

SYNECTICS

Synergy PSN 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 the Synergy PSN Max?

Designed for Video

Extensive hardware testing and OS optimisation ensures consistent performance out of the box, even under high demand.

Resiliency

Enterprise-grade with RAID 6 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

Where licensed, hardware is preinstalled with software and includes an easy-to-understand setup process, reducing installation time.

Storage Capacity

Up to 252TB redundant storage for evidential video storage, using a high-density 16-bay 2U chassis.

Minimised Footprint

2U form factor and high storage density reduces 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 252TB of RAID 6 protected storage using up to 16x 20TB enterprise HDDs
- Dual 480GB OS SSDs with RAID 1 protection Host OS
- Dual 10Gbps Ethernet, with optional fibre connectivity
- Up to 200 video channels
- Dual hot swappable 80 Plus Platinum power supplies
- Optimised Windows Server IoT 2022 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, FCC, UKCA, NOM, KC, cTUVus, EAC, GS
Security	Lockable front bezel included
Operating System	Windows Server IoT 2022 for Storage
CPU	AMD Epyc 8 Core CPU
RAM	64GB ECC (error-correcting code) RAM
Host OS Storage	2x 480GB M.2 SSDs with RAID 1 resilience
Video Storage	Up to 252TB of RAID 6 protected usable storage (max 16x 20TB HDDs)
Minimum Synergy Version	22.1.100

POWER

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

CONNECTIVITY

Networking (Standard)	2x 10Gbps RJ45 (10G-BASE-T) via included network adapter
Networking (Optional Alternatives)	2x 10Gbps SFP+ 4x 10Gbps RJ45 4x 1Gbps RJ45
Out-Of-Band (OOB) Networking (Dedicated Management and Health Toolset)	1x RJ45
USB	Front: 1x USB 3.1 G1 Type-A, 1x USB 2.0 Type-A Rear: 3x USB 3.1 G1 Type-A
Video	Rear: VGA
Other	Front: Diagnostics Port

PRODUCT FUNCTIONALITY

Maximum Inbound Data Throughput	1.2Gbps (10Gbps or higher network link speed) (NOTE: 384Mbps if 1Gbps link speed used)
Maximum Outbound Data Throughput	384Mbps (if 10Gbps link speed used)
Maximum Recorded Video Channels	200
System Health Monitoring	Configured as standard with Synergy alerts
Out-Of-Band Management with IP-KVM	Yes
SNMP Alarm Support	Yes
Synectics Metadata Recording Support*	Yes
Synectics Backfiller Support*	Yes
Multicast Video Support	Yes
H.264 and H.265 Video Support	Yes
Performance Optimised 4K Sector Size for HDDs	Yes
Tool-less HDD Replacement	Yes
Tool-less Hardware Servicing	Yes

PART CODES

SY-PSNMAX-V1-21TB-R6	Synergy PSN Max V1 2U – 21TB RAID 6 (8x 4TB HDDs)
SY-PSNMAX-V1-36TB-R6	Synergy PSN Max V1 2U – 36TB RAID 6 (12x 4TB HDDs)
SY-PSNMAX-V1-50TB-R6	Synergy PSN Max V1 2U – 50TB RAID 6 (16x 4TB HDDs)
SY-PSNMAX-V1-100TB-R6	Synergy PSN Max V1 2U – 100TB RAID 6 (16x 8TB HDDs)
SY-PSNMAX-V1-150TB-R6	Synergy PSN Max V1 2U – 150TB RAID 6 (16x 12TB HDDs)
SY-PSNMAX-V1-200TB-R6	Synergy PSN Max V1 2U – 200TB RAID 6 (16x 16TB HDDs)
SY-PSNMAX-V1-252TB-R6	Synergy PSN Max V1 2U – 252TB RAID 6 (16x 20TB HDDs)

SPARE PART CODES

SY-CRU-PSU-L1	1100W PSU Module for Synergy Server Max V1 and PSN/Locker Max V1
SY-CRU-M2SSD-L1	480GB M.2 OS SSD for Synergy Server Max V1 and PSN/Locker Max V1
SY-CRU-RAID2U-L1	HDD RAID Controller for Synergy PSN/Locker Max V1
SY-CRU-RACK-L1	Rack Mount Kit for Synergy Server Max V1 and PSN/Locker Max V1
SY-HDD-SAS-4KN-4TB-L	4TB Enterprise SAS HDD for Max Hardware (4K Sector Size)
SY-HDD-SAS-4KN-8TB-L	8TB Enterprise SAS HDD for Max Hardware (4K Sector Size)
SY-HDD-SAS-4KN-12TB-L	12TB Enterprise SAS HDD for Max Hardware (4K Sector Size)
SY-HDD-SAS-4KN-16TB-L	16TB Enterprise SAS HDD for Max Hardware (4K Sector Size)
SY-HDD-SAS-4KN-20TB-L	20TB Enterprise SAS HDD for Max Hardware (4K Sector Size)

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