

DS-A81016S Series Storage System

Introduction

The DS-A81 series is an economical and reliable Hybrid SAN (Storage Area Network) product. Hikvision Hybrid SAN product creates a network with access to data storage servers, and it integrates Hikvision's unique video direct streaming technology as well as supports IPSAN. Hybrid SAN system supports third-party cameras such as BOSCH, AXIS, SONY, Samsung, etc., and supports RTSP and SIP protocols, and extended data retention. With no recording server needed, Hikvision's Hybrid SAN systems truly make applications simple, flexible, and budget-friendly.



Key Feature

Economical and Stable Hardware Platform

- Modular and no-cable design and SBB 2.0 structure.
- 64-bit multi-core processor.
- 4 GB high-speed cache.
- Four 1000M network interfaces.
- 12G SAS high-speed transmission channel.
- Redundant design for key modules.

HDD Detection and Repair/RAID Optimization

- Detection before operation.
- Detection in operation.
- Fault reparation.
- RAID 0, 1, 3, 5, 6, 10, 50, and VRAID.
- Global and local hot spare.
- Quick RAID building.
- Capability of cascading up to two storage enclosures behind a single SAS port.

Advanced Data Protection

- Synchronous backup of key information in system disk and HDD.
- RAID-based tamper-proof data technology.
- Auto data synchronization between devices.

Energy Efficient

- CPU load balance.
- Auto fan tuning.

User-Friendly UI

- Quick configuration.
- Various alarm management.
- Supports SADP protocol.
- Supports SNMP.

Surveillance-Specialized Stream Media Direct Storage (Direct Streaming Mode)

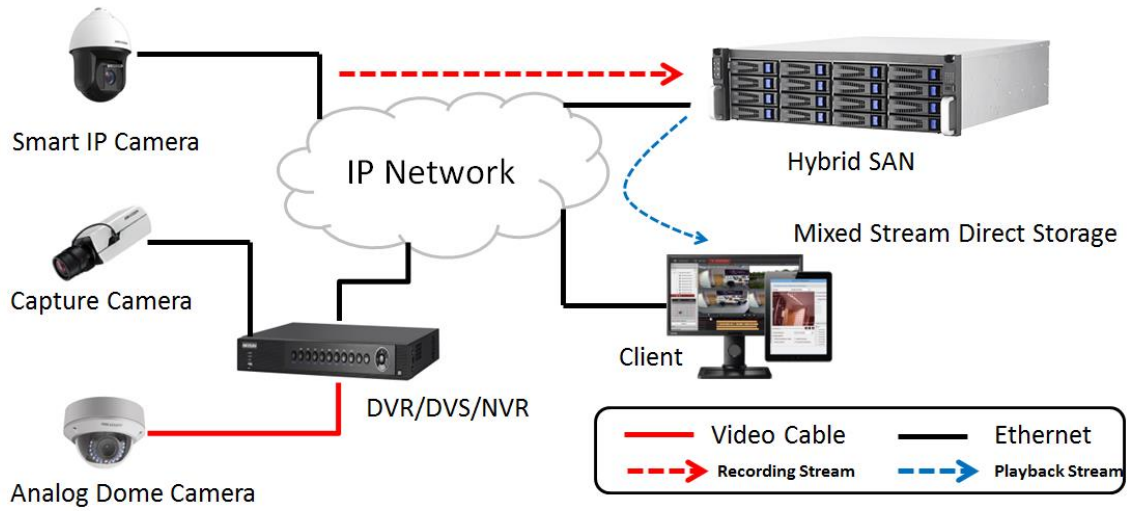
- Space pre-allocation strategy.
- Direct storage for video and picture streams.
- Supports direct IP camera/DVR/NVR streaming and recording.
- Support H264, H264+, H265, H265+.
- Support N+1.
- Supports camera access through RTSP, ONVIF, and PSIA protocol.
- Supports alarm/scheduled/manual recording.
- Automatic network replenishment (ANR), timely uploading, and video loss alarm.
- Lock key videos.
- VRAID data protection.
- Supports both Direct Streaming Mode and IPSAN Mode.
- Search, play, and download videos by video type or video time.



