AXIS S3016 Recorder

16-channel recorder with powerful PoE switch

AXIS S3016 Recorder is a 1U rack recorder with an integrated PoE switch for up to 16 devices and a maximum of PoE class 4 per port. It provides reliable recording thanks to the four surveillance-grade hard drives and different RAID levels. This high-performance recorder offers a gigabit switch for connecting network devices and a 2.5 gigabit uplink for video recordings in ultra-high definition and includes a 5-year warranty. The recorder can be used in single-site, multi-site systems and for expanding storage and network in existing systems. It is compatible with both AXIS Companion as well as AXIS Camera Station video management software and mobile app.

- > Rack recorder with integrated PoE switch
- > Easy to install and operate
- > Surveillance-grade hard drives
- > USB port for exporting video
- > 5-year warranty

AXIS S3016 Recorder

Models	AXIS S3016 Recorder 8 TB AXIS S3016 Recorder 16 TB AXIS S3016 Recorder 32 TB

Hardware

Processor	i.MX 8QuadMax
Storage	Hot swappable Surveillance Class HDD Total HDD slots: 4 Free HDD slots: 0 **8 TB** Out-of-the-box storage: 6 TB after RAID 5 Out-of-the-box capacity without RAID: 8 TB (4x2 TB) **16 TB** Out-of-the-box storage: 12 TB after RAID 5 Out-of-the-box capacity without RAID: 16 TB (4x4 TB) **32 TB** Out-of-the-box storage: 24 TB after RAID 5 Out-of-the-box capacity without RAID: 32 TB (4x8 TB)
RAID	Factory RAID level: 5 Supported RAID levels: 0, 1, 5, 6, 10
Switch	16 ports integrated, 305 W total power budget Power over Ethernet (PoE) IEEE 802.3at Class 4
Power	Max 650 W, 305 W PoE dedicated 100–240 V AC, 50–60 Hz
Power consumption	(Excluding power consumption from connected devices) **Typical power consumption** **8 TB:** 31 W **16 TB:** 34 W **32 TB:** 44 W **Maximum power consumption** **8 TB:** 37 W **16 TB:** 41 W **32 TB:** 49 W
Connectors	**Front side:** 1x USB 3.0 **Rear side:** 16x PoE RJ45 1 Gbps 1x AUX RJ45 2.5 Gbps 1x LAN RJ45 2.5 Gbps 1x LAN SFP 1 Gbps 1x USB 2.0 1x power connector

Video

Recording	Qualified for recording up to 16 video sources with a total recording rate up to 256 Mbit/s
Video compression	H.264 (MPEG-4 Part 10/AVC), H.265 (MPEG-H Part 2/HEVC) Depending on camera support
Resolution	Supports all camera resolutions
Frame rate	Supports all camera frame rates

Audio

Audio streaming	One-way audio recording depending on camera support
Audio encoding	AAC Depending on camera support

Network

Network protocols	IPv4, IPv6 USGv6, ICMPv4/ICMPv6, HTTP, HTTPS[a], HTTP/2, TLS[a], SFTP, SMTP, mDNS (Bonjour), UPnP®, DNS/DNSv6, NTP, NTS, RTSP, TCP, UDP, IGMPv1/v2/v3, ICMP, DHCPv4/v6, ARP, SSH, LLDP, IEEE 802.1X (EAP-TLS), IEEE 802.1AR

System integration

Application Programming Interface	Open API for software integration, including VAPIX®, and AXIS Camera Application Platform (ACAP); specifications at *axis.com/developer-community*. One-click cloud connection
Video management systems	Compatible with AXIS Companion and AXIS Camera Station available at *axis.com/vms*
Event triggers	Hard drive error, hard drive temperature warning, CPU temperature warning, fan error, PoE budget exceeded, RAID warning

Approvals

Product markings	UL/cUL, CE, VCCI, NOM, RCM
Supply chain	TAA compliant
EMC	EN 55035, EN 55032 Class A, EN 61000-3-2, EN 61000-3-3, EN 61000-6-1, EN 61000-6-2 **Australia/New Zealand:** RCM AS/NZS CISPR 32 Class A **Canada:** ICES-3(A)/NMB-3(A) **Japan:** VCCI Class A **USA:** FCC Part 15 Subpart B Class A **Taiwan:** CNS 15936
Safety	CAN/CSA C22.2 No. 62368-1, IEC/EN/UL 62368-1 ed. 3, RCM AS/NZS 62368.1:2018
Environment	IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27, IEC 60068-2-78, IEC/EN 60529 IP20
Network	NIST SP500-267

Cybersecurity

Edge security	**Software:** Signed firmware, digest authentication, password protection, AES-XTS-Plain64 256bit hard drive encryption **Hardware:** Secure boot, Axis Edge Vault with Axis device ID, secure keystore (CC EAL4 certified hardware protection of cryptographic operations, certificates and keys), TPM 2.0 FIPS 140-2 level 2
Network security	IEEE 802.1X (EAP-TLS)[a], IEEE 802.1AR, HTTPS/HSTS[a], TLS v1.2/v1.3[a], Network Time Security (NTS), X.509 Certificate PKI
Documentation	*AXIS OS Hardening Guide* *Axis Vulnerability Management Policy* *Axis Security Development Model* To download documents, go to *axis.com/support/cybersecurity/resources* To read more about Axis cybersecurity support, go to *axis.com/cybersecurity*

