

PERFORM IMU

The World's Most
Trusted Load
Management System

Including Unrivaled AI-Driven Metrics

KINEXON
SPORTS

Distance ▲

High-Speed Distance ▲

Exertions ▼

Live Jumps ▲

Jump Height ▼

Accumulated Acc. Load ▲

Changes of Orientation ▲

Max. Speed ▲



POWERFUL PLAYER TRACKING

The Most Powerful Solution for Seamless Load Analysis and Management

KINEXON Sports is a pioneer in sports tracking and analytics. The KINEXON PERFORM IMU system is a blend of sensors and software that provides a wide range of data for team sports.

KINEXON PERFORM IMU uses cutting-edge IMU technology and AI to provide all players' performance and load management metrics, tracking their movements and directional changes.

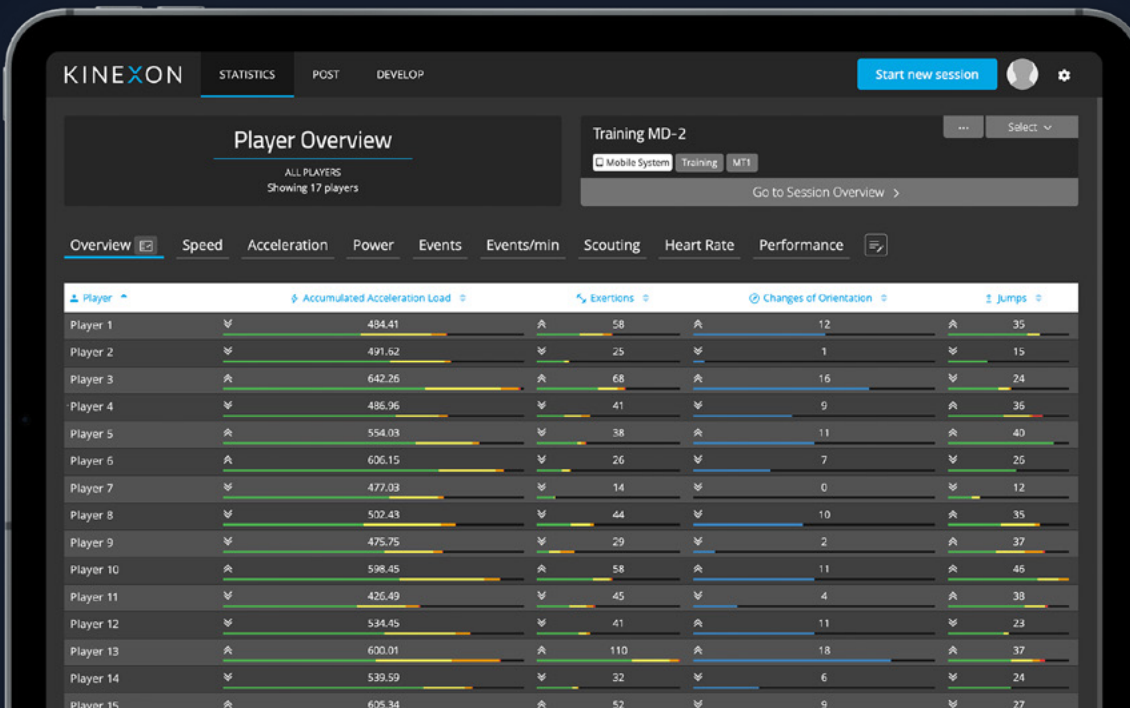
Coaches and trainers can use this information to identify areas for improvement, optimize training programs, and monitor an athlete's development.

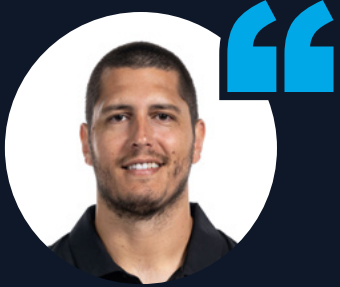
Anywhere and anytime

As the system does not require wired installation, athletes can be tracked anywhere and at any time with the easily portable mobile system.



