

# 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 2 TB server hard disk drives, a storage capacity of 4 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 | <b>VideoNetBox III</b><br>SMAVIA appliance for the recording of up to 16 video streams,<br>licenses for the recording of 2 video streams included,<br>licenses for the access with 2 clients included,<br>without HDDs                    |
| Options Hardware   |        |   |
|  | 000178 | <b>Mounting of a HDD</b><br>Mounting of a HDD, incl. function, long-term-, and final test, acceptance and approval  |
|    | 008356 | <b>HDD 1000 GB, SATA, 2.5"</b>  |
|    | 006248 | <b>HDD 2000 GB, SATA, 2.5"</b>  |
| Option Network Contacts  |        |   |
|  | 005142 | <b>DLC - Ethernet I/O Interface</b><br>License for the use of the software interface for the connection of the<br>Ethernet I/O interfaces MOXA ioLogik E1210 (16 contacts), E1212 (8 contacts, 8 DIOs) or<br>E1214 (6 contacts, 6 relays) |
|   | 001739 | <b>Remote Ethernet I/O Interface</b><br>Ethernet I/O Interface, 2x Ethernet, 6x contact, 6x relay (MOXA ioLogik E1214)  |
| Option DNI Interface   |        |   |
|    | 007522 | <b>USB to Serial Adapter</b><br>Programmed and certified adapter cable for the connection of a Dallmeier DNI interface<br>to a VideoNetBox III or to a DMS 2400, USB 2.0 type A, RS232 D-Sub 9 pins, length 1 m                           |
| Included Licenses  |        |   |
| <b>DLC - 2 Recording Channels</b><br>License for the recording of two high-definition video streams  |        |   |
| <b>DLC - 2 Client Access</b><br>License for the simultaneous access of two clients to SMAVIA Recording Server (floating license)   |        |   |
| <b>DCP - Software Maintenance 24 Months</b><br>License for the update of the SMAVIA software for 24 months   |        |   |
| <b>DLC - SmartBackfill</b><br>License for the storage of video streams that have been buffered by Dallmeier network cameras with EdgeStorage<br>(not available in combination with DLC - Bank Package and for cameras with recording mode Contact) |        |   |
| <b>DLC - SNMP</b><br>License for the integration into a central SNMP device management system  |        |   |
| <b>DLC - Multicast Streaming</b><br>License for the transmission of video streams via multicast in a SeMSy® video management system  |        |   |
| <b>DLC - Multicast Recording</b><br>License for the recording of video streams of Dallmeier network cameras using multicast transmission   |        |   |
| <b>DLC - Real-Time Recording</b><br>License for real-time recording for all video streams (depending on the camera)  |        |   |
| <b>DLC - Data Protection and Data Security</b><br>Basic license for use of the integrated data protection and data security module (GDPR-compliant)  |        |   |

