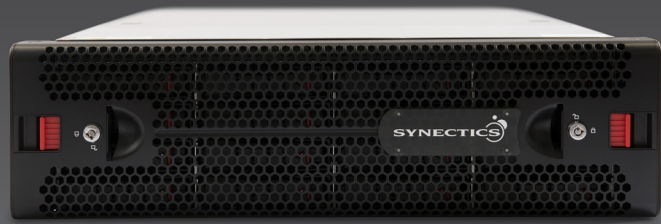


PSN 4

Enterprise Class Video Storage Device

Synectics PSN 4 provides up to 200TB of storage per unit and up to 200PB of total system storage.



PSN 4 delivers real-time, evidential quality recording of SD, HD and 4K video streams from a variety of proprietary and third-party cameras and encoders, including ONVIF compatible devices.

Available in a short form factor, the PSN 4 is engineered with non-proprietary enterprise class components for high speed performance and ease of maintenance ensuring exceptional data throughput and reliability.

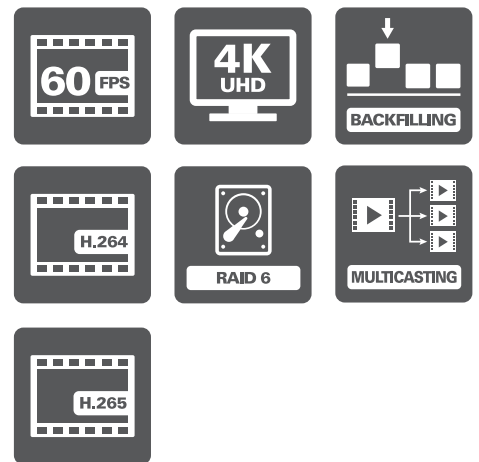
Flexible Storage Options

The variety of storage capacities (from 4TB - 200TB) provides improved cost per TB across the PSN 4 product range. Customers can select the 'per unit' storage size to meet their site needs; such as large-scale multi-site deployments, or specific storage demands that require high resilience and redundancy, or economic use of rack space.

Enterprise-Class Technology for Redundancy and Resilience

Redundancy is delivered via auto-rebuild storage arrays using 4, 6, 8, 10, 14 or 16TB hard drives which can be hot swapped during live operation to minimise downtime, while dual hot swap power supplies, error-correcting code RAM and 10 Gigabit* network connections ensure optimum resilience and uptime for mission critical sites.

The PSN 4 self-monitors server components and data integrity with automated user notification of critical errors and manages the auto restart sequence in the event of a catastrophic failure such as power loss. Through Synergy 3 command and control platform, further safeguards can be configured for additional redundancy and resilience including camera prioritization to ensure the storage of high-value video footage and many-to-many server failover.



* 10 Gigabit NICs, are automatically compatible with 1 Gigabit connections.



Storage Management to Meet Your Needs

Synectics flexible, user-friendly storage management software allows users to individually configure each video stream's frame rate, resolution, retention and data rate. Streams can be configured to record real-time or time lapse frame rates.

Every recorded video stream is authenticated to 256-bit using SHA-2 hashing, applied at the point of recording ensuring video authenticity throughout its evidential life.

High Data Throughput for Evolved Performance

The large storage capacity available with the PSN 4 is complimented by high throughput capability with up to 700 Mbps of continuous data input for each device. Throughput is optimally managed to enable the received video data to be re-broadcast to a maximum of 384 Mbps via multiple streams. Individual streams can be configured as per user preference for complete control, and this feature is particularly useful where network bandwidths are limited and streaming is normally restricted to the camera capability.

Network Video Protection

As video is increasingly being captured at the edge and transmitted across networks, protection against video loss in the event of network failure is essential. PSN 4 is compatible with Synectics Backfilling technology which provides uninterrupted local device recording to protect data in the event of a network failure. Synectics IP cameras, equipped with local recording storage media, can be configured in Synergy 3 to record constantly or when a network fails. Upon network restoration, Synergy 3 identifies any missing video on the networked storage servers and then automatically 'backfills' or copies the appropriate video from IP camera or edge-encoded devices back onto the storage devices. Video data is seamlessly and continuously restored to ensure there is no video loss.

Specifications

PORTS	
Ethernet	2 x 10Gbps Ethernet available for Teaming
USB	3 x USB 3.0 (1 Front, 2 Rear) 2 x USB 2.0 (2 Rear)
Display	1 x VGA
APPLIANCE FUNCTIONALITY	
Inbound Stream Support	Up to 700 Mbps
Outbound Stream Support	Up to 384 Mbps
Lockable Front Panel	Yes
Synectics Advanced Health Monitor	Yes
Quick Lock Rack Kit	Yes
Advanced Out-of-Band Remote Management Service including IP-KVM	Yes
SNMP Alarms	Yes
Synergy Advanced Alarms	Yes
Advanced Motion Detection	Yes
Synergy Alarm Management System	Yes
O/S	Windows IOT LTSC

POWER	
Hot Swap PSU	Yes (2 x in each model)
Power Consumption	1U – Max 300w, Normal 140w 3U – Max 550w, Normal 280w
BTU's	1U – Max 1025 per Hour, Normal 478 per Hour 3U – Max 1875 per Hour, Normal 995 per Hour