The **most powerful wearable** for load management available **on the market.**





“We’re looking at external load metrics, especially in-season. Much of what we do, including our weekly practice structures, is formed through this data from KINEXON Sports.”

Tyler Friedrich, Associate Athletes Director, Applied Performance at Stanford University Women's Volleyball



BENEFITS

Start Collecting Data with Context and Get Immediate Insights



SEAMLESS MOBILITY – HOME AND AWAY

The easily portable mobile system can track athletes anywhere and at any time, without needing a wired installation.

Instead, it uses cutting-edge IMU technology and AI to provide valuable performance insights.



SAVE VALUABLE TIME – ZERO SETUP REQUIRED

Setting up is a breeze. Simply place the wearable device in the waistband of the players' shorts, or use the KINEXON Sports connected vest for a seamless experience.

Now, you're ready to play and can start tracking immediately!



GET ALL METRICS DIRECTLY AFTER THE SESSION

Within the innovative KINEXON Sports app, the raw data is analyzed, organized, and presented in an intuitive format.

These detailed reports can be delivered to the coaching staff within minutes of the end of a session – some metrics you can even get live.

MORE BENEFITS



Individual Player Loads

KINEXON Sports provides tools for coaches to set specific training and load goals for each player. Additionally, it allows for the customization of metrics to suit individual needs.



Customizable Insights

Coaches can select the metrics they value most, allowing them to monitor performance fluctuations and tailor training sessions accordingly.



Streamline Load Planning

Every jump, sprint, and movement is recorded and sent to the KINEXON Sports App, streamlining load planning, and providing coaches and players with a clear and efficient path forward.



We Care About Your Success

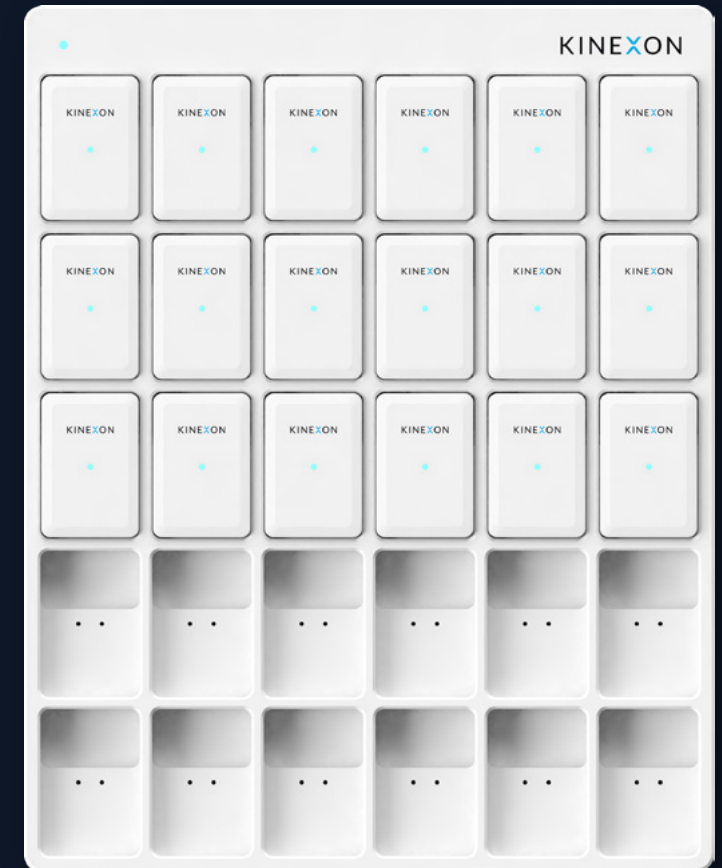
Benefit from the expertise of KINEXON Sports' experienced sport scientists, which supports you in the preparation of your data and leads you to fast and meaningful insights.

