

Gryf: A New Era in Sports Analytics on the Field

SOLUTION BRIEF

Co-designed by GigaIO and SourceCode, Gryf™ is the world's first suitcase-sized AI supercomputer that brings powerful, on-site analytics to sports environments where speed and precision matter. Gryf helps teams produce better athletes, improve performance, and focus on what matters most — winning.

Sports Analytics Challenges at the Edge

- Cumbersome on-site infrastructure
- Inaccurate, incomplete, and irrelevant data collection
- Remote processing delays realtime decision making

The Benefits of Using Gryf

- Portability and ease of deployment
- Real-time, server-class GPU processing and analysis
- Scalability and flexibility
- Deeper performance monitoring
- Enhanced competitiveness
- Better outcomes on the field



College and pro teams face intense schedules — frequent travel, back-to-back games, and limited recovery time. Staying on top of each player's health, workload, and performance is a challenge. Gryf travels with the team, bringing advanced computing power directly to the field and providing coaches and performance staff with real-time, on-site data during both practices and games. Due to its compact size and portability, Gryf makes it possible to analyze and act on up-to-the-minute performance insights wherever athletes train or compete.

Key features:

Portability

Gryf is airline cabin-friendly and can be easily transported to event and practice venues via an overhead bin, making it ideal for field deployment.

High Performance

Equipped with server-class GPUs and CPUs, Gryf can process large datasets and perform complex AI tasks on site.

Scalability

Gryf's AI fabric can interconnect up to five units, providing significant advantages in terms of speed, real-time capabilities, data integration, and cost.

Configurability

Gryf supports a mix of compute, accelerator, storage, and network sleds, allowing for tailored hardware configurations to meet specific workload requirements.

A Powerful Tool for Sports Analytics

By making true high-performance computing portable, Gryf enables sports organizations to leverage advanced analytics right on the field for performance optimization, injury prevention, and strategic decision-making. Teams can stay competitive and achieve better outcomes with instant access to advanced data analytics.

Sample Use Cases

INJURY PREVENTION

On-site Insights to Keep Athletes Healthy

Challenge

Athletes face injury risks from overtraining, fatigue, and limited recovery times. Coaches and staff often rely on delayed or incomplete data, making it difficult to collect timely, informed action.

Gryf Solution

- Real-time data processing provides immediate insight into athlete workload, movement, and fatigue.
- Operates independently as an on-prem solution for fast, onsite decision-making without cloud dependency.
- Portable form factor travels easily for use anywhere – at practice, on the road, or at home.
- Enables staff to tailor training in real time, reducing overexertion and optimizing recovery strategies.

PERFORMANCE INSIGHTS

Real-time Analytics, Anywhere You Play

Challenge

Coaches and performance staff often face delays in accessing and analyzing player data, limiting their ability to adjust plans during training and games.

