

IOPStor: Storage Made Easy



Application data, virtual images, client files, email, the types of data central to running a successful business can seem endless. With IOPStor® you finally have an advanced and easy-to use solution for centralizing, securing and controlling access to your digital assets. Way more than just simple unified (NAS and SAN) storage for your company, IOPStor allows you to do more than you ever thought you could afford by pairing the latest in performance with innovative efficiency technologies such as unlimited snapshots, thin provisioning etc. Designed specifically for the unique needs of SMB & Enterprise, devices are virtualization-ready with iSCSI and NFS support, thin provisioning capability and compatibility with VMware®, Citrix® Microsoft®, Proxmox VE, oVirt, etc. These days, your data is your world. With IOPStor, protecting and accessing that world has never been easier. IOPStor — Storage Made EASY.

Key Business Features



- Data Scrubbing: A technology protecting your files from unplanned degradation



- Unlimited Snapshots: Unlimited data snapshot capability for on-box protection and flexible data recovery



- Data Replication: Maintain data sets in multiple locations or ensure protection of data from remote or branch office locations



- iSCSI and Thin Provisioning: Powerful tools for a business's taking advantage of virtual infrastructures



- Enterprise GUI

Key Business Solutions



- File Server: Unified storage platform for sharing files between Windows, Mac and Linux-based computers



- SW RAID redundancy with automatic expansion and unlimited data snapshots for point-in-time restore




- Virtualization: Thin provisioning, iSCSI support and certified with VMware and Microsoft

IOPStor IOP101B Network Attached Storage (NAS)

Data Sheet

IOPStor Desktop Model Comparison – Rack mount

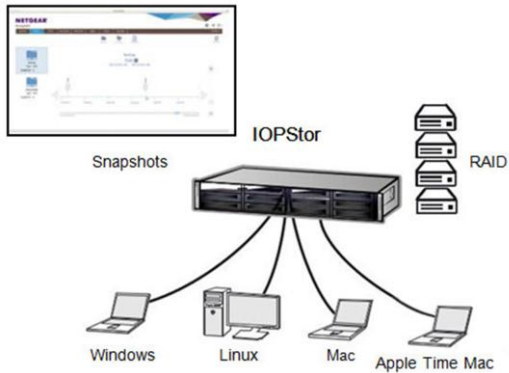
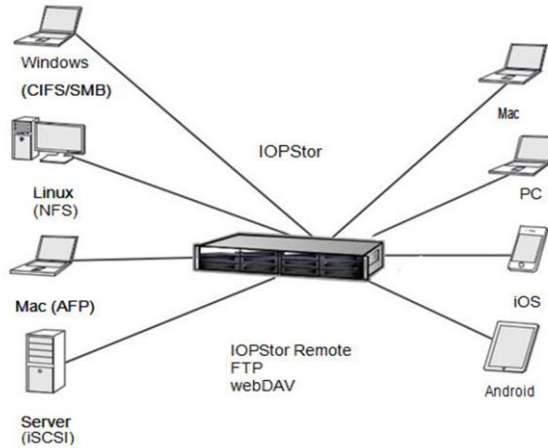
Hardware	IOP101B
	
➤ Image	
➤ CPU	Intel Xeon
➤ Memory	32GB DDR4 ECC expandable up to 128GB
➤ Drive Bays	10 bay
➤ Drive Types Supported	2.5"
➤ Hot Swappable Drives	Yes
➤ Max Raw Internal Capacity (Based on 15.36TB drives):	153.6TB
➤ Read Cache	240GB
➤ Gigabit LAN Ports	10G * 2
➤ Power Supply	700 Watts RPS
➤ Fan (mm)	4 * 40*56mm
➤ Scalability	Unlimited
➤ Dimensions D*W*H (mm)	597 x 437 x 43
➤ Weight (kg)	16.33
➤ Warranty	3 years

Software and Functionality	
➤ Data Protection with Unlimited Snapshots	Yes
➤ Web-managed Replication for	Yes
➤ iSCSI and Thin Provisioning	Yes
➤ SSD Cache	Yes
➤ 30sec RAID boot	Yes
➤ RAID type – 0,1,5,10,	Yes
➤ De-duplication	Yes
➤ Compression	Yes
➤ Hot data management	Yes
➤ File Sharing	Yes
➤ Block Storage	Yes
➤ Volume Size	Unlimited

IOPStor Solutions

File Sharing

These days, running a successful business often depends on successful file sharing—application data, virtual images, client files, email, all the digital files that make your business go. With IOPStor, you finally have an advanced and easy-to-use solution for centralizing, securing, and sharing those critical assets. Faster processors mean more simultaneous users can access unified storage—across PC, Mac and Linux environments.

