



GenomSys

MPEG-G Codec Suite

The GenomSys MPEG-G Codec Suite is a collection of software tools to process genomic data compliant with ISO/IEC-23092 genomic data standard (MPEG-G). The tools enable organizations to implement the standard and leverage its benefits by encoding and decoding genomic data; they also include source code examples, a comprehensive user manual, and additional software to transcode from/to legacy formats and integrate functionalities into existing applications and pipelines. Our Codec Suite is CE Marked as in-Vitro Diagnostic Medical Device according to 98/79/CE directive and hence approved for clinical-grade diagnostic purposes.

High Compression

Rapid Selective Access

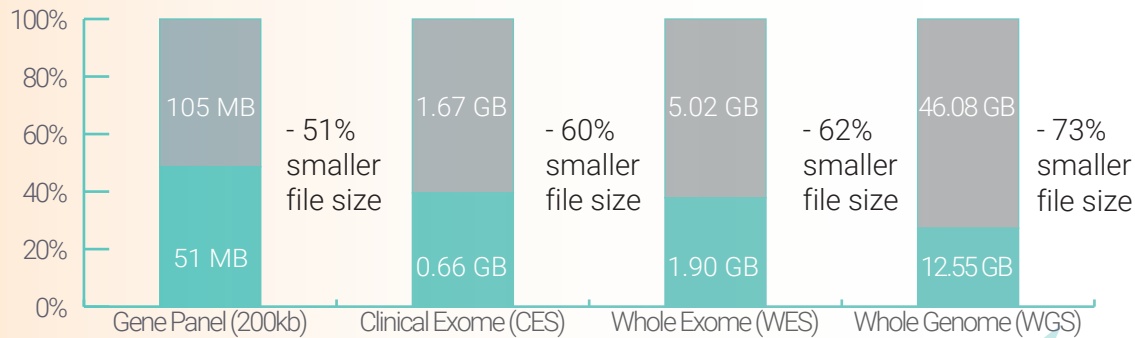
Wide Interoperability

Built-in Security

High Compression¹

This results in significant size benefits enabling cost savings for organizations handling large volumes of genomic data.

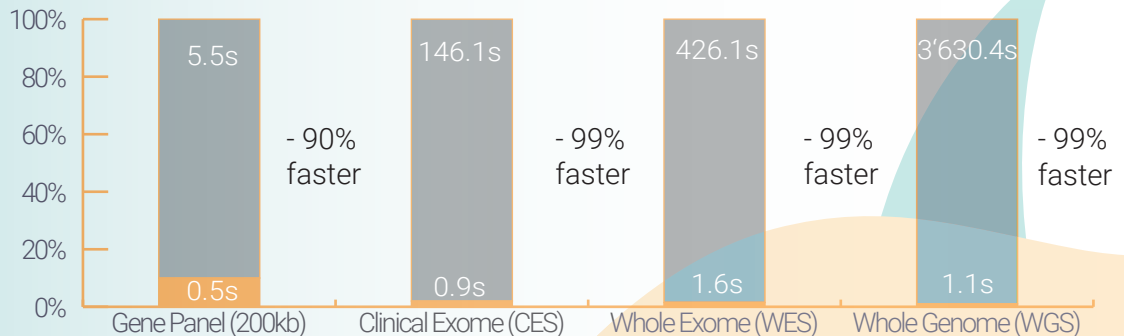
● BAM ● MPEG-G



Rapid Selective Access¹²

Dramatically faster data access time reducing latency for geneticists running the analysis.

● BAM ● MPEG-G



Wide Interoperability

Non-proprietary ISO-defined international standard enables everyone to write its own interoperable code in a single unified format for all genomic-connected file types, providing independence from any company's strategy or continuing support as well assuring the highest data integrity and interoperability.



Built-in Security

Built-in security elements strengthen privacy protection of sensitive individual genomic data: possibility to encrypt natively within the file and grant different access permissions by intervals.

Should you be interested in learning more about GenomSys, please do not hesitate to reach out to us by phone **+41 21 691 10 00** or email **info@genomsys.com**.

¹ The comparison was made between BAM-formatted files and MPEG-G formatted files.

² The BAM file was processed – sorting, indexing and accessing - with the program samtools 1.11 using the command 'samtools view -@ 4' for 27 regions of the *CFTR* gene. The graphic shows the initial processing (sorting, indexing, and accessing) time for BAM and MPEG-G. Follow-on accesses will be faster for BAM than portrayed but still slower for CES, WES and WGS files than with MPEG-G.