



# **INSAIT** KS

**FOOTBALL TRACKING SYSTEM**

A man with a beard and long hair tied back, wearing a blue jacket, is seen from the side, looking down at a tablet computer he is holding. In the background, a soccer field is visible with several players in red and white uniforms. The sky is blue with some clouds. The overall scene is dimly lit, with a blue tint.

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## SEE EVERY MOVE, MASTER EVERY MOMENT.

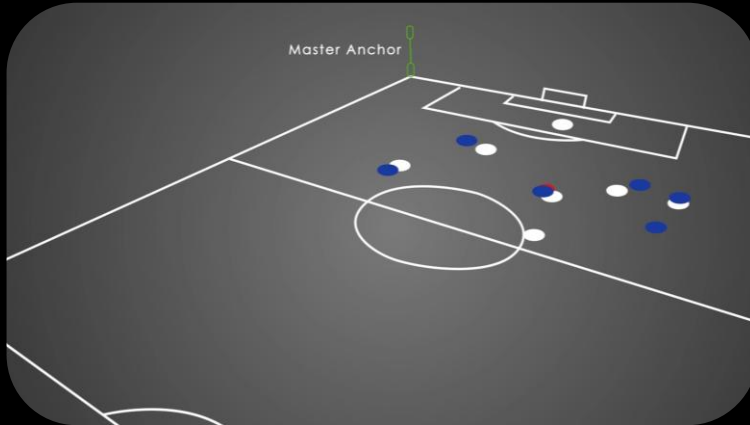
Traditional player tracking is no longer sufficient for the demands of the modern game. Inconsistent satellite signals, indoor dead zones, and meter-level drift create "data noise" that masks true performance.

INSAIT KS breaks these barriers. By leveraging high-frequency Ultra-Wideband (UWB) technology, INSAIT KS provides a seamless ecosystem that democratizes elite-level performance tracking for ambitious clubs and academies worldwide.



# THE NEW STANDARD IN PERFORMANCE SCIENCE

INSAIT KS eliminates the technical barriers that hinder professional analysis, delivering live insights that empower coaches at all levels to make decisive, winning decisions.



## Precision Redefined

While GPS systems drift by meters, INSAIT KS delivers 10cm-level precision, capturing the micro-movements—the true accelerations and tactical spacing—that define professional success.



## Eliminating Data Silos

Stop managing fragmented systems. INSAIT KS integrates biometrics, physical load, and tactical data into one single source of truth, removing the financial and operational burden of multiple subscriptions and incompatible datasets.



## History to Real-Time

Don't wait until the session is over to react. Our low-latency live tracking allows for immediate sideline intervention, turning data into an active coaching tool rather than a mere post-game report.

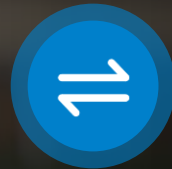
# THE UWB ADVANTAGE: REDEFINING ACCURACY

While GPS relies on distant satellites, INSAIT KS utilizes a local Ultra-Wideband (UWB) network to deliver surgical precision that remains unaffected by environment or weather.



## Professional-Grade Precision

Leveraging high-frequency Ultra-Wideband (UWB) radio waves, INSAIT KS achieves a 10cm positional threshold. This technical leap allows coaches to analyze high-speed agility, intricate dribbling paths, and team compactness with 10x the resolution of standard GPS systems.



## Real-Time Synchronization

INSAIT KS measures raw data at up to 20Hz, ensuring that the "Live View" on your dashboard is a true reflection of the pitch. The low-latency stream allows for immediate monitoring of player intensity and tactical discipline during high-stakes sessions.



## Uninterrupted Tracking Across All Environments

While GPS fails in indoor facilities, our LPS infrastructure thrives. INSAIT KS is optimized for indoor domes, multi-purpose halls, and professional futsal venues, providing reliable, elite-level tracking where traditional satellite-based systems cannot reach.



## UNIFIED PERFORMANCE MONITORING

The industry's lightest tracking device (35g) integrates high precision heart rate and UWB positioning into a single unit, eliminating the need for bulky chest straps.

By merging internal and external load data into one holistic view, INSAIT KS empowers coaching and medical staff to make critical, real-time decisions regarding training intensity, injury mitigation, and return-to-play protocols without compromising player comfort or performance.