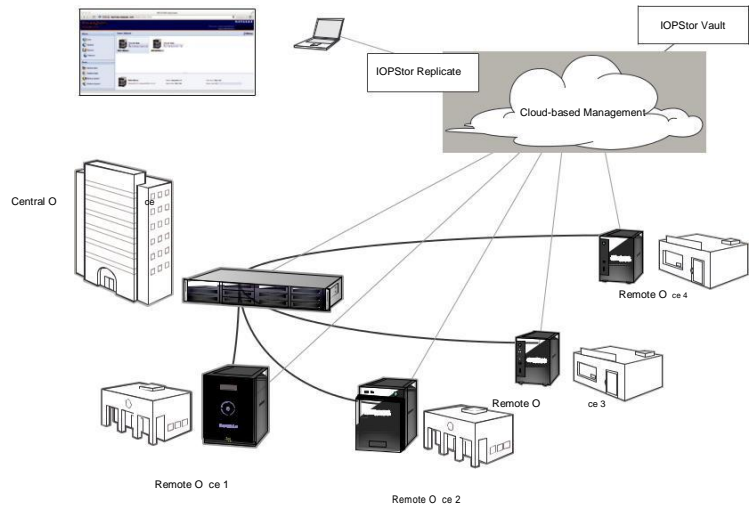
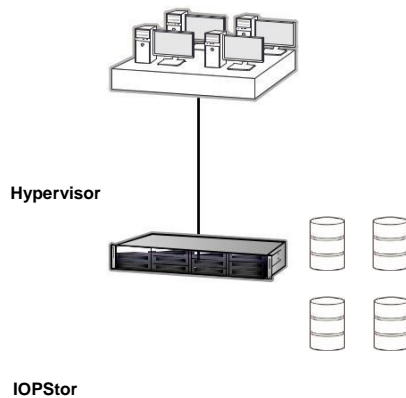


Backup

Unlimited snapshots give you complete control over the past, present, and future of your data. This enterprise-class feature copies any point of time in the file system, can be manually or automatically scheduled, and can restore any version with a simple click.

Disaster Recovery

Data Replication for onsite & off site data protection is done seamlessly.



Virtualization

With Unlimited Snapshots, thin provisioning, and improved iSCSI support, IOPStor delivers a virtualization platform with next-generation features at an affordable price.



Technical Specifications

Data Protection (Backup & Replication)

- Unlimited block-based snapshots for continuous data protection
- Restore Snapshots to any point in time
- Restore Snapshot data from local admin GUI
- Scheduled and manual snapshots
- File Synchronization (rsync)
- Remote Replication
- RAID Levels: RAID Z, RAID Z1, RAID Z2, mirror, stripe, mirror + stripe equivalent to 0, 1, 5, 6, 10, others (RAID level support depends on number of drives/bays)
- RAID Global Hot Spare

Storage Area Networks (SAN), Virtualization

- Unlimited iSCSI LUN Snapshot
- Thin or thick provision LUNs
- Multi-LUN per target
- LUN mapping
- LUN masking
- SPC-3 Persistent Reservation (iSCSI)
- MPIO (iSCSI)

File System & Transfer Protocols

- External File System: EXT3, EXT4, NTFS, FAT32, HFS+
- Copy-on-write file system
- Microsoft Network (CIFS/SMB)
- Apple OS X (AFP 3.3)
- Linux/Unix (NFS v3)
- Internet (HTTP)
- Secure Internet (HTTPS)
- File Transfer Protocol (FTP)
- Secure Shell (SSH)
- Web Authoring (WebDAV)
- Storage Array Network (iSCSI)
- File Synchronization (rsync)
- Local web file manager

Users/Groups

- Share Folder Level ACL Support
- Advanced Folder Permissions with Subfolder ACL support for CIFS/SMB, AFP, FTP
- Microsoft Active Directory (AD) Domain Controller Authentication
- Local access list

Management

- Save and restore system configuration (clone devices)
- Local event log
- Thin provision Shares and LUNs
- Instant Provisioning/Expansion with data protection
- Restore to factory default
- Operating Systems supported: Microsoft Windows 7, 8/8.1, 10, Microsoft Windows Server 2008 R2/2012, Apple OS X, Linux/Unix, Solaris, Apple iOS, Google Android
- Supported Web Browsers (Microsoft Internet Explorer 9+, Mozilla Firefox 14+, Google Chrome 20+, Apple Safari 5+)

System Monitoring

- Device capacity, performance, resource and health monitoring
- Bad block scan
- Hard Drive S.M.A.R.T.
- File System Check
- Disk Scrubbing
- Volume balance
- Alerts (SMTP email)

