ITPOD Storage Hybrid



ITPOD

Intelligent Storage Systems

for your
digital future

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In today's world, where information holds immense value, Data Storage Systems (DSS) have become an integral component of any enterprise. Requirements for modern systems are growing increasingly stringent due to continuous technological advancements and the rising volume of data that must be processed. This results in higher software system demands, including compatibility, operational reliability, and computational power.

ITPOD Storage Hybrid (HYB) is a line of hybrid traditional storage systems designed for large-scale data storage. They combine **hard disk drives (HDDs)** and **solid-state drives (SSDs)**, which can be used both for rapid access to hot data (read cache) and for direct storage on high-speed drives. The inclusion of SSDs enhances system performance and reduces response times when handling operational data. By leveraging the advantages of both HDDs and SSDs, these systems deliver cost efficiency, reliability, and high data availability. ITPOD Hybrid DSS solutions are optimized for mixed storage workloads, making them an ideal choice for companies seeking to improve storage performance and efficiency.

ITPOD Storage systems support fault tolerance for up to three failed drives, ensure transactional integrity, and provide automatic data recovery. All critical components feature redundancy to guarantee uninterrupted operation. An intuitive graphical web interface simplifies storage resource management.

When designing our storage systems, we meticulously selected hardware components, implemented innovative software solutions, and dedicated maximum effort to create high-quality data storage platforms. Through our team's coordinated work, we have built systems that deliver high performance, stability, and storage efficiency.

Data storage efficiency



Store petabytes of data while reducing storage costs

Reliability



Your data will always be available, even if half of the system components fail

High performance



Combining HDD capacity with SSD performance for efficient high-speed operation

Compatibility



Easy integration with existing IT infrastructures and support for advanced protocols and standards

Guaranteed data protection



Keep your data secure with transactional integrity support and automatic recovery

Ease of maintenance



Intuitive web-based graphical interface makes it easier than ever to manage storage resources like never before

Dimensions

Disk Shelf:
6U (60 x 3.5" 12Gb/s SAS)

Weight (including one disk shelf):
120 kg

Controllers: 2 x 2U,
D: 748мм x W: 433.4мм x H: 87.6мм

Operating conditions

Installation in a standard 19" rack,
up to 1 meter deep

Power consumption from 2000W
(depending on the fill)

Operation at temperatures from 10° to 35°C and relative humidity between 30% and 80%
(without air condensation)

Technical specifications	ITPOD HYB-100	ITPOD HYB-300	ITPOD HYB-500
Class of equipment	Entry	Midrange	High End
Performance (GBps)	5.2	7.8	13
Operating mode	Active-Active		
Memory (per system)	384 GB	512 GB	1024 GB
NVRAM (per system)	64 GB		
Maximum number of drives	480	720	1440
Maximum unplaced space	up to 10 PB	up to 15 PB	up to 31 PB
Efficient space	up to 30 PB	up to 45 PB	up to 92 PB
Supported drives SAS HDD, 7200rpm	4TB, 8TB, 10TB, 18TB, 22TB		
Supported drives SAS SSD	1.6TB, 3.2TB, 6.4TB		