# SMART BALL: GAME-CHANGING INSIGHT

A powerful add-on that bridges the gap between physical load and technical execution, automating insights that traditionally require manual video tagging.



## Patented Sensor Integration

Featuring an ultra-light UWB sensor and structural design capable of withstanding over 15,000 impacts, our patented Smartball technology ensures the ball's flight, roll, and bounce characteristics remain 100% unaltered and FIFA-compliant.



## Automated Technical Analysis

Unlock centimeter-accurate data for passing patterns, possession splits (On-ball / Off-ball), and dribble trajectories, while seamlessly capturing critical game moments such as interceptions and goal events without manual tagging.



## Total Tactical Synergy

Completes the performance picture by linking player movement to ball data. While INSAIT KS tracks extensive load and tactical metrics alone, the Smart Football adds the layer of technical mastery required for elite-level evaluation.



# FROM DATA TO DECISIONS

Leveraging 270+ deep-dive metrics to transform raw data into a competitive edge across every phase of the season.



## Real-Time Tactical Intervention

Utilize live tracking to adjust team compactness, intensity, and positioning as the session unfolds.



## Performance Periodization

Optimize physical load from pre-season through the final match, ensuring players peak at the right moment.



## Risk Mitigation & Recovery

Quantify "return-to-play" with objective heart rate and load benchmarks to prevent injuries and manage rehabilitation.



## Talent Identification

Standardize academy scouting with high-precision technical and physical profiles to identify future stars.



# INSTANT CLARITY

Pro-grade software suite designed for the sideline, converting data into actionable tactical intelligence in real-time.



## Live Tracking View

A real-time, bird's-eye perspective of every player and the ball, allowing for immediate monitoring of positioning and intensity.



## Session Replay & Analysis

Review any moment with synchronized data trails, heatmaps, and performance overlays for instant feedback.



## Interactive Tactic Board

Draw, annotate, and visualize plays directly on the session replay to communicate tactical improvements with precision.



## Smart Event Tagging

Automatically capture or manually tag critical moments—goals, mistakes, and fouls—to streamline your post-session workflow.



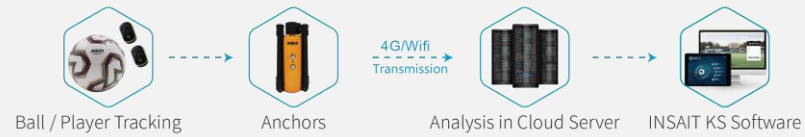
## Team Compactness Widget

A visual indicator of line spacing and unit density, ensuring your team maintains its tactical shape under pressure.



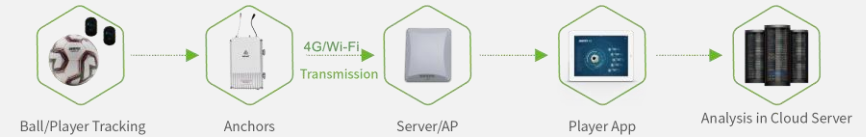
# FIXED & MOBILE DEPLOYMENT

Flexible infrastructure designed to deliver elite-level performance tracking wherever the game takes you.



## The Mobile Kit: Performance on the Move

The ultimate solution for traveling teams and scouting missions. Lightweight and portable, this plug-and-play setup ensures elite UWB precision during away games, pre-season tours, and neutral-site trials, keeping your data consistent across any venue.



\*Note: fixed anchors to be pre-installed in the venue.

