

SRS Edge

SMAVIA appliance for the recording of up to 16 video streams, compact, fanless, energy efficient, SSD memory



The SRS Edge is designed as an appliance for **decentralized and bandwidth-saving use** in close proximity to the network cameras. It combines the recording software **SMAVIA Recording Server** with an **ultra-compact, fanless, energy efficient and robust 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**.

Storage System

The **SRS Edge** is equipped ex works with a highly efficient and solidly installed **SSD memory**. This allows high storage speeds even in the elevated temperature range and is used exclusively **for recording**. The hardened **Linux operating system** and the **SMAVIA Recording Server** application are installed on a separate flash module.

SMAVIA Viewing Client

SMAVIA Viewing Client 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 SMAVIA Viewing Client or SeMSy® 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**. **SMAVIA Viewing Client** is available for the targeted **search and evaluation** of the events with the **SmartFinder** 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.

Features Hardware





- Compact, fanless and robust server hardware
- Extended temperature range -30°C to +65°C
- Passive cooling over aluminium housing
- Flash module for operating system and application
- Built-in 2/4 TB M.2 SSD fixed storage ex factory
- Highly efficient system with low power consumption
- Power supply unit for top hat rails (DIN EN 6071) included
- Adapter for top hat rails and wall mounting included

Features SMAVIA Recording Server

- Recording of up to 16 high-definition video streams
- License for the recording of a Dallmeier network camera or a Panomera® system included
- Licenses for access with 2 clients included
- Licenses for the update of the software for 24 months included
- Video compression H.265, H.264, MJPEG supported
- Direct evaluation with LocalViewing optional
- Evaluation with DMVC App over WAN/LAN optional
- Evaluation with SMAVIA or SeMSy® over WAN/LAN included
- Basic license for integrated data protection and data security module (GDPR-compliant) included

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Appliance	
007506	 <p>SRS Edge SMAVIA appliance for the recording of up to 16 video streams, licenses for the recording of a Dallmeier network camera or a Panomera® system included, licenses for the access with 2 clients included, PSU for top hat rails (DIN EN 6071) included, without SSD memory module¹⁾</p>
Option Memory	
007751	 <p>M.2 NVMe Module 2TB Dallmeier certified 2 TB M.2 NVMe SSD memory module, including installation, functional, long-term and final test, acceptance and approval</p>
000000	 <p>M.2 NVMe Module 4TB Dallmeier certified 2 TB M.2 NVMe SSD memory module, including installation, functional, long-term and final test, acceptance and approval (availability expected Q3 2020)</p>
Option Network Contacts	
005142	<p>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), E1212 (8 contacts, 8 DIOs) or E1214 (6 contacts, 6 relays)</p>
001739	 <p>Remote Ethernet I/O Interface Ethernet I/O Interface, 2x Ethernet, 6x contact, 6x relay (MOXA ioLogik E1214)</p>
Included Licenses	
DLC - 1 Recording Channel License for the recording of a Dallmeier network camera or a Panomera® system	
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)	

1) The M.2 SSD memory module is installed at the factory and must be ordered with the appliance. Subsequent installation or replacement is not possible.