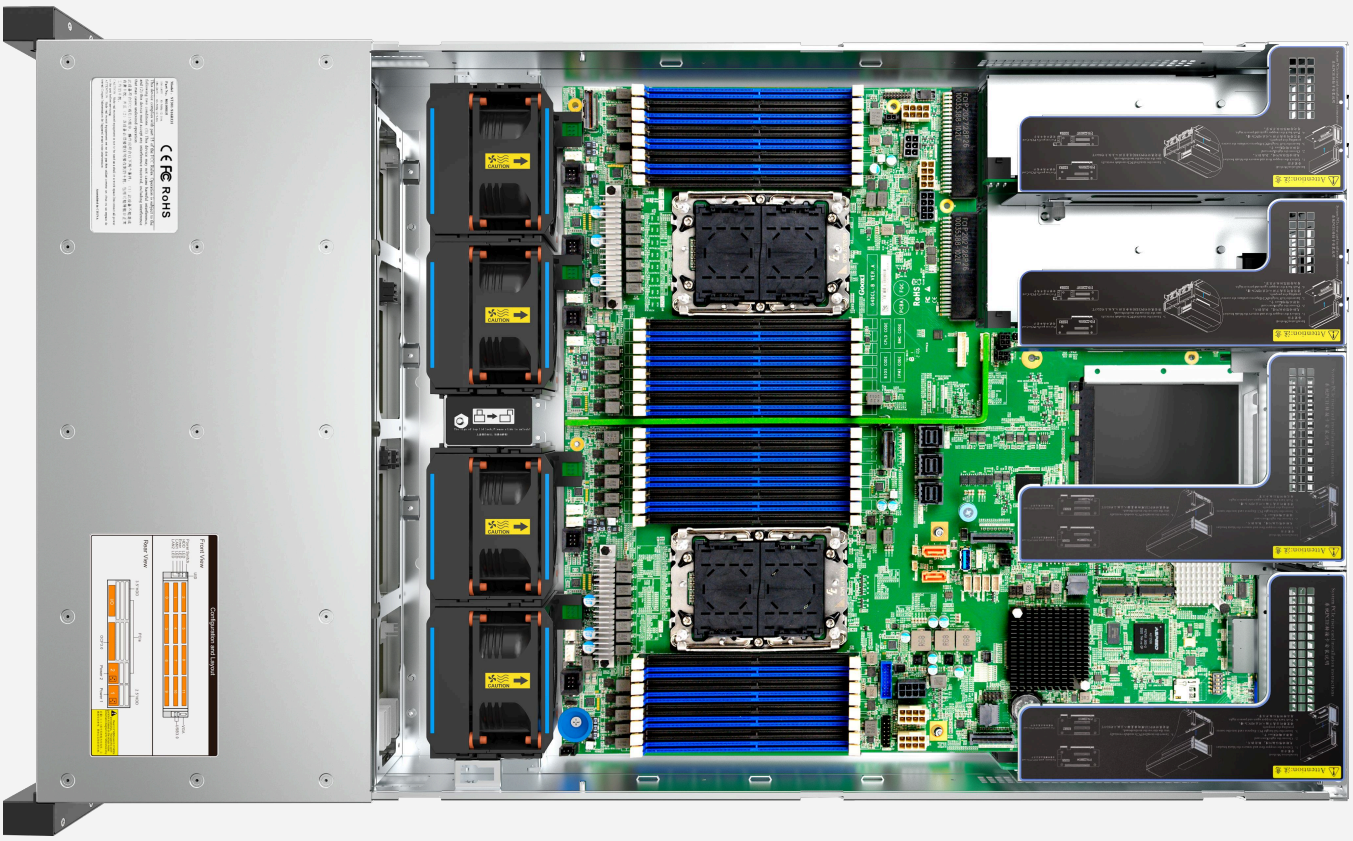
Block access protocol
iSCSI
NVMe/TCP

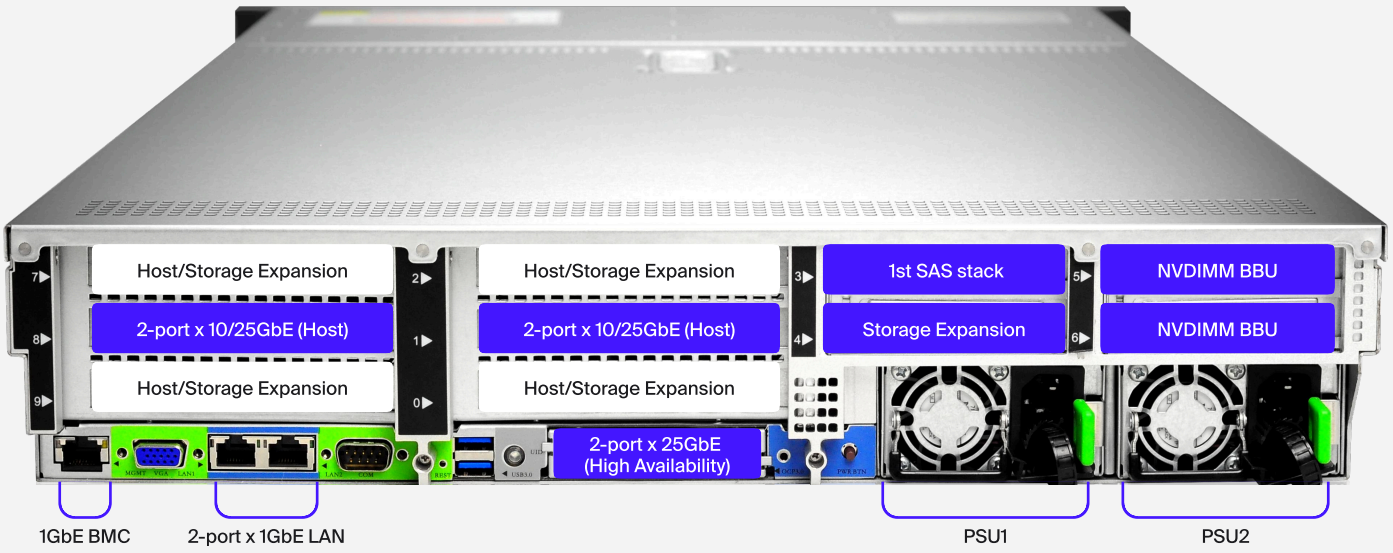
File access protocol
NFS

Management console
Web GUI

Notifications
AutoSupport
SMTP
SNMP
Syslog

Storage controller





Storage expansion

Support up to 1440 pcs 12Gb/s SAS drives per system

4 expansion slots for installation

4-port 10Gb Eth SFP+

2-port 10/25Gb Eth SFP28

2-port 40/100Gb Eth QSFP28

Functionality



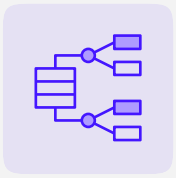
Read Cache

Increased overall performance through storage of frequently accessed data blocks on high-speed SSDs



Snapshots

No impact on performance and independent of volume size



App-on-Controller

The possibility of running isolated user applications directly on storage controllers



AutoSupport

Performance monitoring and AutoSupport alerts with 24/7 support



RAID-Z (2,3)

Providing redundancy without performance degradation disk failures



QoS

Workload control and QoE prioritization



Inline-Deduplication Inline-Compression

Cost-effective real-time storage space utilization for SSD



Thin Provisioning

High efficiency of space utilization and allocation

Included tech support	3 years
Advanced service plan	24x7 for 5 years
Replacement of failed components	Up to Next Business Day
Remote Technical Support	Access to the self-service web portal 24 hours a day, 7 days a week

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