



UNIVERSALITY

The universal production servers **XSTREAMSTORE** were developed to achieve optimal performance, ensure advanced data protection, and provide simple and intuitive access management, all while delivering unwavering reliability.

XSTREAMSTORE is compatible with all major editing and color grading solutions, including AVID, Resolve, Adobe Premiere, Final Cut, and more.

XSTREAMSTORE allows multiple users to simultaneously read and write from the same storage volume across all platforms: **Mac OS, Windows, Linux**, and common applications such as Avid, Final Cut, Edius, Resolve, ProTools, Scratch, and more.

XSTREAMSTORE is also equipped with **Avid virtualization functionality**, enabling full utilization of the collaborative workflow possibilities offered by **Avid Media Composer** (Bin Locking, etc.).

PERFORMANCE

The exceptionally high bandwidths enable smooth simultaneous work with multiple very high-resolution video streams, up to 16K. Naturally, with such bandwidths, thousands of audio tracks can be supported for both reading and writing.



On a single gigabit network port, XSTREAMSTORE sustains a throughput of over 110 MB/s, more than 1 GB/s over a 10Gb connection, and over 4 GB/s using a 40Gb connection. Equipped natively with port aggregation functionality for up to 4 Ethernet connections, XSTREAMSTORE achieves connection speeds of up to 160 Gb/s.

EASE OF INSTALLATION

XSTREAMSTORE can integrate directly into any existing network infrastructure. XSTREAMSTORE volumes mount as network storage on client workstations. They can be accessed via SMB, NFS, and/or FTP/SFTP simultaneously. XSTREAMSTORE integrates seamlessly into Active Directory or OpenLDAP domains with flexibility and speed.



THE VICTORY GENERATION

What is the new XSTREAMSTORE Victory line?

It is the culmination of several years of research and development in extremely high-performance production servers. The new embedded **Victory generation technology** drastically increases the overall bandwidth of XSTREAMSTORE units, enhances network connections, and strengthens stability during collaborative work. Victory further boosts the reliability of your working environment.

With Victory technology, the performance of the new generation of XSTREAMSTORE achieves bandwidths exceeding 30 gigabytes per second (XSTREAMSTORE MAXIMUS) while consuming less energy. This increase in power, combined with enhanced server stability, allows you to reduce production costs while becoming even more performant.



SECURITY

XSTREAMSTORE Victory is a fully secure system. It comes standard with redundant power supplies, mirrored SSD system disks, and protection against power loss. The operating system at the core of XSTREAMSTORE's performance is based on a specific Unix distribution.

Data storage utilizes the ZFS file system, offering the highest level of security currently available. Indeed, data corruption and file system damage due to an abrupt power failure are impossible thanks to its Copy-On-Write architecture. This eliminates the need for automatic file system analysis and reconstruction after a power outage. Additionally, ZFS's specific RAID-Z architecture protects against the inconsistency of parity data in traditional RAID systems (1, 4, 5, and 6), known as the "write hole". This issue, inherent to classic RAID systems, can lead to data corruption or even reconstruction failures after a disk replacement.

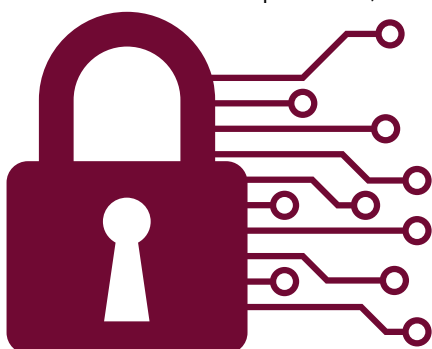
XSTREAMSTORE natively supports the following features:

- Snapshot
- Clone
- Replication

Incremental SNAPSHOTS can be created automatically or manually. They capture the state of a volume at a specific moment in time while using minimal storage space. For example, if 10 MB of a 3 GB file are modified between two snapshots, the latest snapshot will only store the 10 MB of new data. Previous versions of the file can be accessed via the "previous versions" feature on the client machine where the volume is mounted. It is also possible to configure the retention period for automatic snapshots.

The CLONE function allows snapshots to be shared and made editable. These clones become accessible for both read and write operations from workstations connected to the XSTREAMSTORE.

