

SYNECTICS

Synergy PSN

Enterprise-class storage for your critical video surveillance data

Delivers high data throughput and excellent storage density in a compact 2U rack mounted form factor. Enterprise-class components protect your critical video surveillance data and reduce system downtime. Validated and tested performance under high demand gives peace of mind for long-term reliability.



Why Choose the Synergy PSN?

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 180TB redundant storage for evidential video storage.

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 700Mbps of inbound data throughput
- Up to 180TB of RAID 6 protected storage using up to 12x 20TB enterprise HDDs
- Dual 480GB Host 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 IoT 2022 operating system

Specifications

GENERAL

Dimensions (W x H x D)	2U rack mountable server 437 mm x 89 mm x 648 mm (11.4" x 3.5" x 25.5")
Weight	Maximum 27.2 kg
Operating Temperature	10-35°C (50°F ~ 95°F)
Operating Humidity	8% to 90% (non-condensing)
Certifications and Approvals	CE, FCC, UKCA
Security	Lockable front bezel included
Operating System	Windows Server IoT 2022 for Storage
CPU	AMD Epyc 8 Core CPU
RAM	32GB ECC (error-correcting code) RAM
Host OS Storage	2x 480GB M.2 SSDs with RAID 1 protection
Video Storage	Up to 180TB of RAID 6 protected usable storage (max 12x 20TB HDDs)
Minimum Synergy Version	22.1.100

POWER

Hot Swap PSUs	2x redundant 920W PSU modules
PSU Efficiency	80 Plus Platinum
Typical Power Consumption (Based on Maximum Configuration)	230W (785 BTUs)

CONNECTIVITY

Networking (Standard)	2x 1Gbps RJ45 (unused) 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	4x USB 3.0 Type-A
Serial	1x RS232 port (unused)
Video	1 x VGA

PRODUCT FUNCTIONALITY

Maximum Inbound Data Throughput	700Mbps (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

PART CODES

SY-PSN-V5-21TB-R6	Synergy PSN V5 2U – 21TB RAID 6 (8x 4TB HDDs)
SY-PSN-V5-36TB-R6	Synergy PSN V5 2U – 36TB RAID 6 (12x 4TB HDDs)
SY-PSN-V5-72TB-R6	Synergy PSN V5 2U – 72TB RAID 6 (12x 8TB HDDs)
SY-PSN-V5-108TB-R6	Synergy PSN V5 2U – 108TB RAID 6 (12x 12TB HDDs)
SY-PSN-V5-126TB-R6	Synergy PSN V5 2U – 126TB RAID 6 (12x 14TB HDDs)
SY-PSN-V5-144TB-R6	Synergy PSN V5 2U – 144TB RAID 6 (12x 16TB HDDs)
SY-PSN-V5-180TB-R6	Synergy PSN V5 2U – 180TB RAID 6 (12x 20TB HDDs)

SPARE PART CODES

SY-CRU-M2SSD-S1	480GB M.2 OS SSD for Synergy PSN/Locker V5
SY-CRU-BEZEL-S1	Front Bezel for Synergy PSN/Locker V5
SY-CRU-RAID-S1	HDD RAID Controller for Synergy PSN/Locker V5
SY-CRU-RACK-S1	Rack Mount Kit for Synergy PSN/Locker V5
SY-CRU-FAN-S1	Hotswap Internal Fan for Synergy PSN/Locker V5
SY-CRU-PSU-S1	920W PSU Module for Synergy PSN/Locker V5
SY-HDD-SAS-4KN-4TB	4TB Enterprise SAS HDD (4K Sector Size)
SY-HDD-SAS-4KN-8TB	8TB Enterprise SAS HDD (4K Sector Size)
SY-HDD-SAS-4KN-12TB	12TB Enterprise SAS HDD (4K Sector Size)
SY-HDD-SAS-4KN-14TB	14TB Enterprise SAS HDD (4K Sector Size)
SY-HDD-SAS-4KN-16TB	16TB Enterprise SAS HDD (4K Sector Size)
SY-HDD-SAS-4KN-20TB	20TB Enterprise SAS HDD (4K Sector Size)

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