General

Supported devices	Axis devices with firmware 5.50 or later AXIS Companion mini cameras and third-party cameras are not supported
Casing	Steel casing Color: black NCS S 9000-N
Form factor	Rack 1U Compatible with EIA-310 racks
Operating conditions	Temperature: 0 °C to 45 °C (32 °F to 113 °F) Humidity: 10–85% RH (non-condensing)
Storage conditions	Temperature: -20 °C to 65 °C (-4 °F to 149 °F) Humidity: 5–90% RH (non-condensing)
Dimensions	484 x 402 x 44.1 mm (19.1 x 15.8 x 1.7 in) **Minimum rail depth**[b]: 398 mm (15.7 in) **Product installation depth**[c]: 377 mm (14.8 in) **Rail adjustability range**[d]: 376–499 mm (14.8–19.6 in)
Weight	**8 TB**: 10.24 kg (22.6 lb) **16 TB**: 10.08 kg (22.2 lb) **32 TB**: 10.68 kg (23.5 lb)
Box content	Recorder, rack rails, front cover, rubber feet, installation guide, power cord, screws
Optional accessories	AXIS TS3901 Rail Extensions For more accessories, go to *axis.com/products/axis-s3016*
System tools	AXIS Site Designer, AXIS Device Manager, product selector, accessory selector Available at *axis.com*
Languages	English, German, French, Spanish, Italian, Russian, Simplified Chinese, Japanese, Korean, Portuguese, Polish, Traditional Chinese, Dutch, Czech, Swedish, Finnish, Turkish, Thai, Vietnamese
Warranty	5-year warranty, see *axis.com/warranty*
Part numbers	Available at *axis.com/products/axis-s3016#part-numbers*

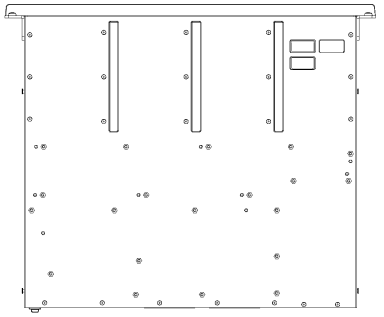
Sustainability

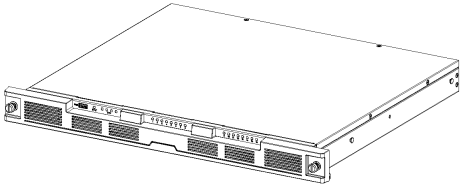
Substance control	PVC free RoHS in accordance with EU RoHS Directive 2011/65/EU/ and EN 63000:2018

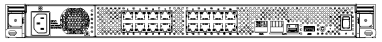
	REACH in accordance with (EC) No 1907/2006. For SCIP UUID, see *echa.europa.eu*
Materials	Renewable carbon-based plastic content: 63% (recycled) Screened for conflict minerals in accordance with OECD guidelines To read more about sustainability at Axis, go to *axis.com/about-axis/sustainability*
Environmental responsibility	*axis.com/environmental-responsibility* Axis Communications is a signatory of the UN Global Compact, read more at *unglobalcompact.org*

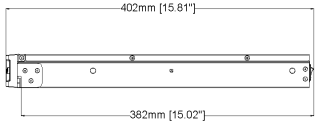
a. *This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (openssl.org), and cryptographic software written by Eric Young (eay@cryptsoft.com).*
b. *Measured from the outside-facing surface of the front rack post until the end of the rail.*
c. *Measured from the outside-facing surface of the front rack post to the back of the product.*
d. *The allowable distance between the outside-facing surface of the front and rear rack posts.*

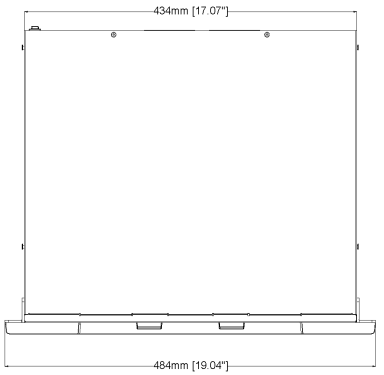
Dimension drawing











AXIS S3016 Recorder

Revision	v.01	Revision date	2023-09-13
Paper size	A4	Release date	2023-01-17
Created by	MS	Scale	1:8

