

# SeMSy® Recording Server VM 5

SMAVIA Recording Server software for virtual environments (Proxmox VE), recording of up to 240 video streams on two instances, ready-to-run image



SeMSy® Recording Server VM 5 is a high performance server software with a processing capacity for up to 120 video streams per instance. Designed for the operation as a virtual machine on server systems with a Proxmox<sup>1)</sup> VE hypervisor, SRS VM 5 can run in multiple instances in parallel.

## Up to 240 Video Streams

SeMSy® Recording Server VM 5 can be licensed with up to 120 channels for recording from Dallmeier network cameras or Panomera® systems. The server software can be operated twice as a virtual machine on one of the recommended Dallmeier Recording Appliances. This allows up to 240 video streams to be recorded on one server.

## Linux Operating System

SeMSy® Recording Server VM 5 includes a specially adapted and low-maintenance Linux operating system. Due to fundamental adaptations and runtime optimizations for the special requirements of the SeMSy® recording system, it is considerably more powerful than comparable recording systems for Microsoft Windows<sup>2)</sup> operating systems.

## Ready-to-Run

SeMSy® Recording Server VM 5 is made available as a ready-to-run virtual appliance for systems with a Proxmox VE hypervisor. The package of application and operating system can be quickly and easily copied into an instance of the hypervisor and put into operation immediately. The relatively complex installation and customization on systems with Windows operating system is completely eliminated.

## SeMSy® Integration

The server software is factory fitted with the SeMSy® Flat license. Thus, it is optimally equipped for integration into the storage system of a SeMSy® Video Management System. The server software supports the complete SeMSy® functional range including convenient evaluation of recordings on a SeMSy® Workstation.

## 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. SeMSy® Recording Server VM 5 comes with unlimited licenses for access with clients.

## EdgeAnalytics Database

SeMSy® Recording Server VM 5 is equipped with a database for the analysis results of Dallmeier network cameras and Panomera® systems with EdgeAnalytics technology. The received events, objects and classes are stored with the relevant metadata almost in real-time. The Hemisphere® SeMSy® Workstation and SeMSy® Compact are available for targeted searches and evaluations.

## SmartBackfill

Dallmeier network cameras are equipped with a RAM memory that can be expanded with an SD card. This memory is used by the EdgeStorage function for buffering the video stream in the event of network failures (e.g. spanning tree, bursts). When the network is restored, the optional SmartBackfill feature ensures fast transfer to the SeMSy® recording system. This stores the video stream at high speed and then seamlessly continues recording the live stream.

## Open Platform

SeMSy® Recording Server VM 5 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

- High performance server software
- Parallel operation on 2 instances with 120 channel licenses each
- Up to 240 channels supported on a powerful server system
- Licenses for the update of the software for 24 months included
- Hardened and low-maintenance Linux operating system included
- Ready-to-run package for Proxmox VE hypervisor

1) Proxmox is a registered trademark of Proxmox Server Solutions GmbH in the EU, the U.S. and other countries

2) Microsoft and Windows is a trademarks or registered trademarks of Microsoft Corporation headquartered in Redmond, Washington, USA

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Software	
009338	<b>SeMSy® Recording Server VM 5</b> License for the operation of SeMSy® Recording Server VM 5 on two Proxmox VE instances, unlimited access licenses for SeMSy® Compact included, without channel licenses, ready-to run image, 1x Dallmeier License Dongle (Net 10)
009339	<b>DLD - SeMSy® Recording Server VM 5</b> Extension of an existing SRS VM 5 dongle with a license for the operation of SeMSy® Recording Server VM 5 on two additional Proxmox VE instances, unlimited access licenses for SeMSy® Compact included, without channel licenses
Included Licenses	
<b>DLC - 2 SRS VM 5 Instances</b> License for the operation of SeMSy® Recording Server VM 5 on two Proxmox VE instances	
<b>DLC - 10+ Additional Client Access (Unlimited)</b> License for the simultaneous access of an unlimited number of SeMSy® Compact Clients, depending on system load and bandwidth (floating license)	
<b>DCP - Software Maintenance 24 Months</b> License for the update of the SeMSy® software for 24 months	
<b>DLC - SEDOR® Camera Sabotage Protection</b> License for the detection and reporting of covering, defocusing and twisting of cameras	
<b>DLC - SNMP</b> License for the integration into a central SNMP device management system	
<b>DLC - SeMSy® Flat</b> License for the integration into a SeMSy® Video Management System	
<b>DLC - Multicast Streaming</b> License for the transmission of video streams via multicast in a SeMSy® Video Management System	
<b>DLC - Multicast Recording</b> License for the recording of video streams of Dallmeier network cameras using multicast transmission	
<b>DLC - Real-Time Recording</b> License for real-time recording for all video streams (depending on the camera)	
Optional Licenses	
009340	<b>DLC - 1 Additional Recording Channel (SRS VM 5)</b> License for the use of one additional channel for the recording of Dallmeier network cameras or Panomera® Channels, valid for one instance of the SRS VM 5 server
009341	<b>DLC - 3rd Party Package for 1 Recording Channel (SRS VM 5)</b> License for the use of one existing channel for the recording (permanent, contact controlled or with motion detection) of 3rd party network cameras, valid for one instance of the SRS VM 5 server
Maintenance	
009343	<b>DLD - SW Maintenance 12 Months (SRS VM 5)</b> License for the update of the SeMSy® software for further 12 months, 1x license for Dallmeier License Dongle, valid for all instance of the SRS VM 5 server

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Software	
Supported hypervisor	Proxmox VE
Operating system	Linux (proprietary, hardened)
Application	SeMSy®Recording Server VM 5 <sup>3)</sup>
Application language	English, German, French, Spanish, Italian (others on request)
External management software	SeMSy® Compact, SeMSy® Workstation Software
External configuration software	Dallmeier Device Manager
ONVIF conformity	Profile S

Performance	
Channels	Up to 120x high definition video streams per instance
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 required)
Track mode	Automatic
Video compression	H.264, H.265, MJPEG (depending on the camera)
Audio compression	G.711, G.722.1, AAC, Opus (depending on the camera)
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 480 Mbps per instance

Protocols	
Ethernet protocols	IPv4 (ARP, ICMP, IGMPv2/IGMPv3), UDP, TCP
Ethernet protocols in preparation	IPv6 (NDP, ICMPv6, MLDv1/MLDv2, SLAAC, RDNSS), UDPv6, TCPv6, SNMPv3
Communication protocols	DaVid, DaVidS, HTTP/HTTPS <sup>5)</sup> , DNS, DHCP, LDAP, LDAPs, NTP, RTSP, RTP, RTCP, SNMP (v1, v2c)
Security	HTTPS <sup>5)</sup> encryption, SSL/TLS <sup>5)</sup> 1.2, 1.3 (AES), network access control according to IEEE 802.1X <sup>5)</sup>

System Requirements Server (per instance)	
CPU virtual	8 vCPU
CPU cores physical	8 pCPU
RAM virtual	12 vRAM
RAM physical	12 pRAM
Access speed drives	400 IOPsec
Network	1000 Mbps
Operating system	Linux

3) Portions of this software are copyright © 2023 The FreeType Project ([www.freetype.org](http://www.freetype.org)). All rights reserved.

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

5) 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](mailto:ey@cryptsoft.com))

