

*Catapult.*

# CLEARSKY

THE FUTURE OF PLAYER MONITORING

ClearSky is a local positioning system that combines precision player movement traces with next-level micro-movement analysis to enable an end-to-end solution for measuring performance and tactical output.

**ELITE**

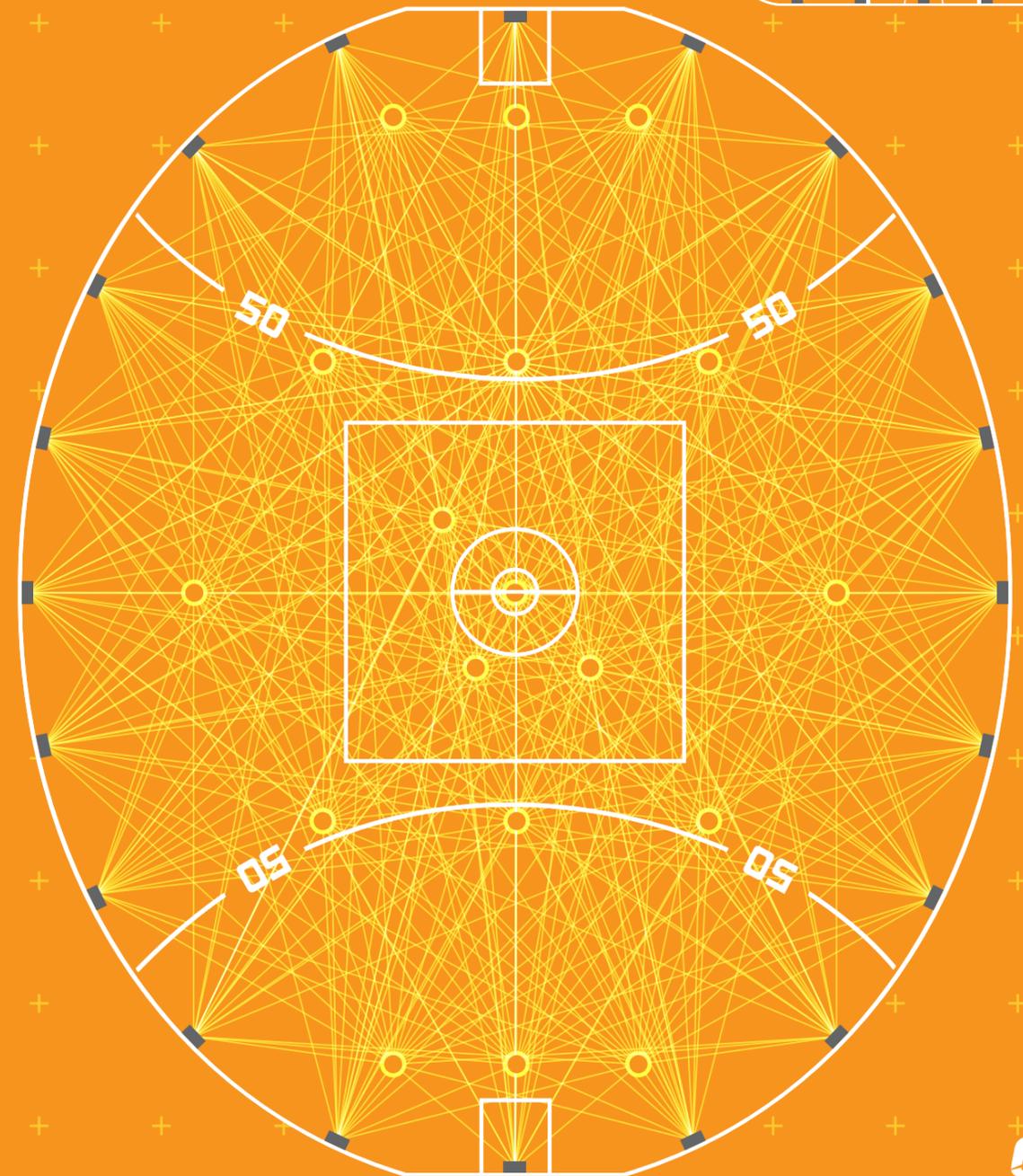
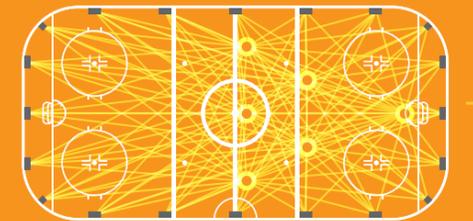