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| Optional Licenses (Access)    |   |
|-------------------------------|---|
| 006770                        | <b>DLC - 1 Additional Client Access (VNB III)</b><br>License for the simultaneous access of a further client on SMAVIA Recording Server (floating license)  |
| 006771                        | <b>DLC - 5 Additional Client Access (VNB III)</b><br>License for the simultaneous access of five further clients on SMAVIA Recording Server (floating license)  |
| 006772                        | <b>DLC - 10+ Additional Client Access (unlimited, VNB III)</b><br>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                        | <b>DLC - 1 Additional Recording Channel (VNB III)</b><br>License for the recording of a further high-definition video stream, maximum 16 video streams in total   |
| 006774                        | <b>DLC - 3rd Party Package for 1 Recording Channel (VNB III)</b><br>License for the use of one existing channel for the recording (permanent, contact triggered or with motion detection) of third-party network cameras  |
| Optional Licenses (Functions) |   |
| 006775                        | <b>DLC - PRemote-HD (VNB III)</b><br>License for the transmission of SD and HD video with low bandwidth, including a dedicated access license <sup>1)</sup> as well as the function for access with a mobile app (DMVC Server)  |
| 006777                        | <b>DLC - SEDOR<sup>®</sup> Camera Sabotage Protection (VNB III)</b><br>License for the detection and reporting of covering, defocusing and twisting of cameras  |
| 006778                        | <b>DLC - LAN Interface for Data Reception (VNB III)</b><br>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                        | <b>DLC - RAID 1 Recording (VNB III)<sup>2)</sup></b><br>License for the recording with RAID 1 in combination with two identical Solid State Disks (SSDs)  |
| 006780                        | <b>DLC - High-Speed Recording &gt;30 fps (VNB III)</b><br>License for the recording of Dallmeier network cameras with a frame rate of more than 30 fps  |
| 006894                        | <b>DLC - LocalViewing (VNB III)</b><br>License for direct evaluation on a connected monitor with playback of one camera and live display of several cameras (multi-split)   |
| 006895                        | <b>DLC - ViProxy Plus (VNB III)</b><br>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                        | <b>DLC - Bank Package (VNB III)</b><br>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                        | <b>DCP - SW Maintenance 12 Months (VNB III)</b><br>License for the update of the SMAVIA software for further 12 months, maximum 60 months in total  |
| 006782                        | <b>DCP - HW Warranty and SW Maintenance 36 Months (VNB III)</b><br>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                        | <b>DCP - HW Warranty and SW Maintenance 48 Months (VNB III)</b><br>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                        | <b>DCP - HW Warranty and SW Maintenance 60 Months (VNB III)</b><br>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 2× 2.5" HDD (optional)   |
| Max. storage capacity             | Currently up to 4 TB   |
| Fan <sup>3)</sup>                 | --   |
| Power supply unit                 | External PSU, 115/230 V AC -> 12 V DC  |
| Interfaces                        |  |
| Video OUT                         | 1× DisplayPort eDP 1.3   |
| USB                               | 1× USB 3.0, type A<br>2× 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                        | 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   |
| Status LED                        | Er. (Error), red, the device indicates an error<br>Al. (Alarm), orange, the device is in alarm mode<br>St. (Status), green, the device is recording<br>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 <sup>4)</sup> , DNS, DHCP, LDAP, NTP, RTSP, RTP, RTCP, SNMP (v1, v2c)   |
| Security                          | HTTPS <sup>4)</sup> encryption, SSL/TLS <sup>4)</sup> 1.2 (AES), network access control according to IEEE 802.1X <sup>4)</sup>   |
| Electrical Data                   |  |
| Voltage supply                    | 12 V 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 × H × D)            | Approx. 215 × 75 × 206 mm (8.5" × 3.0" × 8.1")   |
| Weight                            | Approx. 3.2 kg (7 lb) 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 ([eyay@cryptsoft.com](mailto:eyay@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   |

| Performance in connection with VideoNetBox III |   |
|--|---|
| Channels                                       | Up to 16x high definition video streams   |
| Supported cameras                              | Dallmeier Panomera® multifocal sensor systems<br>Dallmeier network cameras over TCP/DaVid (Dallmeier video protocol)<br>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 <sup>5)</sup> | 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          |

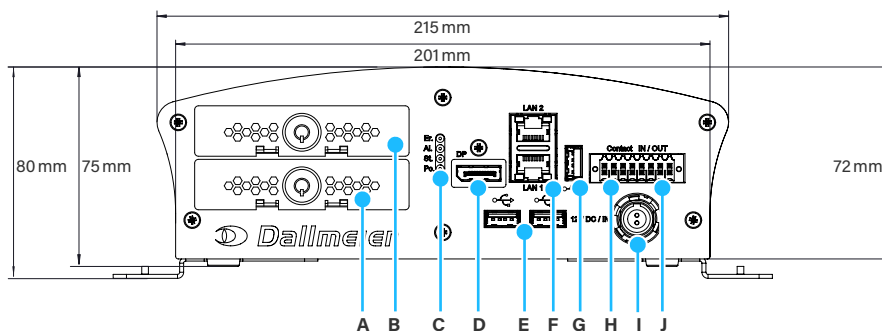
| Functions <sup>5)</sup>           | 3rd Party IP Camera      | Dallmeier IP Camera |
|-----------------------------------|--------------------------|---------------------|
| Motion detection                  | integrated               | integrated          |
| SmartFinder                       | integrated               | 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 <sup>6)</sup> | 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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**A Hard Disk 1**  
SATA, 2.5"