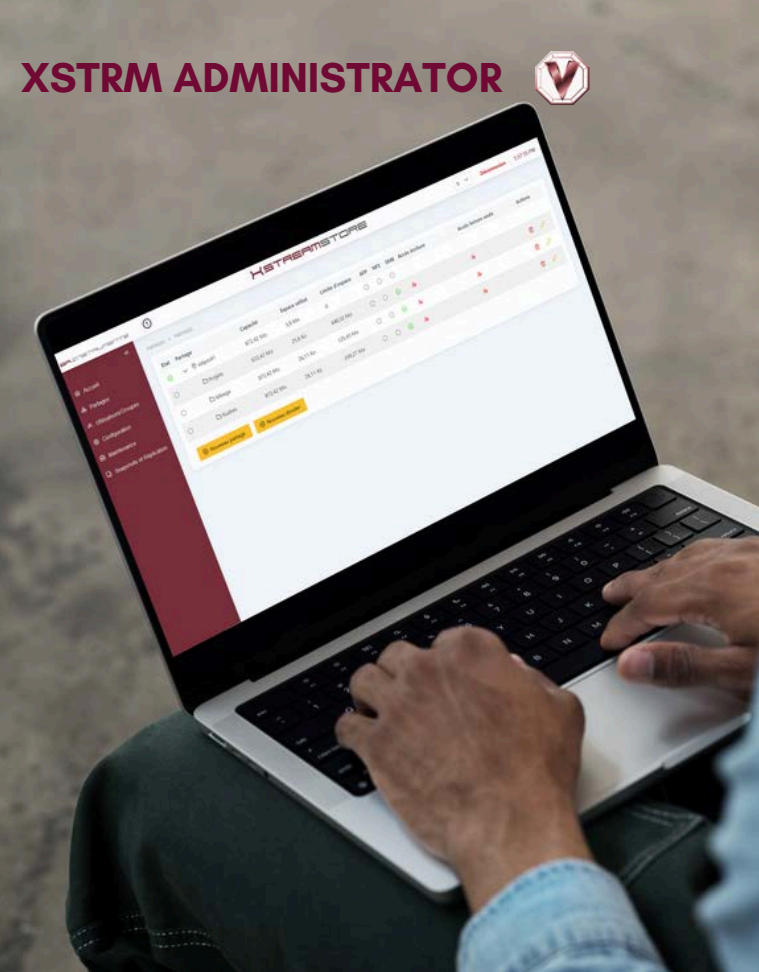
REPLICATION is the ultimate security feature. It enables incremental replication of the primary XSTREAMSTORE to another XSTREAMSTORE unit. Configurable settings allow for flexible retention periods, including near real-time synchronization.



The Snapshot, Clone, and Replication functionalities all operate at the block level, significantly optimizing the amount of data in motion.

For the most critical production environments requiring flawless continuity, XSTREAMSTORE is also available in a ****High Availability (Active/Passive Failover)**** version.