SYSTEM OVERVIEW

Wearables So Small, Your Players Won't Notice

The KINEXON PERFORM IMU system is a compact, ultra-lightweight wearable technology package designed for optimal player comfort and mobility.

The system includes wirelessly charged sensors, a charging cradle, non-restrictive vests, and the KINEXON Sports App. The entire system is portable, fitting neatly into a single flight case for convenient travel.



Connected vest

The KINEXON PERFORM IMU sensors can be comfortably fixed into the KINEXON Sports connected vests.



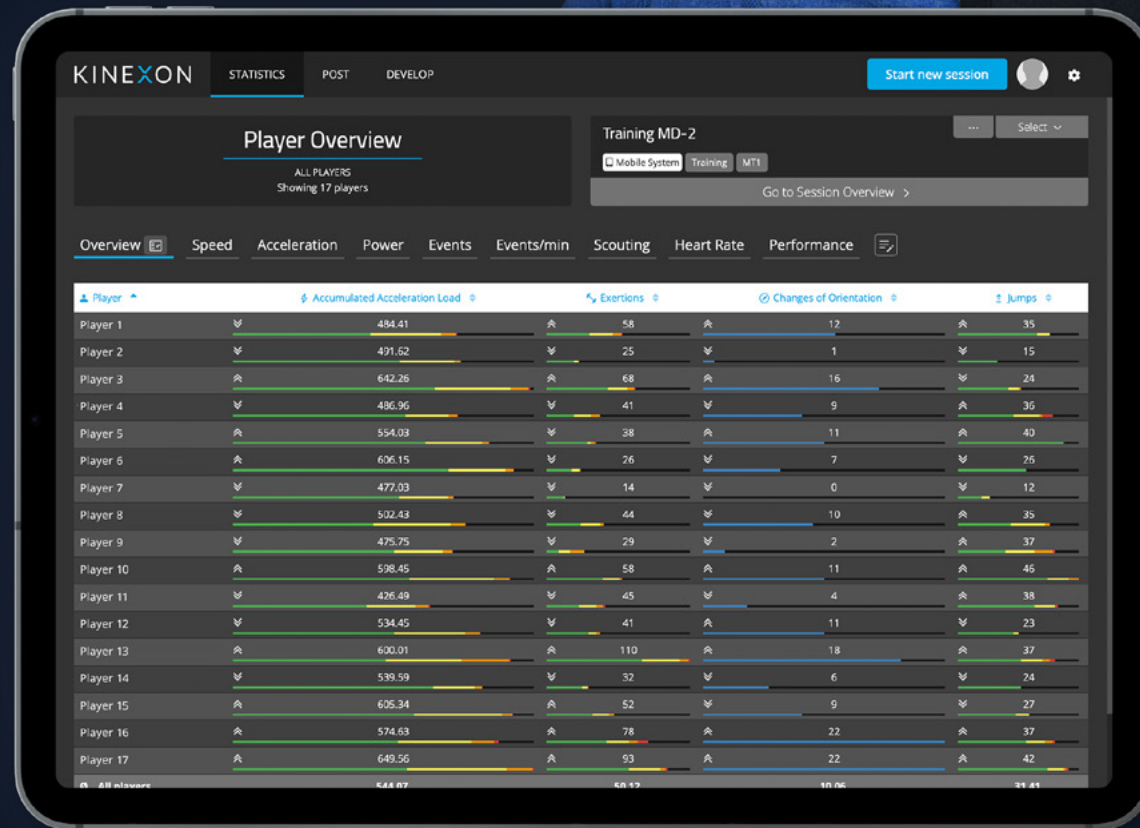
Charging cradle

The charging cradle fits 20 ultra-lightweight KINEXON PERFORM IMU sensors; each sensor is only 15 g.



Get even more out of the system

To receive selected metrics live, an optional **anchor** can be added as a reference point for all deployed KINEXON tags.



KINEXON Sports App

All your information will be stored in one place; displayed on an easy-to-read dashboard.



