

# PSN 3

## Enterprise Class Video Storage Device

**Synectics PSN 3 device provides up to 230TB of storage with throughput of 700 mbps for exceptional data performance**



PSN 3 delivers real-time, broadcast quality recording of analog-encoded and IP video streams from a variety of proprietary and third party cameras and encoders, including ONVIF compatible devices.

Available in 1, 2, 3 and 4U variants, the PSN 3 is engineered with enterprise-class components to provide exceptional data throughput and ultra-reliability.

### **Enterprise-Class Technology for Redundancy & Resilience**

Hot swap redundancy on the PSN 3 is delivered with auto-rebuild, 2, 3, 4, 6 or 8TB hard drives, dual hot swap power supplies and dual gigabit network connections to ensure optimum resilience and uptime.

RMS also self-monitors server components and data integrity with Synectics' proprietary Watchdog system. In addition to automated user notification of critical errors, Synectics Watchdog system manages the auto restart sequence in the event of a catastrophic failure such as power loss.

Every recorded video stream is authenticated to 256-bit using SHA-2 hashing. SHA-2 hashing is applied during recording and ensures that any exported or replicated video data is identical to the original source and can be validated throughout its evidential life.

### **Flexible Storage Options Deliver Better Value**

The variety of storage capacities from 2TB – 230TB offer users improved cost per TB<sup>1</sup> across the PSN 3 product range. PSN 3 enables users to select the 'per unit' storage using a combination of hard drive sizes and is well suited for large scale deployments or those with specific storage needs that might require high resilience and redundancy or economic use of rack space.

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

## High Data Throughput For Evolved Performance

Large storage capacities require high throughput to effectively utilize the device storage capacity and ensure the data being received is optimally managed. PSN 3 is engineered to provide leading performance and scalability allowing up to 700 mbps of continuous data input<sup>2</sup> in a single unit.

This high throughput is complimented by streaming capabilities which enable the device to re-broadcast received video data to a maximum of 384 mbps and deliver multiple streams of data based

on specific requirements. This feature is particularly useful in situations where network capabilities are limited and streaming is normally restricted to the stream capability of the camera.

## 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 3 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, and e1600

encoders 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 storage devices via IP back onto the PSN 3 devices. Video data is seamlessly and continuously restored.

<sup>1</sup> compared to PSNPro

<sup>2</sup> available on 2, 3 and 4U variant

## Specifications

PORTS	
COM Ports	1
USB	2
Ethernet	2 x 1G Ethernet Teamed. (2 x 10G Ethernet, 4 x 1G Ethernet and 2 x 10G Fibre available as options.)
BMC Port	3.5 mm Data Integration Port
Display	1 x VGA
PS2	1 x Keyboard 1 x Mouse
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	Microsoft Wes7

POWER	
Hot Swap PSU	Yes (2 x in each model)
Power Consumption	1u – Max 250w, Normal 110w 2u – Max 500w, Normal 260w 3u – Max 650w, Normal 300w 3u (short) – Max 650w, Normal 300w 4u - Max 1200w, Normal 660w
BTU's	1u – Max 854 per Hour 2u – Max 1707 per Hour 3u – Max 2210 per Hour 3u (short) – Max 2210 per Hour 4u – Max 4095 per Hour

NETWORK OPTIONS	1G Link	2 x 1G Link	1G Link + Management Link	2 x 1G Ethernet + Management Link	1 x 10G Ethernet	2 x 10G Ethernet	1 x 10G Fibre	2 x 10G Fibre	4 x 1G Ethernet
Out of Band Management Connection	✓	✓	✓	✓	✓	✓	✓	✓	✓
Dedicated Management Connection	N	N	✓	✓	N	N	N	N	N
Adapter Fault Tolerant	N	✓	N	✓	N	✓	N	✓	✓
Switch Fault Tolerant	N	✓	N	✓	N	✓	N	✓	N
Adaptive Load Balancing	N	✓	N	✓	N	✓	N	✓	✓
Static Load Aggregation	N	✓	N	✓	N	✓	N	✓	✓
Dynamic Link Aggregation	N	✓	N	✓	N	✓	N	✓	✓
Max Recording	384 Mbps	384 Mbps	384 Mbps	384 Mbps	700 Mbps	700 Mbps	700 Mbps	700 Mbps	700 Mbps
Max RMS RTP	300 Mbps	384 Mbps	384 Mbps	384 Mbps	384 Mbps	384 Mbps	384 Mbps	384 Mbps	384 Mbps

MODEL OPTIONS	2 x 10G Fibre Card & 2 x SFP	2 x 10G Ethernet	4 x 1G Ethernet	Incident Locker
1u PSN3	✓	✓	✓	*
2u PSN3	✓	✓	✓	✓
3u PSN3	✓	✓	✓	✓
4u PSN3	✓	✓	✓	✓

NOTE: \* Available with Synergy Server add-ins.

**GENERAL**

Size (H x W x D)	1u – 45 mm x 430 mm x 700 mm / 1.7" x 17" x 27.5" 2u – 90 mm x 430 mm x 700 mm / 3.5" x 17" x 27.5" 3u – 135 mm x 430 mm x 540 mm / 5.3" x 17" x 21.2" 4u – 180 mm x 430 mm x 700 mm / 7" x 17" x 27.5"
Weight	1u – 6 kg / 13 lb 2u – 18 kg / 40 lb 3u – 30 kg / 66 lb 4u – 45 kg / 100 lb
Operating Temperature	18°C - 26°C (64°F - 79°F) recommended. Maximum normal operating temp 30°C (86°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 Advanced Motion Detection (Max 200 Channels per PSN 3)

SNMP Alarms

Automatic RAID Configuration and Advanced Monitoring

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Specifications subject to change. E &amp; OE.

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