XSTRM ADMINISTRATOR



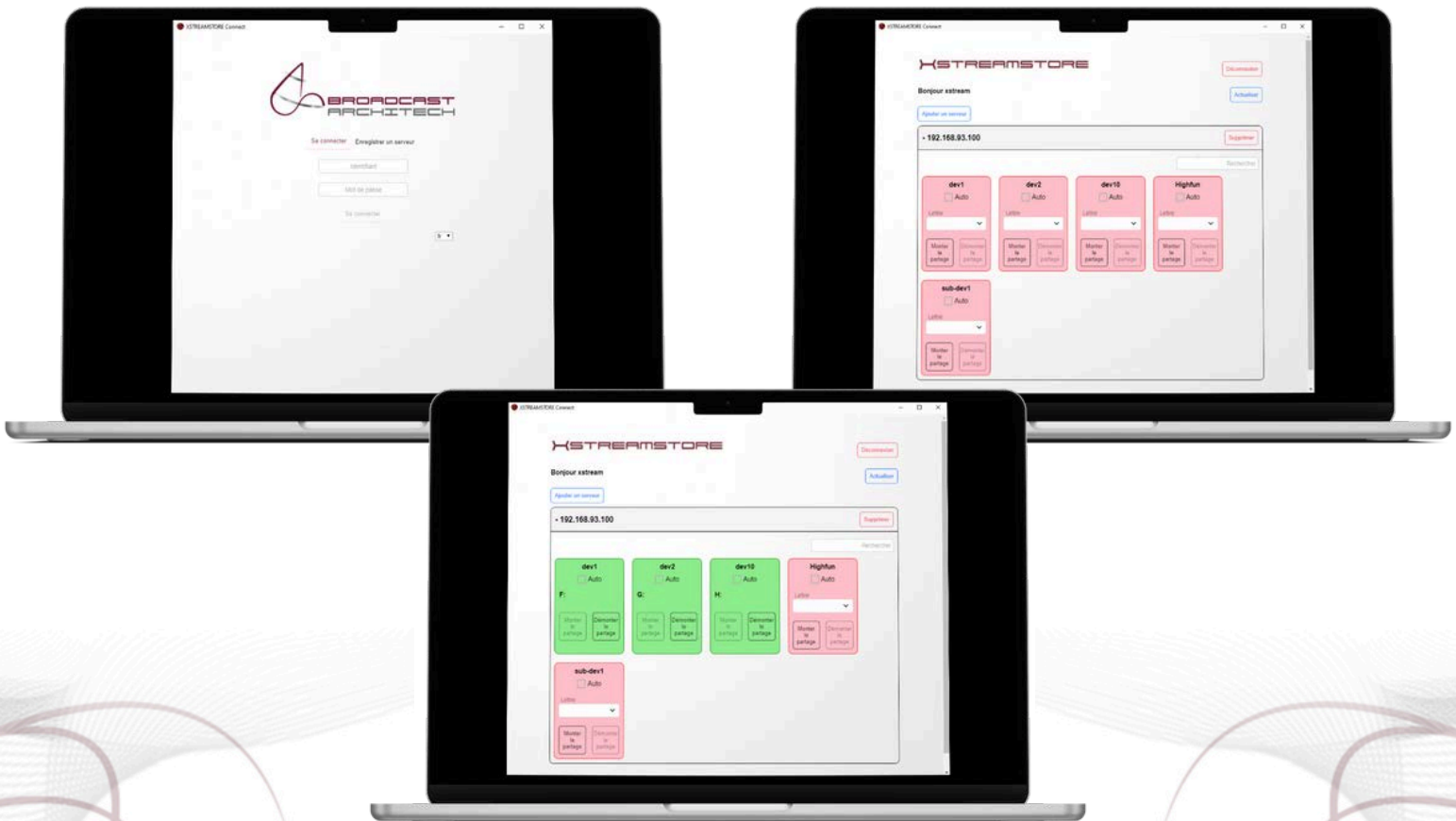
EASE OF ADMINISTRATION

The administration interface, called XSTRM Administrator, is accessible from any Mac, Windows, or Linux workstation using a simple web browser. You can also control your server from any smartphone or tablet for easy, fully mobile management.

Ergonomic and intuitive, it offers numerous tools for analysis, monitoring, maintenance, volume operations, access rights configuration, backup, and more. Naturally, access is regulated by authentication.

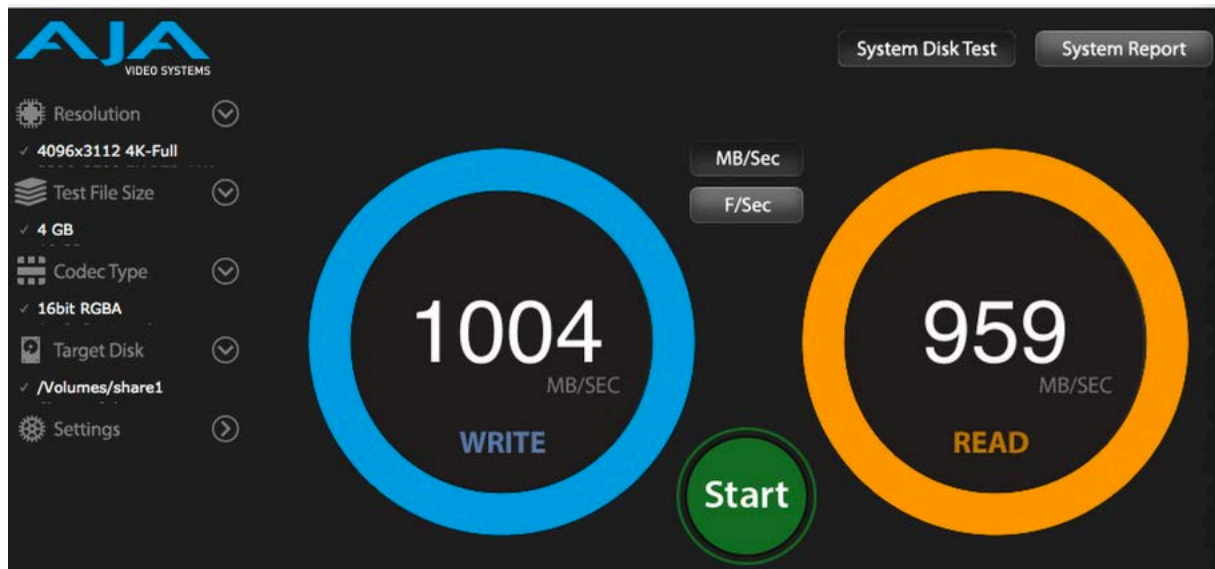
Managing volume sharing and dynamic resizing is done simply and in real time. ****Quotas**** allow precise management of storage space based on productions and projects. Access to shares is regulated visually and intuitively by user or user group.