NETWORK CONNECTIVITY REQUIREMENTS*	1 Port	2 Ports (Data Connections)	3 Ports (2 x Data Connections, 1 x Dedicated Management IPMI)
1 x 10Gbps / 1Gbps	Y	N/A	N/A
2 x 10Gbps / 1Gbps	N/A	Y	Y
Out-of-Band Management Connection	Y	Y	Y
Dedicated Management Connection	N/A	N/A	Y
Adapter Fault Tolerant	N/A	Y	Y
Switch Fault Tolerant	N/A	Y	Y
Adaptive Load Balancing	N/A	Y	Y
Static Link Aggregation	N/A	Y	Y
Dynamic Link Aggregation	N/A	Y	Y

* Fiber options available

GENERAL	
Size (H x W x D)	1U – 45 mm x 430 mm x 540 mm / 1.7" x 17" x 21.2" 3U – 135 mm x 430 mm x 540 mm / 5.3" x 17" x 21.2"
Weight	1U – 6 kg / 13 lb 3U – 30 kg / 66 lb
Operating Temperature	18°C- 30°C (64°F- 86°F) recommended. Maximum normal operating temp 35°C (95°F). Short term maximum operating temp up to 45°C (113°F) for up to 1% of maximum yearly uptime.
Storage Temperature	-20°C- 80°C (-4°F- 176°F)
Humidity	5% to 90% non-condensing, 40% recommended
Certifications and Approvals	RoHS Compliant EMI / EMC Certification UL 60950-1:2007 CAN/CSA C22.2 No. 60950 EMC 2004/108/EC

OPTIONS / ADDITIONAL FEATURES	
RMS Motion Detection	
SNMP Alarms	
Automatic RAID configuration and advanced monitoring	

PSN 4 PART CODES	
SY-PSN4-1U-3.6TB	Synectics PSN 4 1U 3.6TB RAID1 4TB HD
SY-PSN4-3U-21TB	Synectics PSN 4 3U 21TB RAID6 4TB HD
SY-PSN4-3U-36TB	Synectics PSN 4 3U 36TB RAID6 4TB HD
SY-PSN4-3U-50TB	Synectics PSN 4 3U 50TB RAID6 4TB HD
SY-PSN4-3U-75TB	Synectics PSN 4 3U 75TB RAID6 6TB HD
SY-PSN4-3U-100TB	Synectics PSN 4 3U 100TB RAID6 8TB HD
SY-PSN4-3U-126TB	Synectics PSN 4 3U 126TB RAID6 10TB HD
SY-PSN4-3U-176TB	Synectics PSN 4 3U 176TB RAID6 14TB HD
SY-PSN4-3U-200TB	Synectics PSN 4 3U 200TB RAID6 16TB HD

SPARES & REPLACEMENT PARTS	SPECIFICATION	SYNECTICS PART NUMBER	COMPATIBLE WITH
Hard Disk Drive	4TB HDD (SATA, 4Kn)	SY-SERVER-V4-FRU-4TB	PSN 4 (SATA)
Hard Disk Drive	6TB HDD (SATA, 4Kn)	SY-SERVER-V4-FRU-6TB	PSN 4 (SATA)
Hard Disk Drive	8TB HDD (SATA, 4Kn)	SY-SERVER-V4-FRU-8TB	PSN 4 (SATA)
Hard Disk Drive	10TB HDD (SATA, 4Kn)	SY-SERVER-V4-FRU-10TB	PSN 4 (SATA)
Hard Disk Drive	14TB HDD (SATA, 4Kn)	SY-SERVER-V4-FRU-14TB	PSN 4 (SATA)
Hard Disk Drive	4TB HDD (SAS, 4Kn)	SY-SERVER-V4-FRU-4TB-SAS	PSN 4 (SAS)
Hard Disk Drive	6TB HDD (SAS, 4Kn)	SY-SERVER-V4-FRU-6TB-SAS	PSN 4 (SAS)
Hard Disk Drive	8TB HDD (SAS, 4Kn)	SY-SERVER-V4-FRU-8TB-SAS	PSN 4 (SAS)
Hard Disk Drive	10TB HDD (SAS, 4Kn)	SY-SERVER-V4-FRU-10TB-SAS	PSN 4 (SAS)
Hard Disk Drive	12TB HDD (SAS, 4Kn)	SY-SERVER-V4-FRU-12TB-SAS	PSN 4 (SAS)
Hard Disk Drive	14TB HDD (SAS, 4Kn)	SY-SERVER-V4-FRU-14TB-SAS	176TB PSN 4, PSN 4 (SAS)
Hard Disk Drive	16TB HDD (SAS, 4Kn)	SY-SERVER-V4-FRU-16TB-SAS	PSN 4 (SAS)
Power Supply	Hotswap PSU Module (1U)	SY-SERVER-V4-FRU-PSU-MODULE-1U	PSN 4 1U
Power Supply	Hotswap PSU Module (3U)	SY-SERVER-V4-FRU-PSU-MODULE-1U	PSN 4 3U
Rack Mount Kit	Rack Mount Kit (1U)	SY-SERVER-V4-FRU-RACK-1U	PSN 4 1U
Rack Mount Kit	Rack Mount Kit (3U)	SY-SERVER-V4-FRU-RACK-3U	PSN 4 3U