**B Hard Disk 2**  
SATA, 2.5"

**C Status LED Er. (Error)**  
Red / The device indicates an error.

**Status LED Al. (Alarm)**  
Orange / The device is in alarm mode.

**Status LED St. (Record)**  
Green / The device is recording.

**Status LED Po. (Power)**  
Blue / The device is in operation.

**D Video OUT Interface**  
DisplayPort eDP 1.3

**E USB Interface**  
2x USB 2.0, type A

**F Ethernet Interface 1**  
RJ45, 10/100/1000 Mbps

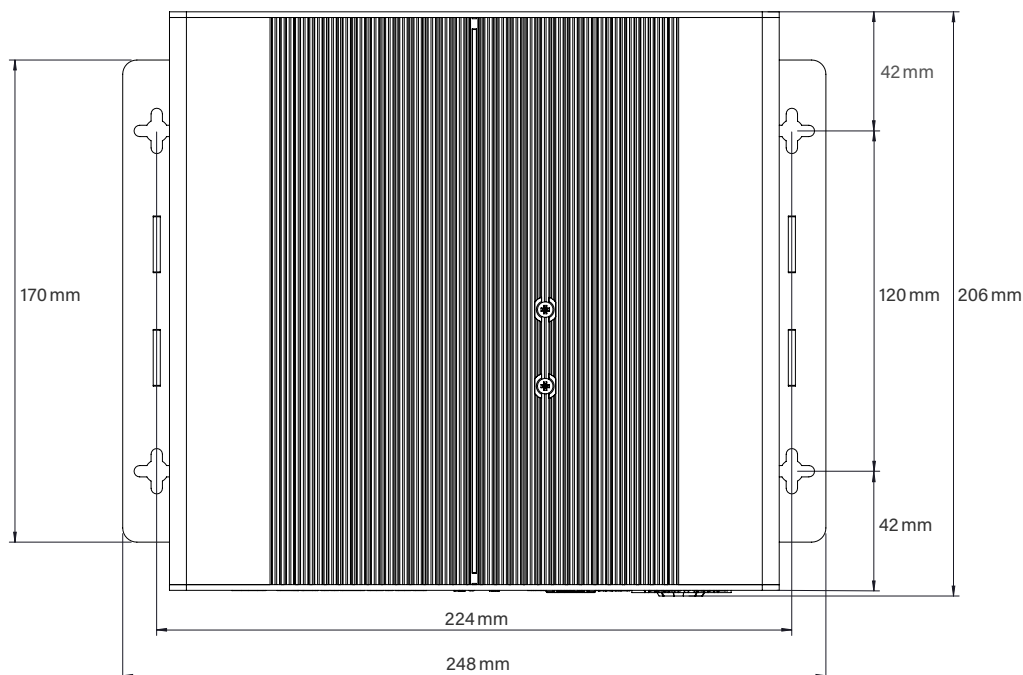
**Ethernet Interface 2**  
RJ45, 10/100/1000 Mbps  
(optional, license **DLC - ViProxy Plus** (006895) required)

**G USB Interface**  
USB 3.0, type A

**H Contact IN (1 - 4)**  
Weidmüller socket, 8 pins, only for switch / push button (dry contact)

**I Power Supply 12 V DC**  
ODU socket, 2-pole, 12 V DC  $\pm 5\%$

**J Relay OUT (1 - 4)**  
Weidmüller socket, 8 pins, max. 12 V DC / 24 V AC / 0,5 A, 150 mOhm



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