XSTRM KONNECTOR

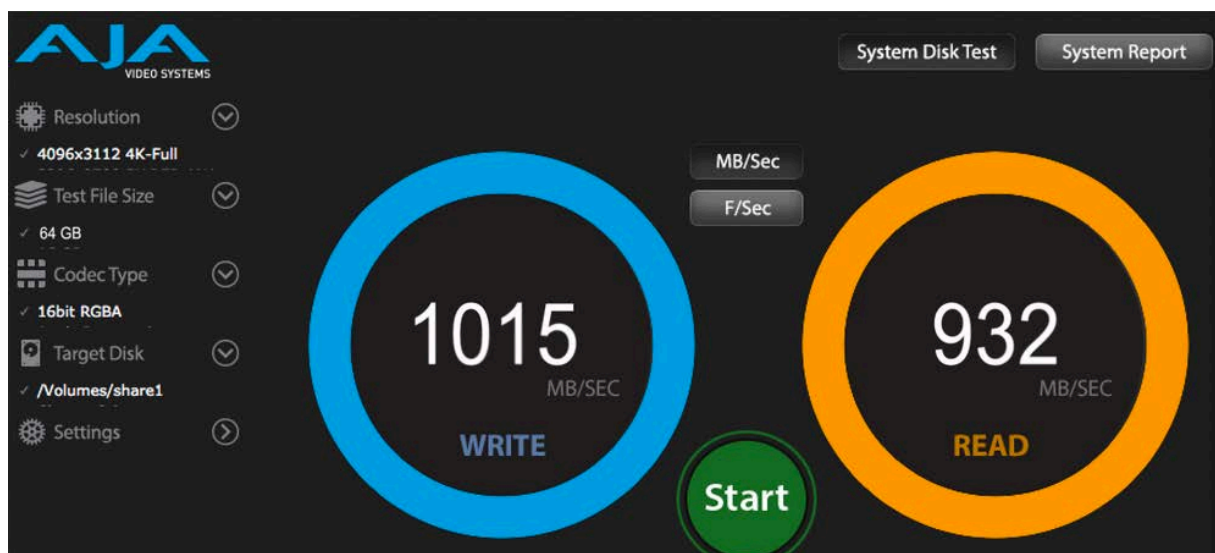


XSTREAMSTORE Victory BANDWIDTH 10 Gb/s CONNECTION

Transfer of a full 4K 4GB file



Transfer of a full 4K 64GB file



THE ATYPICALS - Ultra-mobile and ultra-quiet

XSTREAMSTORE BACKPACK V2

Its high-security design and extremely compact form factor were engineered for ultra-mobility Scooter, bike, scooter—nothing stops it! Ultra-quiet, it is ideal for on-location shooting or outdoor capture for tasks like rushes offloading, pre-editing, generating files for self-conforming, and more.



Dimensions (L x W x H)	210 x 210 x 320 mm
Capacity	24 To Full SD
Bandwidth	2 GB/s read and write
Connectivity	10 Gb/s RJ45 or SFP+
Net Weight	< 7 kg

XSTREAMSTORE Assistant

Ideal for small productions or limited spaces, it is the perfect partner in an Assistant/ Editor configuration, for TV/film productions, web TV, eSports, etc. Extremely quiet, it can be used in the workspace right beside you. Its compact design makes it easily portable.

Dimensions (L x W x H)	210 x 350 x 285 mm
Capacity	24 TB
Bandwidth	600 MB/s read and write
Connectivity	1 Gb/s RJ45 or SFP



XSTREAMSTORE Assistant Pro



Dimensions (L x W x H)	210 x 350 x 285 mm
Capacity	48 TB
Bandwidth	800 MB/s read and write
Connectivity	1 Gb/s RJ45 or SFP

THE RACKS - compact & ultra-quiet

XSTREAMSTORE Pro

A rack-mounted server designed for all types of TV/film production and post-production, web TV, eSports, etc. Integrable into racks, it fits perfectly in mobile control rooms, studios, nodal points, and more.

