

Synergy Storage Max

Exceptional storage and reliability for your video surveillance data.

Delivers high data throughput and exceptional storage density in a 2U rack-mounted form factor. Outstanding reliability protects your critical video surveillance data and reduces system downtime. Validated and tested performance under high demand, paired with proven Lenovo hardware, gives peace of mind for long-term reliability.



Why Choose Synergy Storage Max?

Designed for Video

The surveillance optimised hardware and operating system ensure consistent performance out of the box, even under high demand.

Resiliency

Enterprise-grade with RAID protection features for OS and data storage, and dual power supplies as standard to enhance system uptime.

Health Monitoring

Automatic alerts of any hardware events that require action, ensuring optimal system resilience and uptime is maintained.

Simplified Installation

Synergy software is automatically installed (license sold separately) via an intuitive device configuration process.

Storage Capacity

Up to 302TB redundant storage for evidential video storage, using a high-density 16-bay 2U chassis.

Minimised Footprint

2U form factor and high storage density reduce the quantity of PSNs required, as well as the total cost of ownership (energy and cooling costs).

Key Features

- Up to 1.2Gbps of inbound data throughput
- Up to 302TB of RAID 6 protected storage using up to 16x 24TB enterprise HDDs
- Dual 960GB OS SSDs with RAID 1 protection
- Dual 10Gbps Ethernet, with optional fibre connectivity
- Up to 200 video channels
- Dual hot swappable 80 Plus Platinum power supplies
- Optimised Windows Server 2025 operating system

Specifications

GENERAL

Dimensions (W x H x D)	2U rack-mountable server 445 mm x 87 mm x 764 mm (17.5" x 3.4" x 30.1")
Weight	Maximum 38.8 kg
Operating Temperature	ASHRAE A2 (10-35°C if altitude is 900m or below)
Operating Humidity	ASHRAE A2: 8% to 80%; maximum dew point: 21°C (70°F)
Certifications and Approvals	CE, UKCA, FCC, CCC, NOM, KC, RCM, EAC, VCCI, BSMI, BIS
Security	Lockable bezel for front HDDs
Operating System	Windows Server 2025
Supported Rack Mount Types	Square-hole and round-hole racks supported – threaded-hole racks supported with optional rack rail kit
CPU	AMD Epyc 9015 8-core
RAM	64GB (2x 32GB DDR5 6400Mhz)
Host OS Storage	2x 960GB M.2 SSDs with RAID 1 resilience
Video Storage	Up to 302TB of RAID 6 protected usable storage (max 16x HDDs)
Keep Your Drive	Included with warranty
Minimum Synergy Version	23.1.100

POWER

Hot Swap PSUs	2x redundant 1100W modules (115V/230V)
PSU Efficiency	80 Plus Platinum
Typical Power Consumption (Based on Maximum Configuration)	300W with 16x HDDs (1024 BTUs per hour)

CONNECTIVITY

Networking (Standard)	4x 10Gbps RJ45 (10G-BASE-T) via included OCP adapter
Networking (Optional Alternatives)	2x 25Gbps SFP+
Out-Of-Band (OOB) Networking (Dedicated Management and Health Toolset)	1x RJ45
USB	Front: 1x USB 3.2 G1 Type-A, 1x USB 2.0 Rear: 3x USB 3.2 G1 Type-A
Video	Rear: VGA
Other	Front: Diagnostics Port

PRODUCT FUNCTIONALITY

Supported Deployment Modes	Synergy PSN, Synergy Incident Locker
Maximum Inbound Data Throughput (Synergy PSN)	1.2Gbps
Maximum Outbound Data Throughput (Synergy PSN)	384Mbps (up to 128 concurrent video sessions)
Maximum Recorded Video Channels (Synergy PSN)	200
System Health Monitoring	Yes, with Synergy alerts for hardware health events
Out-Of-Band Management with IP-KVM	Lenovo XClarity Platinum included
SNMP Alarm Support	Yes, via Lenovo XClarity
Synectics Metadata Recording Support*	Yes
Synectics Backfiller Support*	Yes
Multicast Video Support	Yes
H.264 and H.265 Video Support	Yes
Tool-less Hardware Servicing	Yes

*Configuration may impact maximum inbound/outbound data throughput and maximum recorded video channels.

PART CODES

STO-2011-72TB-R6	Synergy Storage Max V1.1 (12x 8TB RAID 6)
STO-2011-101TB-R6	Synergy Storage Max V1.1 (16x 8TB RAID 6)
STO-2011-180TB-R6	Synergy Storage Max V1.1 (12x 20TB RAID 6)
STO-2011-216TB-R6	Synergy Storage Max V1.1 (12x 24TB RAID 6)
STO-2011-252TB-R6	Synergy Storage Max V1.1 (16x 20TB RAID 6)
STO-2011-302TB-R6	Synergy Storage Max V1.1 (16x 24TB RAID 6)

SPARE PART CODES

SY-CRU-RACK-L1	Rack Mount Kit (standard)
SY-CRU-RACK-L2	Rack Mount Kit (threaded hole racks)
SY-CRU-PSU-L2	1100W PSU Module (110V/230V)
SY-CRU-RAM-L2	32GB DDR5 RAM Module
SY-CRU-RAID2U-L2	RAID Controller for HDDs
SY-CRU-M2SSD-L2	960GB M.2 OS SSD
SY-CRU-FAN-L3	Hotswap Internal Fan
SY-CRU-RACK-L1	1100W PSU Module for Synergy Storage Max V1.1
SY-NIC-25G-DUALSFP-E810DA2-L	Intel E810-DA2 Network Dual SFP+ OCP Network Adapter
SY-HDD-SAS-8TB-L	8TB Enterprise SAS HDD
SY-HDD-SAS-20TB-L	20TB Enterprise SAS HDD
SY-HDD-SAS-24TB-L	24TB Enterprise SAS HDD