30

Jump Height
2'3" / 68 cm

NUMBER OF JUMPS

Jump Load per Kilogram
29 J/kg

METRICS

Use Player Performance Data to Plan Practices and Prevent Injuries

KINEXON PERFORM IMU utilizes a variety of load metrics, derived from our accelerometer, to comprehensively capture player speed, acceleration, and load profile.

These metrics assist in:

- Designing practices and drills tailored to meet game-level demands
- Preventing overuse by tracking seasonal workload
- Formulating return-to-play protocols for injured players, using baseline practice and game data

WOMEN-SPECIFIC METRICS

KINEXON Sports provides a database with adjusted thresholds based solely on women's historical data, improving analysis and benchmarks. Design dashboards to include cycle-oriented insights and new analyses for more effective planning.

Women can choose between wearing their own sports bra with a sensor pocket or opting for the specially designed KINEXON Sports bra. Additionally, KINEXON Sports offers flexible load management, incorporating menstrual cycle phases and well-being, supported by the KINEXON Sports Science Consulting Team for meaningful insights.

TRACK ALL RELEVANT LOAD METRICS

- Accumulated Acceleration Load
- Mechanical Load
- Jump Load
- Number of Jumps
- Jump Height
- Live Jumps
- Max. Speed
- Changes of Orientation
- Exertion Events
- Total Distance