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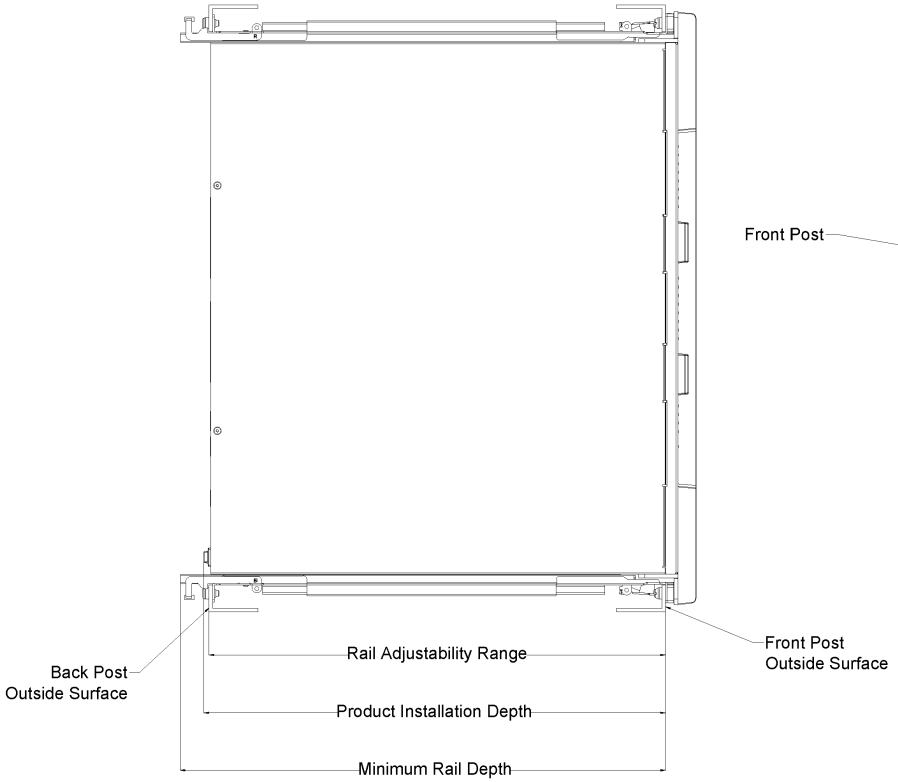

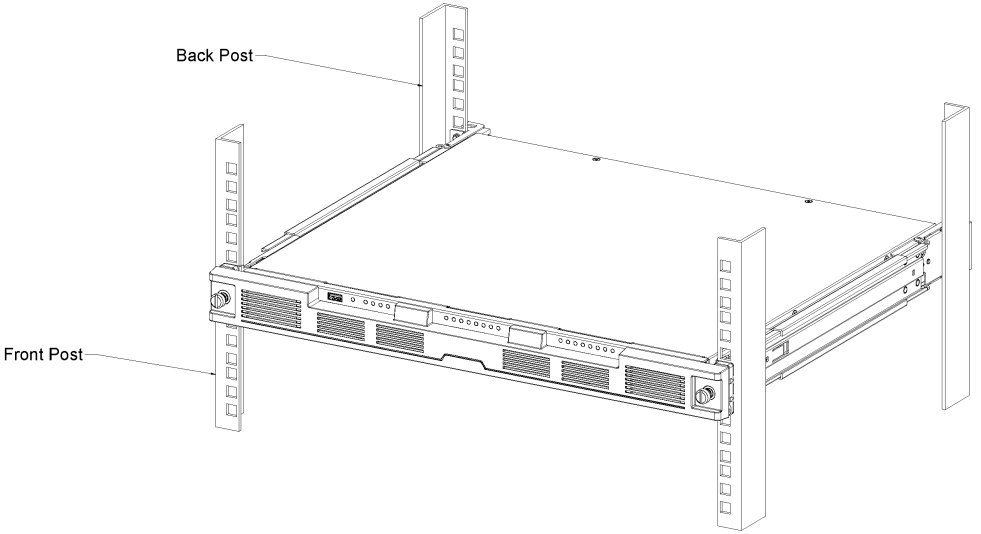

AXIS S3016 Recorder

Revision	v.01	Revision date	2023-09-13
Paper size	A4	Release date	2023-09-13
Created by	MS	Scale	1:5

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Key features and technologies

Axis Edge Vault

Axis Edge Vault is the hardware-based cybersecurity platform that safeguards the Axis device. It forms the foundation that all secure operations depend on and offers features to protect the device's identity, safeguard its integrity from factory and protect sensitive information from unauthorized access.

Establishing the root of trust starts at the device's boot process. In Axis devices, the hardware-based mechanism **secure boot** verifies the operating system (AXIS OS) that the device is booting from. AXIS OS, in turn, is cryptographically signed (**signed firmware**) during the build process. Secure boot and signed firmware tie into each other and ensure that the firmware has not been tampered with during the lifecycle of the device and that the device only boots from authorized firmware. This creates an unbroken chain of cryptographically validated software for the chain of trust that all secure operations depend on.

From a security aspect, the **secure keystore** is the critical building-block for protecting cryptographic information used for secure communication (IEEE 802.1X, HTTPS, Axis device ID, access control keys etc..) against malicious extraction in the event of a security breach. The secure keystore is provided through a Common Criteria and/or FIPS 140 certified hardware-based cryptographic computing module. Depending on security requirements, an Axis device can have either one or multiple such modules, like a TPM 2.0 (Trusted Platform Module) or a secure element, and/or a system-on-chip (SoC) embedded Trusted Execution Environment (TEE).

To read more about Axis Edge Vault, go to *axis.com/solutions/edge-vault*.

For more information, see *axis.com/glossary*