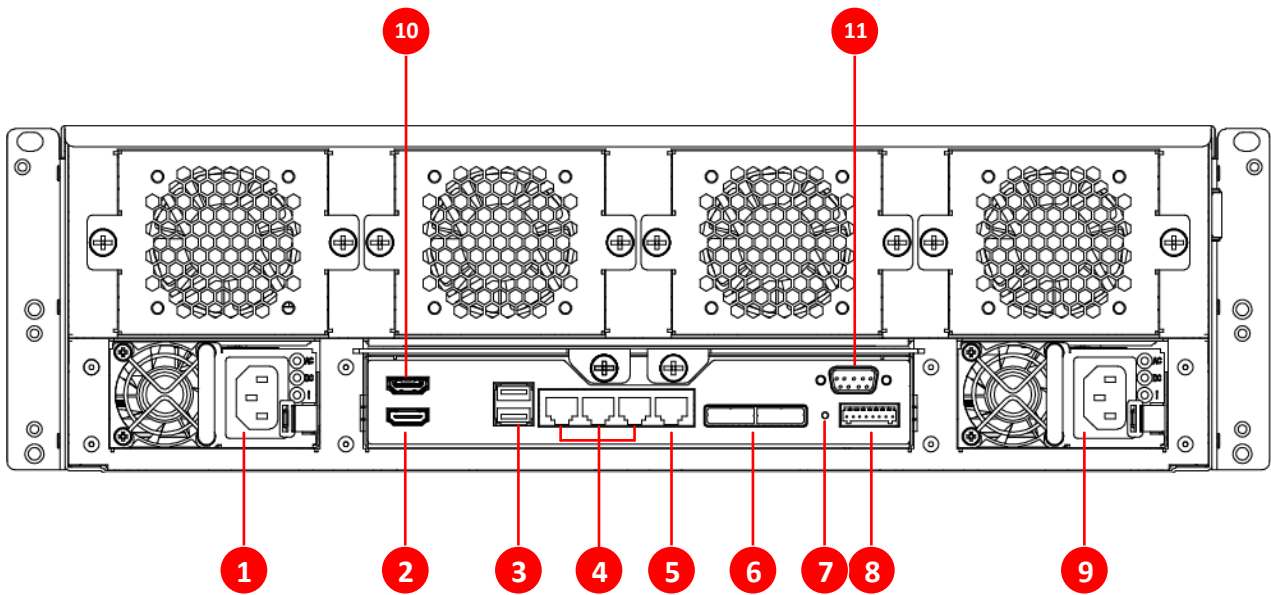
Specification

Model		DS-A81016S
Performance	Direct Streaming Mode: video (2 Mbps) + picture	320-ch recording + playback
	IPSAN	180-ch recording + playback
Controller	Processor	One controller (64-bit multi-core processor)
	Cache	4 GB (extendable to 32 GB)
HDD	HDD slot	16
	Interface/capacity	SATA/Up to 12 TB
	Hot-swapping	Supported
	HDD support	Single, RAID(Enterprise Hard Disk)
Storage Management	RAID	RAID0, 1, 3, 5, 6, 10, 50, VRAID, JBOD, Hot-spare
	Disk management	Disk inspection, alarm and repair
Storage Management	Logical volume management	iSCSI volume, video volume management
	Recording mode	Timing recording, manual recording, dual-stream recording, alarm recording
Recording Management	Video protection	Lock key video, N+1 service protection, ANR, video loss detection and alarm
	Searching mode	Search by time and event
	Downloading mode	Quick download, batch download, download by segment, download by merging
Device Maintenance	Management mode	Web-based GUI, serial port CLI, centralized management of multiple devices
	Alarm mode	Sound, light, email, message, web page
	Log downloading	Download no web page
Network	Protocol	iSCSI, RTSP, ONVIF, PSIA
Interfaces	Data network interface	3, 1000M Ethernet interface
	Management network interface	1, 1000M Ethernet interface
	MiniSAS interface	Supported
	COM	1
	USB 3.0	2
	Alarm interface	1
General	HDMI	2
	Power supply	Redundant
	Consumption (with HDDs)	<ul style="list-style-type: none"> ● Working: ≤308 W (967 BTU with 16 HDDs) ● Rated: ≤ 550 W
	Environment temperature	<ul style="list-style-type: none"> ● Working: +5 °C to +40 °C (41 °F to 104 °F) ● Storing: -20 °C to +70 °C (-4 °F to +158 °F)
	Environment humidity	<ul style="list-style-type: none"> ● Working: 20% to 80%RH (non-condensing/frozen) ● Storing: 5% to 90%RH (non-condensing/frozen)
	Chassis	3U (19 inches high)
	Dimensions (W × H × D)	440 x 132 x 495 mm (17.3 x 5.2 x 19.5 in)
Weight (without HDDs)	≤ 20 Kg (44.1 lb)	

Typical Application



Physical Interface



No.	Name	No.	Name
1	Power module 1	7	Reset button
2	HDMI interface 1	8	Alarm interface
3	USB interface	9	Power module 2
4	Data network interface 1 to 3	10	HDMI interface 2
5	Management network interface	11	RS-232 interface
6	SAS interface		

Hikvision Tested and Recommended HDDs

Note: It is strongly recommended to use enterprise HDDs in RAID mode and iSCSI application for its stability feature. Please consult with Hikvision sales before using HDDs not listed below.

HDD model	Capacity (TB)	HDD model	Capacity (TB)
ST12000NM0008	12	ST1000NM0055	1
ST10000NM0478	10	WD101KRYZ-01	10
ST10000NM0086	10	WD101KRYZ-31	10
ST10000NM0016	10	WD8003FRYZ-31	8
ST8000NM0055	8	WD8003FRYZ-01	8
ST8000NM0016	8	WD6002FRYZ-31	6
ST6000NM0024	6	WD4002FYYZ-31	4
ST4000NM0024	4	WD2005FBYZ	2
ST2000NM0024	2	WD6002FRYZ	6
ST6000NM0115	6	WD4002FYYZ	4
ST4000NM0115	4	HUS726T4TALA6L4	4
ST2000NM0125	2	HUS726T6TALE6L4	6
ST4000NM0035	4	HKS728T8TALE-31	8
ST3000NM0005	3	HUS728T8TALE6L4	8
ST2000NM0055	2	HUH721212ALE-31	12

Available Model

DS-A81016S

Distributed by



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