It is ideal for editing and color grading suites in standard production and post-production environments.



Dimensions (L x W x H)	430 x 560 x 88 mm
Capacity	48 TB
Bandwidth	1 GB/s read and write
Connectivity	10 Gb/s or 40 Gb/s (RJ45, SFP+, QSFP+)
Net Weight	32.5 kg

XSTREAMSTORE Classic

Ideal configuration for production and post-production in studios, control rooms, or nodal points. A rack-mounted server designed for high-quality codec and heavy-format demands. Perfect for intensive simultaneous editing and color grading.



Dimensions (L x W x H)	430 x 680 x 133 mm
Capacity	96 TB
Bandwidth	1,3 GB/s read and write
Connectivity	10 Gb/s or 40 Gb/s (RJ45, SFP+, QSFP+)
Net Weight	43.6 kg

XSTREAMSTORE Storm

Designed for large editing facilities and highly demanding color grading workflows with heavy codecs and formats (4K UHD, EXR 4K, 8K, etc.).



Dimensions (L x W x H)	430 x 680 x 174.3 mm
Capacity	144 TB
Bandwidth	2 GB/s read and write
Connectivity	10 Gb/s or 40 Gb/s (RJ45, SFP+, QSFP+)
Net Weight	51.4kg

XSTREAMSTORE Thunder

Need a boost? Ideal for large facilities looking to multiply color grading and editing stations while working with extremely heavy formats, and for structures requiring vast storage capacities.



Dimensions (L x W x H)	645 x 835 x 310 mm
Capacity	216 TB
Bandwidth	3 GB/s read and write
Connectivity	10 Gb/s or 40 Gb/s (RJ45, SFP+, QSFP+)
Net Weight	62 kg

XSTREAMSTORE Hurricane

Designed for high-capacity, high-performance storage needs, primarily targeting facilities that require working with very large volumes of rushes and demanding codecs—all while supporting collaborative workflows, of course.



Dimensions (L x W x H)	603 x 1240 x 454 mm
Capacity	480 TB
Bandwidth	4 GB/s read and write
Connectivity	10 Gb/s or 40 Gb/s (RJ45, SFP+, QSFP+)
Net Weight	79 kg



Option Dual Head "FireSafe"

All rack-mounted XSTREAMSTORE models offer the option to integrate the "FireSafe" functionality. It enables high availability through active-passive failover.

XSTREAMSTORE Victory Custom

In addition to the XSTREAMSTORE models listed in the catalog, BA Instruments designs custom storage units to meet any type of need. Thus, upon simple request, we can provide you with a unique, perfectly tailored XSTREAMSTORE from the very latest Victory generation.

XST FLASHES - Ultra Fast & Killer I/Ops

XSTREAMSTORE Neutrino

Optimized for over 7 million I/Ops. Ideal for coloring, rendering, compositing, SFX, animation, and more.



Dimensions (L x W x H)	430 x 645 x 88 mm
Capacity	48 TB
Bandwidth	10 GB/s read and write
Net Weight	25.5 kg

XSTREAMSTORE Maximus

Designed for very high-resolution productions, multiple RAW, DPX, and EXR streams. Nearly unlimited I/Ops.



Dimensions (L x W x H)	430 x 645 x 88 mm
Capacity	48 TB
Bandwidth	30 GB/s read and write
Net Weight	25.5 kg

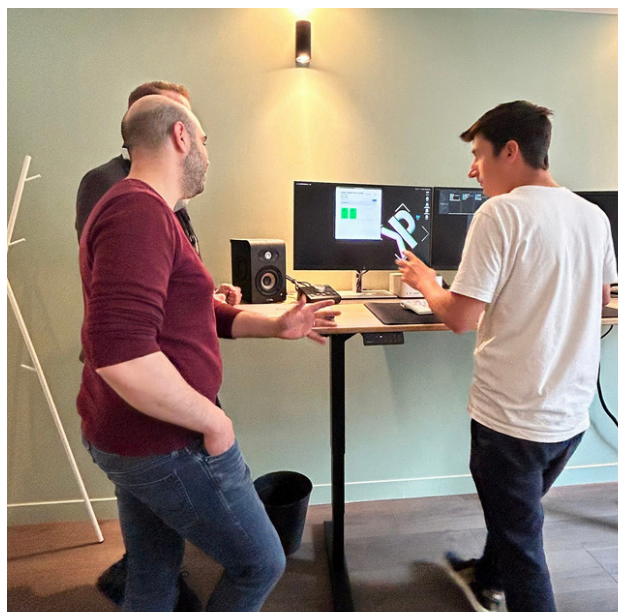


Dual Head "FireSafe" Option

All rack-mounted XSTREAMSTORE models offer the possibility to integrate the "FireSafe" functionality. It enables high availability through active-passive failover.