Technical Specifications

Networking Protocols

- TCP/IP
- IPv4
- Next-generation Internet Protocol (IPv6)
- Static IP Address
- Dynamic IP Address
- Multiple IP Settings
- DHCP Client
- UPnP Discovery
- Link Aggregation IEEE 802.3ad
- Port Trunking (balanced round robin, active backup, balance xor, broadcast, 802.3ad link aggregation LACP, transmit load balancing, adaptive load balancing)
- Hash Types IEEE 802.3ad LACP or XOR (Layer 2, Layer3, Layer 4)
- Jumbo Frames
- Static routes
- Secure Shell (SSH)
- Simple Network Management Protocol v2, v3
- Network Time Protocol (NTP)

Hardware

- Intel Xeon
- Memory: 32GB DDR4 ECC expandable up to 128GB
- Flash: 60GB*1 for OS
- Drive Bays: 10
- Drive Types Supported: 2.5"
- Hot Swappable Drives
- Total solution capacity:153.6 TB based on 15.36TB
- Read Cache – 240GB
- Scalability - Unlimited
- 10G Ethernet ports with link aggregation and failover
- LEDs: Power, Activity, Disk, Backup, LAN
- Integrated rack mount ears
- 4 40*56mm fans
- Dimensions (D*W*H): 597mm x 437mm x 43mm
- Weight: 16.33 kg
- Power cord localized to country of sale

IOPStor IOP101B Network Attached Storage (NAS)

Data Sheet

Specification	Values
Storage System Type	SAN
Group2	
Storage Capacity (TB)	153.6 terabyte
Group3	
Hardware Form Factor of Storage System (RU)	1
Disk	
Disk Type	SAS
Speed of dual ported disk drive in Gbps	12Gbps
Total Numbers of Drive Slots	10
Number of Drive Slots Populated with drives of different type in the Storage System	10
Total no of drive slot populated with SSD	0
Total no of drive slot populated with Flash Drive	0
Total no of drive slot populated with SAS	0
Total no of drive slot populated with NL-SAS	0
Drive Type Wise Storage Capacity of System in GB	15360
Automated Storage tiering feature across the populated Drives types(in case of multiple drive system)	No
Automated Storage tiering Software License Included	No
Hot Spares	Yes
Number of Populated Disks per Hot Spare	1
Provision for additional Capacity	Yes
If Yes, Number of Drive Slots available to achieve additional capacity	Unlimited
Connectivity/Port	
Type of Front end Ports	No
Number of Front end Ports	No
Speed of front end Ports in Gbps	No
Type of Back end Ports	Lan
Number of Back end Ports	2
Speed of Back end ports in Gbps	10G
Number of Remote Replication Ports(FC/Ethernet)	2
Controllers	
Number of Controllers/VSD/ Node available in the storage System	1
RAID Level Support	0,1,5,6,10,50,60
Active-Active Controllers Configured in HA	NA
Active Stand by Controller Configured in HA	NA
System Cache	
Cache Availability Type	Global
Total Configurable Cache (GB)	240GB
Group4	
Wide Stripping or equivalent feature	TRUE

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Data Sheet

Group5	
No of Snapshot Copies Per Volume	255
License for Snapshot included	Yes
Data Replication	
Remote Replication	Yes
Remote Replication license included	Yes
Synchronized Replication Support	Yes
Synchronous Replication license included	Yes
Asynchronous Replication Support	Yes
Asynchronuos Replication license included	Yes
3-DC Zero Data Loss Support	No
If Yes, Supported Replication Topology for 3-DC Zero Data Loss	No
Group6	
Type of Data Compression	S/W Level
Type of Data Deduplication	S/W Level
No Single point of Failure with Non-Disruptive replacement of Hardware	Yes
The Storage provide Non disruptive Firmware /Microcode upgrade	Yes
Firmware upgrade without any controller reboot	Yes
Encryption Mode	
Encryption Required	FALSE
Type of Data at Rest Encryption	SW based
Group7	
Storage management software for configuration and multi-pathing(part of the supply).	YES
Group8	
Multi-pathing and load balancing and fail over software (part of supply) with license for windows/Linux servers or shall support native multipathing of OS.	YES
Group 9	
Protocols Supported by the storage system from day one	Yes
Group 10	
Operating System Platform and Clustering Supported by the Storage from day one	Yes
Group11	
Operating Temp Range	60
Group12	
Storage Temp Range	55
Group13	
Operating Humidity (Rh)	85

IOPStor IOP101B Network Attached Storage (NAS)

Data Sheet

Group14	
Storage Humidity (Rh)	80
Group15	
BIS Registration under CRS of MeiTY	No
If Yes, BIS Registration No under CRS of MeiTY otherwise indicate N/A	No
BIS Registration Certificate shall be furnished when demanded by the buyer	No
Group16	
Storage System is compliant with IPv6	TRUE
Group17	
Standby power consumption of System in Watt	250
Group18	
Scope of Supply	It includes installation, commissioning & integration together with all necessary software to make the system fully functional as intended.
Group19	
On Site OEM Warranty	3