...and many more

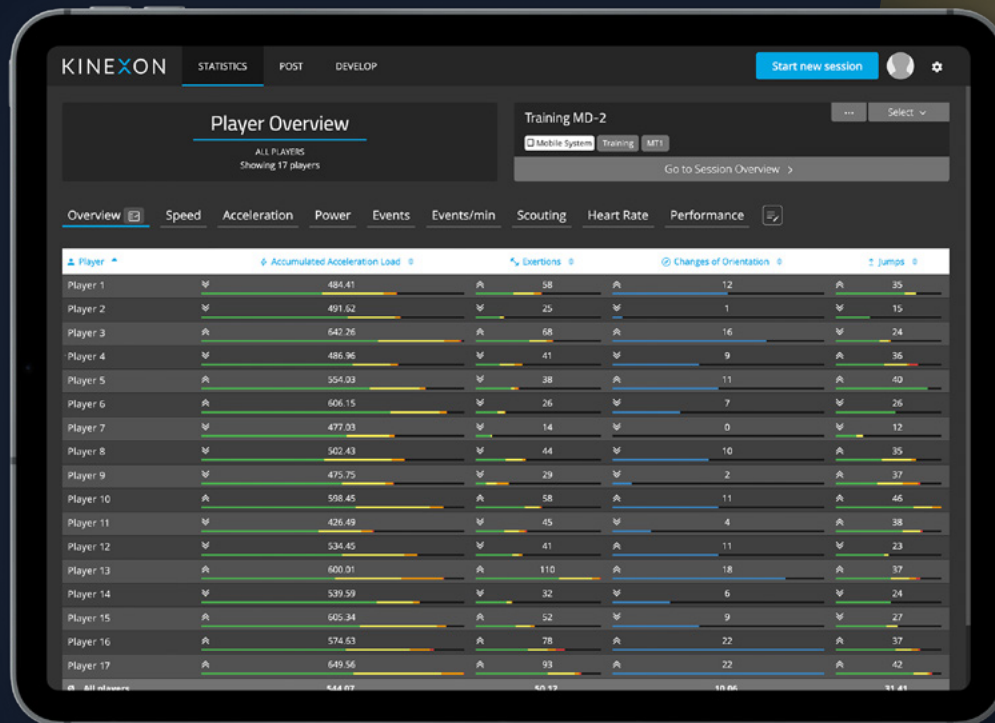


KINEXON SPORTS APP

Next Level Sports Tracking for Trainings and Matches

THREE WAYS TO ANALYZE

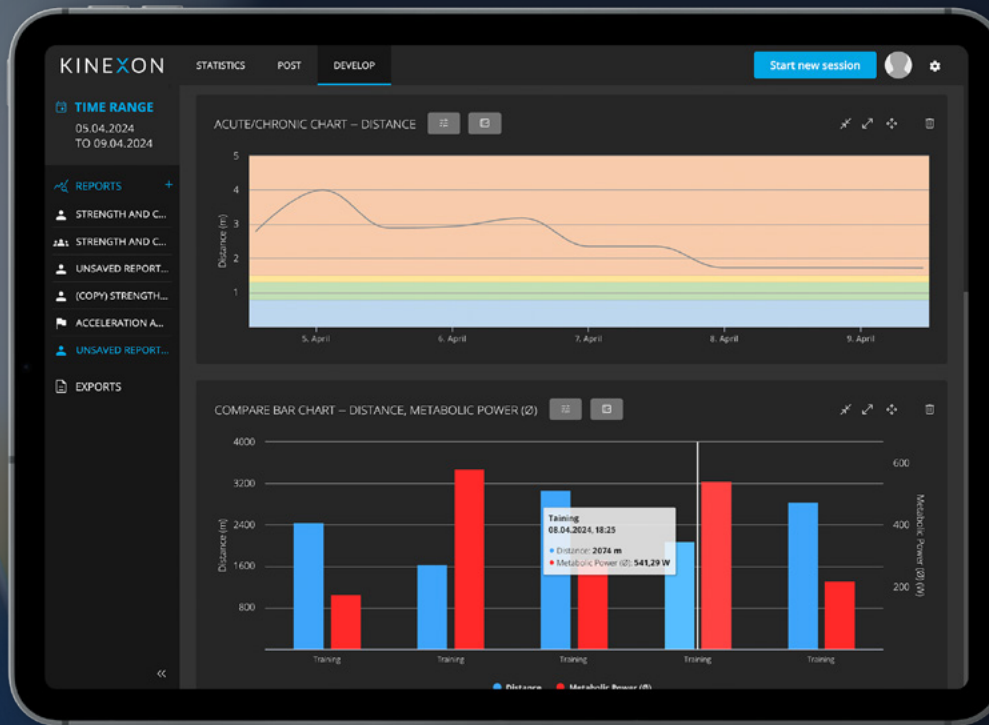
For quick and easy navigation, the KINEXON Sports App is divided into **three clear sections**:



Statistics

Compare key metrics such as changes of orientation, exertions, accumulated acceleration load, and number of jumps to quantify the intensity and duration of the player's movements. It provides an overview of essential load metrics for each individual player in a game or range of games.