## Fixed Infrastructure: Permanent Tactical Mastery

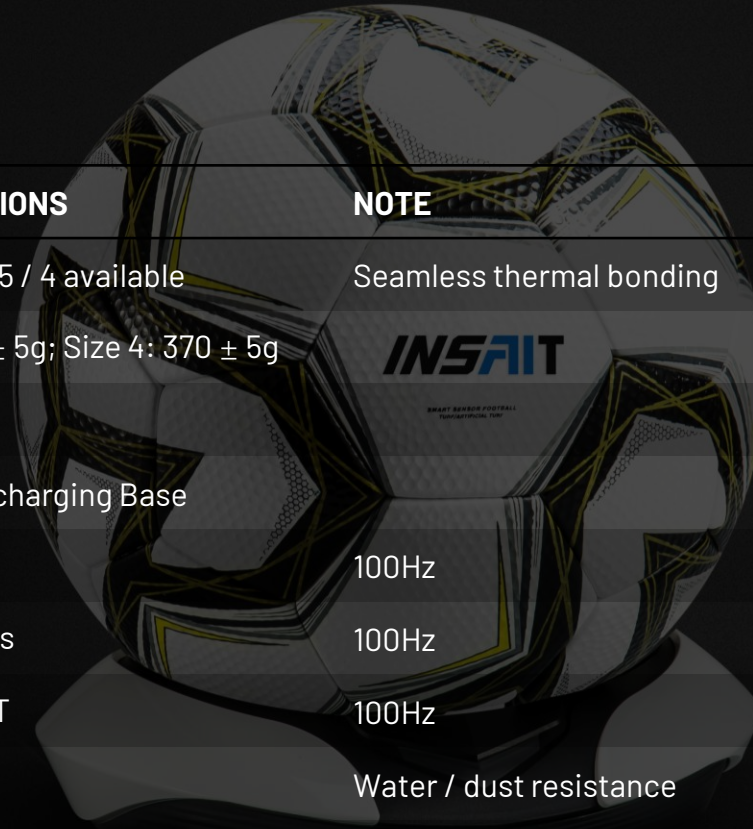
Designed for dedicated training bases and academies. A permanent installation offers a zero-setup workflow with pre-configured parameters and instant-start capabilities, allowing coaching staff to focus entirely on the session, not the technology.

# TECH SPECS

ITEM	SPECIFICATIONS	NOTE
TRACKER SIZE	63mm × 40mm × 16mm; 35 grams	
BATTERY	Tracker: 8 hours; Mobile version anchors: Up to 13 hours	
LOCATION ENGINE	UWB positioning	Update rate up to 100Hz
FREQUENCY	6.34 ~ 6.8Ghz License free UWB	Wireless transmission 150m; Standard football pitch full coverage
ACCURACY	<10cm	Track up to 50 players / balls at 20Hz
ACCELEROMETERS	3D ± 16g	100Hz
GYROSCOPES	3D ± 2000 °/s	100Hz
MAGNETOMETERS	3D ± 4800 uT	100Hz
HEART RATE	Integrated optical heart rate monitor	Error ± 5% compare with testing benchmark
GARMENT	Player vest / player armband	
SET UP	Mobile version: less than 10 minutes	Fixed version: pre-installed, instant set up
INGRESS PROTECTION	IP66	Water / dust resistance
OPERATING TEMPERATURE	-10°C ~ 40°C	



# TECH SPECS – SMART BALL



ITEM	SPECIFICATIONS	NOTE
SIZE	Official Size 5 / 4 available	Seamless thermal bonding
WEIGHT	Size 5: 440 ± 5g; Size 4: 370 ± 5g	
BATTERY	4 Hours	
RECHARGE	Wireless Recharging Base	
ACCELEROMETERS	3D ± 16g	100Hz
GYROSCOPES	3D ± 2000 °/s	100Hz
MAGNETOMETERS	3D ± 4800 uT	100Hz
INGRESS PROTECTION	IP67	Water / dust resistance
OPERATING TEMPERATURE	-20°C ~ 55°C	

# SUCCESS STORIES

Explore how INSAIT KS system revolutionizes performance analysis for clubs, federations, and leagues.



[WATCH VIDEO](#)

## Sparta Rotterdam FC

Discover the game-changing impact of INSAIT KS through the eyes of Sparta Rotterdam FC. Watch as they share their firsthand experience and how innovative LPS has transformed player development and talent selection in their academy.



[READ FULL ARTICLE](#)

## Shandong Taishan FC

Discover how INSAIT KS is helping the Chinese Super League (CSL) powerhouse revolutionize youth talent identification with data-driven insights.



[READ FULL ARTICLE](#)

## Guangzhou FA

Discover how Guangzhou FA leverages the INSAIT KS football tracking system to revolutionize talent identification. Learn how data-driven insights prevent injuries, optimize training, and uncover China's next football stars.



[READ FULL ARTICLE](#)

## CFA NYSL

Discover how INSAIT KS empowered China's National Youth Super League (NYSL) with data-driven youth talent development.



# TRUSTED BY THE BEST

From grassroots academies and players to elite federations, Gengee's next-gen football tracking technologies power progress at every level.



60+  
COUNTRIES

10000+  
TEAMS

250000+  
PLAYERS

130+  
PATENTS WORLDWIDE

# Empowering Players. Elevating the Game.

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