XSTREAMSTORE Victory Custom

In addition to the XSTREAMSTORE models listed in the catalog, BA Instruments designs custom storage units to meet any type of need. Thus, upon simple request, we can provide you with a unique XSTREAMSTORE perfectly tailored to your requirements.



INSTALLATIONS

X-STREAMSTORE
UNIVERSAL PREMIUM STORAGE FOR MEDIA



STREAMING/CODEC TABLE

	HDD					SSD		NVME	
	12	16	24	36	60	8	24	10	24
Streams	HDD	HDD	HDD	HDD	HDD	SSD	SSD	NVME	NVME
DNxHR HQX UHD 50p 1,46 Gb/s (182 Mo/s)	2	2	4	6	11	17	51	18	118
DNxHD 220 220 Mb/s (28 Mo/s)	14	18	28	40	64	111	333	535	1284
DNxHD 185 185 Mb/s (24 Mo/s)	18	18	30	44	70	130	390	625	1500
DNxHD 120 120 Mb/s (16 Mo/s)	20	26	40	60	100	195	585	937	2248
DNxHD 36 36 Mb/s (4 Mo/s)	60	80	120	180	280	780	2 340	3 750	9 000
ProRes HQ 4/2/2 UHD 50p 1,65 Gb/s (206 Mo/s)	2	2	4	6	11	15	46	69	166
ProRes 4/4/4/4 330 HD 330 Mb/s (42 Mo/s)	10	13	20	30	48	74	222	357	856
ProRes HQ 4/2/2 220 HD 220 Mb/s (28 Mo/s)	13	18	28	40	64	111	334	535	1 284
ProRes PROXY 4/2/2 36 HD 36 Mb/s (4 Mo/s)	60	80	120	180	280	780	2340	3750	9000
XAVC 4K 50p 500 Mb/s (62 Mo/s)	7	10	15	22	37	51	154	230	553
5K, R3D 2:1 24p 1,15 Gb/s (144 Mo/s)	3	4	6	9	15	20	65	98	236
4K, R3D 3:1 24p 780 Mb/s (97 Mo/s)	4	6	9	14	24	32	98	147	353
4K, R3D 9:1 24p 260 Mb/s (32 Mo/s)	14	18	28	40	64	100	300	446	1072
ARRIRAW 4,6K 3:2 24p 4,46 Gb/s (557 Mo/s)	1	1	2	3	5	5	17	25	61
ARRIRAW 4K 16:9 24p 2,89 Gb/s (361 Mo/s)	1	2	3	4	7	8	26	39	95
4K DPX 4056x3112 16 bit 24p 10,4 Gb/s (1,3 Go/s)	-	1	1	2	2	2	6	11	26
4K UHD 3840x2160 16 bit 25p 6,72 Gb/s (840 Mo/s)	-	1	2	3	4	3	9	17	40
HD 8 bit 1080i50 uncompressed 744 Mb/s (93 Mo/s)	3	4	8	11	18	33	99	161	386
P2 AVC intra 100 96 Mb/s (12 Mo/s)	22	30	46	92	106	260	780	1 250	3 000
P2 AVC intra 50 48 Mb/s (6 Mo/s)	24	46	69	102	158	520	1560	2500	6000
XDCAM HD 50 50 Mb/s (6Mo/s)	34	46	69	102	158	520	1560	2 500	6 000
MPEG-2 8 Mb/s (1 Mo/s)	138	184	276	414	632	3120	9360	15000	36000
Audio tracks (WAV), 100 tracks 24 bit / 48 Khz	345	460	690	1 035	1 610	19 000	57 000	90 000	216 000

Note: A video editing workstation typically uses at least 2 video streams.

The table above shows actual values measured in real-world deployments using infrastructures specifically designed for collaborative work.

These values have nothing in common with the marketing-oriented figures typically provided by hard drive manufacturers and some of our competitors.