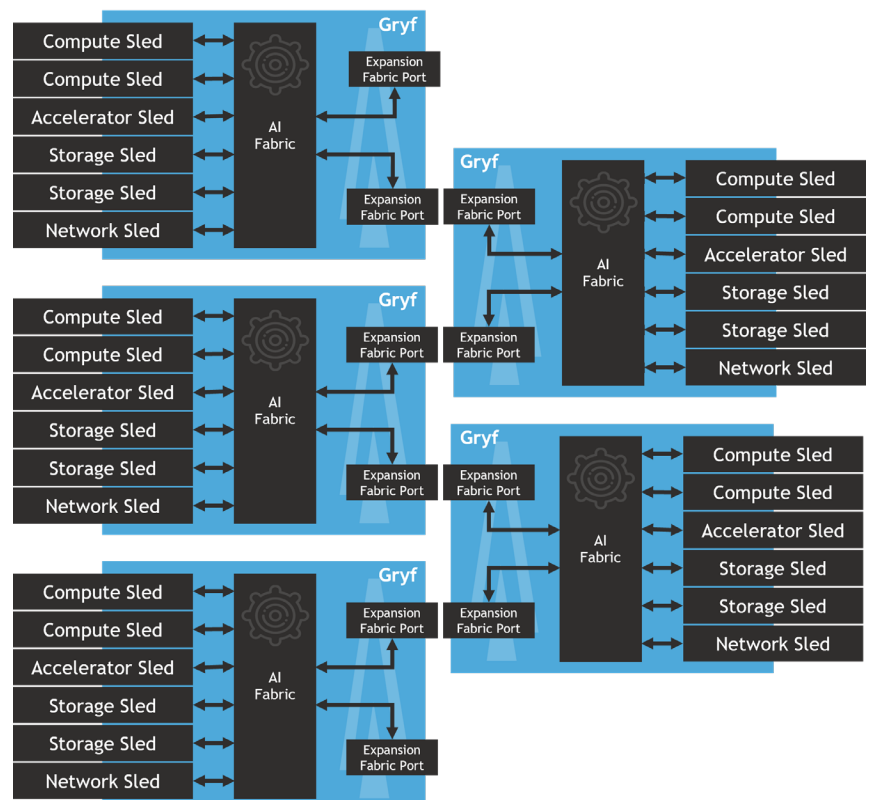
Gryf Solution

- Processes wearable and sensor data instantly on site for real-time decision support.
- Integrates performance data with on-site video for a complete view of athlete performance.
- Enables quick adjustments to strategies and training plans.
- TSA-friendly, portable design ensures teams have access to analytics wherever they go.



Stack Your Gryfs

This diagram shows how you can stack up to five Gryf units, interconnected across GigaIO's AI fabric. This configuration allows any server to access any other server or resource device within the fabric. Gryfs can be reconfigured in real time to meet application requirements.





**Portable Datacenter
Performance**



**Advanced Sports Analytics
at the Edge**



**Better Outcomes
on the Field**



**Optimize Individual and
Team Performance**



**Faster Data-Driven
Decisions**



**Performance Data
Analyzed on the Field**



**Configurable, Field-Ready,
Rugged Design**



**Mix Compute, GPU,
Storage, and Network**



**No Need to Send Data to a
Remote Datacenter**

Utilize Wearable Sensor Data Instantly

Cutting-edge wearable tracking devices can monitor athletic performance using GPS, Local Positioning System (LPS), and inertial sensors (accelerometers, gyroscopes, magnetometers) that track athlete movements, speed, workload, and heart rate. With Gryf, the data collected can be instantaneously analyzed right on the field to provide real-time insights into individual and team performance, injury risk, and training optimization. Performance data can be integrated directly with local, Gryf-processed video analysis to provide a comprehensive view of team or athlete performance, helping coaches make more informed decisions.

Make Faster Decisions With a Deeper Understanding of the Data

Gryf addresses several critical challenges in sports analytics, including data quality, real-time processing, cost, and collaboration. Gryf's portable design is built to withstand the rigors of field use and delivers high-performance computing capabilities that can be deployed anywhere. You can now optimize training routines, reduce injury risk through movement pattern analysis, and deliver immediate feedback on player load and recovery at away games and remote training locations as well as in the clubhouse.

Get Datacenter Performance in a Configurable, Field-Ready, Rugged Design

Gryf ushers in a new era of instant data analysis at the edge via a portable datacenter. Gryf can process the vast amounts of sensor data collected in real time because all data is processed on site, without any of the latency that comes with sending data to a remote datacenter. Gryf's composable infrastructure allows for dynamic reconfiguration on the fly to meet changing field requirements, which ensures optimal resource utilization and provides the ability to scale via multiple interconnected Gryf units. This scalability allows Gryf to handle extremely large datasets and complex analytics tasks, making it an ideal solution for the dynamic and data-intensive field of sports analytics.



Gryf is the world's first suitcase-sized AI supercomputer that brings datacenter-class computing power directly to sports arenas and training facilities, enabling real-time performance analytics and decision-making through its configurable, field-ready design that processes vast amounts of data securely at the venue.

WHAT'S YOUR EDGE?

Learn more at gigaio.com/products/gryf