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Optional Licenses (Access)	
007550	DLC - 1 Additional Client Access (SRS E) License for the simultaneous access of a further client on SMAVIA Recording Server (floating license)
007551	DLC - 5 Additional Client Access (SRS E) License for the simultaneous access of five further clients on SMAVIA Recording Server (floating license)
007552	DLC - 10+ Additional Client Access (unlimited, SRS E) 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)	
007553	DLC - 1 Additional Recording Channel (SRS E) License for the recording of a further high-definition video stream, maximum 16 video streams in total
007554	DLC - 3rd Party Package for 1 Recording Channel (SRS E) 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)	
007555	DLC - PRemote-HD (SRS E) License for the transmission of SD and HD video with low bandwidth, including a dedicated access license ²⁾ as well as the function for access with a mobile app (DMVC Server)
007556	DLC - SEDOR[®] Camera Sabotage Protection (SRS E) License for the detection and reporting of covering, defocusing and twisting of cameras
007557	DLC - LAN Interface for Data Reception (SRS E) 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
007558	DLC - High-Speed Recording >30 fps (SRS E) License for the recording of Dallmeier network cameras with a frame rate of more than 30 fps
007559	DLC - LocalViewing (SRS E) License for direct evaluation on a connected monitor with playback of one camera and live display of several cameras (multi-split)
007560	DLC - ViProxy Plus (SRS E) 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)
Maintenance and Warranty	
007561	DCP - SW Maintenance 12 Months (SRS E) License for the update of the SMAVIA software for further 12 months, maximum 60 months in total
007562	DCP - HW Warranty and SW Maintenance 36 Months (SRS E) Extension of the bring-in warranty period (without SSD memory) to 36 months in total, and extension of the license for the update of the SMAVIA software to 36 months in total
007563	DCP - HW Warranty and SW Maintenance 48 Months (SRS E) Extension of the bring-in warranty period (without SSD memory) to 48 months in total, and extension of the license for the update of the SMAVIA software to 48 months in total
007564	DCP - HW Warranty and SW Maintenance 60 Months (SRS E) Extension of the bring-in warranty period (without SSD memory) to 60 months in total, and extension of the license for the update of the SMAVIA software to 60 months in total

2) 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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Components	
CPU	Quad-Core
RAM	4 GB
Flash module	32 GB (for operating system and application)
Hard disks	--
Max. storage capacity	2/4 TB M.2 NVMe SSD optional (ex factory only)
Fan ³⁾	--
Power supply unit	External power supply unit for top-hat rails (DIN EN 6071), 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 (007560) 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. 15W
Thermal output	Max. 51 BTU/h

Mechanical Data	
Dimensions (W × H × D)	Approx. 135 × 50 × 205 mm (5.3" × 2.0" × 8.0")
Weight	Approx. 2 kg (4.4 lb)
Color	Black (anodized)

Ambient Data	
Temperature	-30°C up to +65°C (-22°F – 149°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, LGC Forensics, tested according to DIN EN 50130-4

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	SMAVIA Viewing Client DMVC App (optional, license DLC - PRemote-HD (007555) required)
External configuration software	PService3
ONVIF compliance	Profile S

Performance in connection with SRS Edge	
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 (007554) required)
Track mode	Automatic
Video/Audio compression	H.264 / 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	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

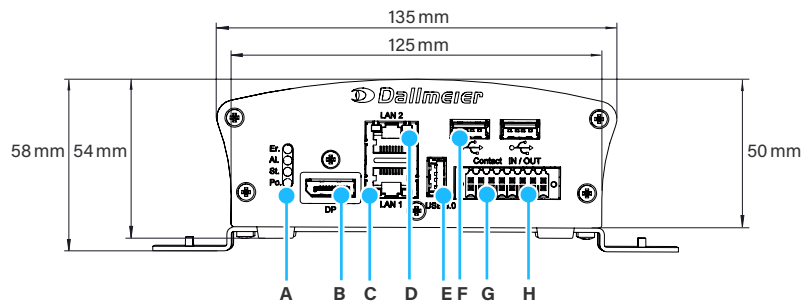
Functions	3rd Party IP Camera	Dallmeier IP Camera
Motion detection	integrated	integrated
SmartFinder	integrated	integrated
Video proxy	integrated	integrated
SeMSy® multicast streamer	integrated	integrated
PRemote-HD	integrated	integrated
DMVC Server	integrated	integrated
PTZ control with SVC	integrated	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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A 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.

B Video OUT Interface

DisplayPort eDP 1.3

C Ethernet Interface 1

RJ45, 10/100/1000 Mbps

D Ethernet Interface 2

RJ45, 10/100/1000 Mbps (optional, license **DLC - ViProxy Plus** (00xxxx) required)

E USB Interface

USB 3.0, type A

F USB Interface

2x USB 2.0, type A

G Contact IN (1 - 4)

Weidmüller socket, 8 pins, only for switch / push button (dry contact)

H Relay OUT (1 - 4)

Weidmüller socket, 8 pins, max. 12V DC / 24V AC / 0,5A, 150mOhm

Power Supply 12V DC (Rear Side)

ODU socket, 2-pole, 12V DC $\pm 5\%$

