maintenance 36 Months (VNB III) Extension of the bring-in warranty period (without HDDs) to 36 months in total, and extension of the license for the update of the SMAVIA software to 36 months in total
006783	DCP - HW Warranty and SW Maintenance 48 Months (VNB III) Extension of the bring-in warranty period (without HDDs) to 48 months in total, and extension of the license for the update of the SMAVIA software to 48 months in total
006784	DCP - HW Warranty and SW Maintenance 60 Months (VNB III) Extension of the bring-in warranty period (without HDDs) to 60 months in total, and extension of the license for the update of the SMAVIA software to 60 months in total

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

2) The RAID 1 function cannot be offered in conjunction with Hard Disk Drives (HDDs) for performance reasons.

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Components	
CPU	Quad-Core
RAM	4 GB
Flash module	32 GB (for operating system and application)
Hard disks	Up to 2x 2.5" HDD/SSD (optional)
Max. storage capacity	Currently up to 8 TB
Fan ³⁾	--
Power supply unit	External PSU, 115/230 V AC -> 12V DC

Interfaces	
Video OUT	1x DisplayPort eDP 1.3
USB	1x USB 3.0, type A 2x USB 2.0, type A
Ethernet 1	RJ45, 10/100/1000 Mbps
Ethernet 2	RJ45, 10/100/1000 Mbps (optional, license DLC - ViProxy Plus (006895) required)
Contact IN	4x, with galvanic isolation, only for switch / push button (dry contact), with 4 functions each
Relay OUT	4x, with galvanic isolation, max. 12V DC / 24V AC / 0,5A, 150 mOhm, as NC or NO
Status LED	Er. (Error), red, the device indicates an error Al. (Alarm), orange, the device is in alarm mode St. (Status), green, the device is recording Po. (Power), blue, the device is in operation

Protocols	
Ethernet protocols	IPv4 (ARP, ICMP, IGMPv2/IGMPv3), UDP, TCP
Ethernet protocols in preparation	IPv6 (NDP, ICMPv6, MLDv1/MLDv2, SLAAC, RDNSS), UDPv6, TCPv6
Communication protocols	DaVid, DaVidS, HTTP, HTTPS ⁴⁾ , DNS, DHCP, LDAP, NTP, RTSP, RTP, RTCP, SNMP (v1, v2c)
Security	HTTPS ⁴⁾ encryption, SSL/TLS ⁴⁾ 1.2 (AES), network access control according to IEEE 802.1X ⁴⁾

Electrical Data	
Voltage supply	12V DC ±5%
Power consumption	Max. 15 W
Thermal output	Max. 51 BTU/h
Internal fuse F1	7 A, slow blow (time lag), LITTELFUSE INC Series 454 (mainboard)

Mechanical Data	
Dimensions (W x H x D)	Approx. 215 x 75 x 206 mm (8.5" x 3.0" x 8.1")
Weight	Approx. 3.2 kg (7lb) with two hard disks
Color	Black (anodized)

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, FCC, RCM, UL, LGC Forensics, tested according to DIN EN 50130-4, DIN EN 50121-3-1, DIN EN 50498

3) The appliance is cooled by waste heat from the housing. Ensure adequate ventilation during operation.

4) This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org>) and cryptographic software written by Eric Young (ey@cryptsoft.com).

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Software	
Operating system	Linux (proprietary, hardened)
Application	SMAVIA Recording Server (version 9.x.x)
Application language	English, German, French, Spanish, Italian (others on request)
External management software	HEMISPHERE® SeMSy® Compact/Workstation Software, SeMSy® III Workstation Software, DMVC App (optional, license DLC - PRemote-HD (006775) required)
External configuration software	Dallmeier Device Manager
ONVIF compliance	Profile S
GDPR compliance	Supported
NDA compliance	Supported

Performance in connection with VideoNetBox III	
Channels	Up to 16x high definition video streams
Supported cameras	Dallmeier Panomera® multifocal sensor systems Dallmeier network cameras over TCP/DaVid (Dallmeier video protocol) Third-party network cameras with RTSP streaming over UDP/RTP or TCP (optional, license DLC - 3rd Party Package (006774) required)
Track mode	Automatic
Video/Audio compression	H.264, H.265 / G.722.1
Resolutions	Up to 12 MP, depending on the camera
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 140 Mbps
Output over network	Up to 8x high definition video streams for playback simultaneous

Recording ⁵⁾	3rd Party IP Camera	Dallmeier IP Camera
Transport protocol	RTP over UDP	TCP
Communications protocol	RTSP	DaVid
Mode Timer	integrated	integrated
Mode Permanent	integrated	integrated
Mode Contact	integrated	integrated
Mode Motion	integrated	integrated
Mode Motion/Contact	integrated	integrated
Switching mode by timer	--	integrated

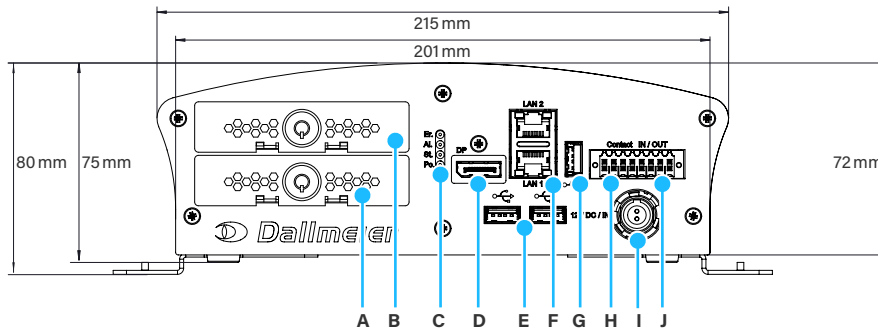
Functions ⁵⁾	3rd Party IP Camera	Dallmeier IP Camera
Motion detection	integrated	integrated
SmartFinder	integrated	integrated
Video proxy	integrated	integrated
SeMSy® multicast streamer	integrated	integrated
PRemote-HD	integrated	integrated
DMVC Server	integrated	integrated
PTZ control with Client	integrated	integrated
Audio recording	integrated ⁶⁾	integrated
Camera configuration	integrated	integrated
Locking the camera configuration	--	integrated
Recording multicast video streams	--	integrated
EdgeStorage&SmartBackfill	--	integrated
Network scan (IP Finder)	--	integrated
VCA data base	--	integrated

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

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

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|---|---|
| <p>A Hard Disk 1
SATA, 2.5"</p> <p>B Hard Disk 2
SATA, 2.5"</p> <p>C Status LED Er. (Error)
Red / The device indicates an error.</p> <p>Status LED Al. (Alarm)
Orange / The device is in alarm mode.</p> <p>Status LED St. (Record)
Green / The device is recording.</p> <p>Status LED Po. (Power)
Blue / The device is in operation.</p> <p>D Video OUT Interface
DisplayPort eDP 1.3</p> | <p>E USB Interface
2x USB 2.0, type A</p> <p>F Ethernet Interface 1
RJ45, 10/100/1000 Mbps</p> <p>Ethernet Interface 2
RJ45, 10/100/1000 Mbps
(optional, license DLC - ViProxy Plus (006895) required)</p> <p>G USB Interface
USB 3.0, type A</p> <p>H Contact IN (1 - 4)
Weidmüller socket, 8 pins, only for switch / push button (dry contact)</p> <p>I Power Supply 12V DC
ODU socket, 2-pole, 12V DC $\pm 5\%$</p> <p>J Relay OUT (1 - 4)
Weidmüller socket, 8 pins, max. 12V DC / 24V AC / 0,5A, 150 mOhm</p> |
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