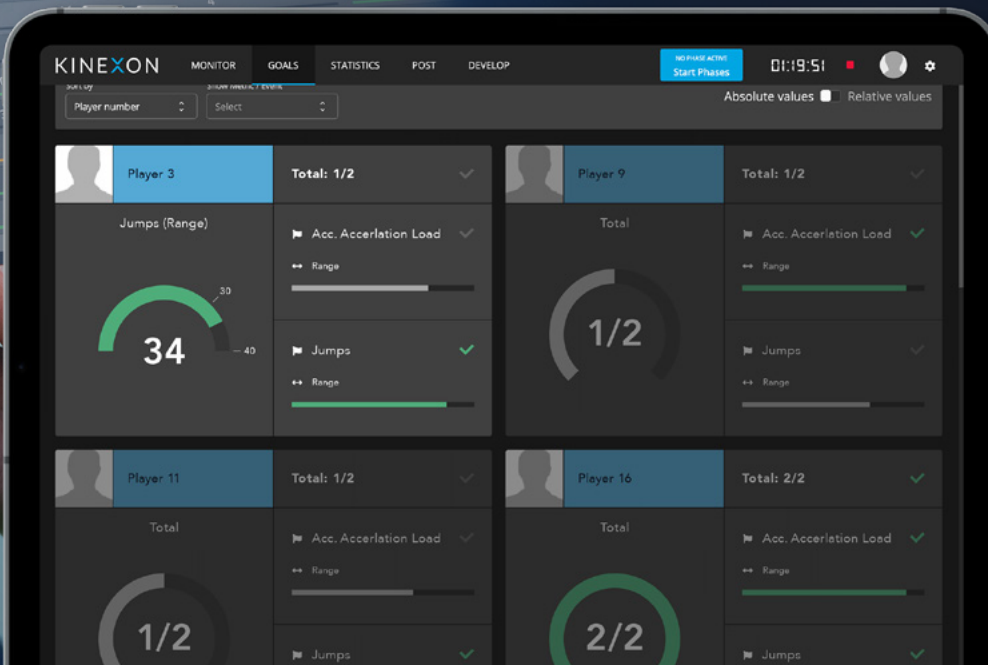


Develop

Generate reports over a time range that spans a session, parts of a session, or multiple sessions. Additionally, you can compare the values of key metrics from each session to each other, average values, and standard deviation ranges. With the provided flagging system you know when a player's performance falls outside of their standard deviation range.

Live

The system provides the option of collecting real-time performance metrics. Coaches and analysts can access the easy-to-read dashboard with a monitor view and live statistics. There's also a goal-tracking feature for optimizing player development and team strategies.





PRODUCT SPECIFICATIONS

KINEXON PERFORM IMU

The KINEXON PERFORM IMU system consists of web-based, AI-powered wearables, a charging cradle, functional vests, a download cable, and the KINEXON Sports App.

All components have been tested by professional sports organizations over years of training and matches, and they meet the highest requirements for usability, comfort, and stability.

IMU SENSOR

Dimensions	47 mm x 33 mm x 7.5 mm, 15 g
Battery life	5 hours
Charging	Via docking station or individually via USB cable
Communication	Ultra-wideband and Bluetooth 5
Scalability	Monitor 1 to 100+ trackers live
Heart rate	Integrated heart rate measurement (ECG-derived), Polar and Suunto compatible
IMU	3-axis accelerometer ± 16 G sampled at 1 KHz provided with 100 Hz, 3-axis gyroscope ± 4000 deg/sec at 200 Hz, 3-axis magnetometer ± 16 μ T at 100 Hz
Certification	CE, FCC, FIFA IMS
Use location	Anywhere

ANCHOR

Positioning Principle	Real Time Location System (RTLS), Radio-based, Ultra-Wideband UWB)
Positioning Methods	Two-Way Ranging, Time Difference of Arrival (TDoA), Angle of Arrival (AoA)
Frequency range	UWB (IEEE 802.15.4): 3 – 5 GHz, 6 – 7 GHz Bluetooth/BLE (4.2/5.0): 2.4 GHz
Data interface	Ethernet (IEEE 802.3, 100BASE-T), Wi-Fi
Power supply PoE	PoE (IEEE 802.3af Class 2: 48 V, 6.49 W) RJ45 (Ethernet and PoE)
Power supply DC	External (12 - 24 VDC, 6.0 W) Barrel jack (2.1/5.5 mm diameter)
Indicators	Front LED, system activity indication side LEDs
Weight	270 – 290 g (depending on the configuration)
Dimensions	129 mm x 129 mm x 45 mm (without antennas)
Mounting options	Tripod, pipe clamp, wall-mounted

CHARGING PAD

Dimensions	298 mm x 235 mm x 21 mm
Weight	3.3 kg incl. sensors; 2.4 kg excl. sensors
Tracker charging time	90 min

ABOUT US

We Enable You to Innovate The Game

KINEXON Sports offers coaches top-tier player and ball data, exclusive insights, and personalised sports science services to deliver actionable, measurable outcomes.

With approximately 85% of NBA franchises and over 500 professional teams across basketball, football, handball, hockey, volleyball, and other sports, KINEXON Sports is a global market leader in sports data tracking and analytics.

SELECTED REFERENCES



More KINEXON PERFORM IMU clients



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