ES-2000WSS Storage Server

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EUROstor ES-2000DB/DC:

- NAS/iSCSI server with Windows Storage Server 2022 64 bit
- up to 72 disks (SAS, SSD or SATA enterprise, also mixed)
- expandable to 512 disks via SAS expansion port (no additional licenses)
- Intel Xeon dual socket processor on X11 board
- 2 x 10 Gbit Ethernet for NAS (CIFS and NFS) and iSCSI connection (opt. more)
- full AD support
- hardware RAID controller with level 0, 1, 5, 6, 10, 50, 60
- RAID 6 on ASIC
- snapshots (VSS)
- SIS Single Instance Storage (file dedup.)
- redundant PSU and fans
- remote server management over IPMI 2.0 with KVM support.

Windows Storage Server 2022 (WSS 2022) is an expansion of Windows 2022 Server operating system, to offer special storage services.

EUROstor ES-2000WSS Storage Server combines this software with high performing hardware RAID technology, to offer storage services with maximum performance and availability. At the same time Windows Storage Server 2022 is still a "normal" operating system, where additional applications can easily be installed – e.g. backup software to save server data.

ES-2000WSS servers come with up to 72 disks – expandable over a SAS port to 240 disks. These can be SAS or SATA enterprise disks, but also less power consuming 2.5" disks or Solid State Disks (SSD).
ES-2000WSS servers offer NAS services for Windows CIFS clients as well as for UNIX or Linux systems over NFS.

With Volume Shadow Copy Service also a snapshot concept is available that allows to save the data status at a given point in time.

The Shadow Copy can be mounted on a different directory. If files have been deleted or changed, the original state can be restored by just copying the files from the snapshot directory.

SIS – Single Instance Storage – is a deduplication feature that can reduce used data space by replacing multiple instances of the same file with small links to a single instance. Especially when storing user home directories, this saves a lot of disk space.

In addition to file server functionality Windows Storage Server 2022 also supports iSCSI volumes – block devices with higher transfer speed.

Management of the system as well as of the internal RAID controller is easily done over the web with a standard browser. The RAID controller can also send email notification on all major events.

For every access that normally would require a local console, an IPMI interface card offers direct access for remote management over the network – including complete system health monitoring and remote system shutdown and startup.

Service:

- 3 years warranty
- free support via telephone or email
- optional: 3 years Advance Replacement Service
- optional: 3 years On-Site Service

model	disks	rackmount size	size WxHxH	PSU
ES-2008DC	8	2 U	437x89x647	2x 800 Watt redundant
ES-2012DC	12	2 U	437x89x647	2x 1200 Watt redundant
ES-2016DB	16	3 U	437x132x647	2x 1000 Watt redundant
ES-2024DB-2U	24x 2.5"	2 U	437x89x630	2x 1200 Watt redundant
ES-2024DB	24	4 U	437x178x660	2x 1200 Watt redundant
ES-2036DB	36 *	4 U	437x178x699	2x 1200 Watt redundant
ES-2072DB	72x 3.5" **	4 U	437x178x699	2x 1280 Watt redundant

*) 24 on front, 12 on rear side   **) 48 on front, 24 on rear side

specifications	
disk interface	SAS / SATA-II / SSD, also mixed
system architecture	• Intel Xeon Silver 4208 processor on dual socket X11 Board, optional other • 96 GB DDR4 RAM, optional up to 4 TB on 16 slots • 2 Ethernet ports (10 Gbit RJ45), 1 IPMI port • 7 PCIe 3.0 slots (3 x16, 4 x8) • 2 onboard NVMe M.2 slots, 4 USB 3.0 ports
RAID architecture	• Hardware RAID level 0, 1, 0+1, 3, 5, 6, 50, 60 JBOD • multiple RAID selection • online RAID level / stripe size modification • online capacity expansion with RAID level migration • direct availability of capacity – background initialization • hot-spare disks • automatic disk integration and automatic rebuild • optional battery backup module, up to 72 h
NAS features	• SMB/CIFS for Windows clients • NFS for UNIX/Linux clients • Windows Active Directory • Distributed Filesystem Support (DFS) • iSCSI initiator for easy capacity expansion • Volume Shadow Copy Service (snapshots) • quota on NAS volumes • Single Instance Storage (deduplication)
management	• IPMI 2.0 with KVM support • over Web browser and remote desktop
operating system	Windows Storage Server 2022, 64 bit
electrical	110-230 V AC, 50-60 Hz
temperature	operating: 5 – 35° C, non-operating: -40° – +60° C
rel. humidity	20% - 80% non-condensing