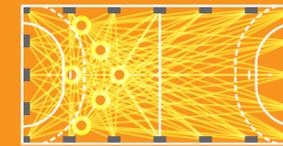
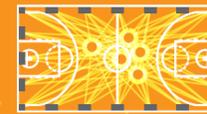
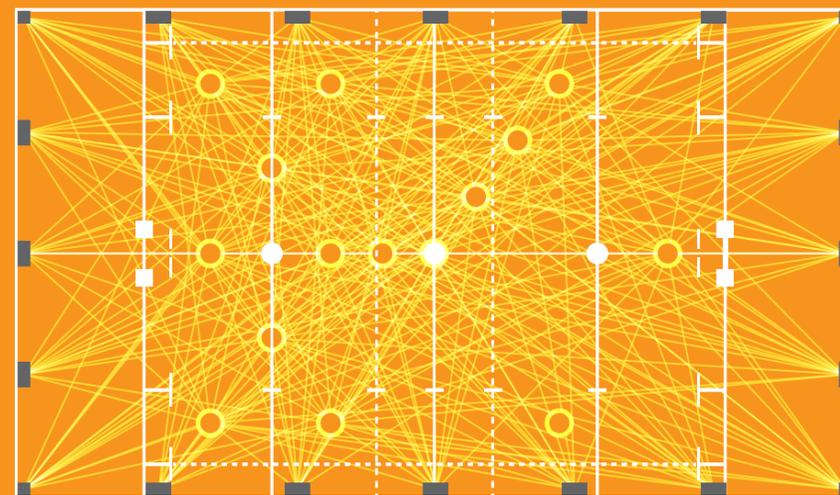
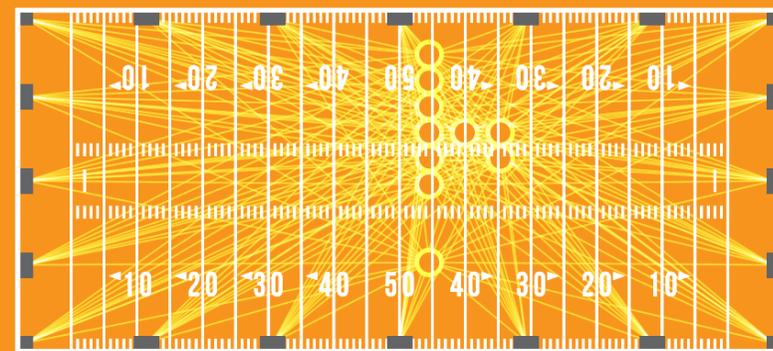
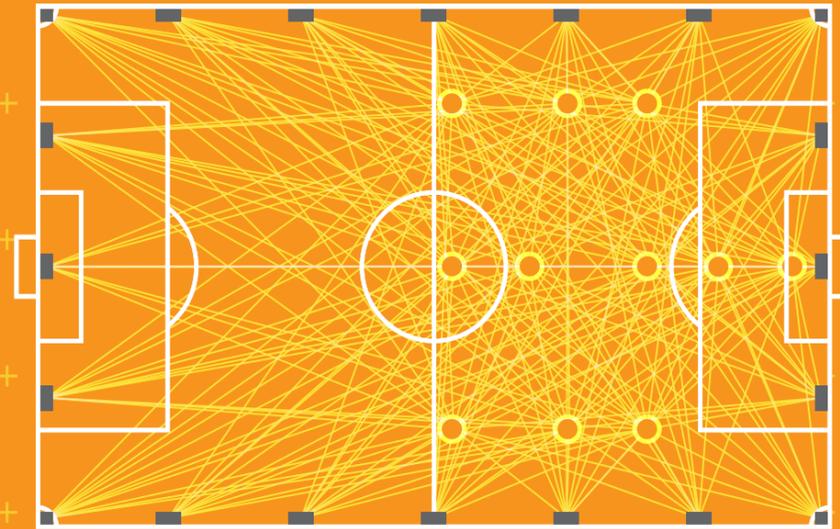
# ANYWHERE YOU TRAIN, PRACTICE AND PLAY

Consistent real-time data enabling full load management inside and out. A comprehensive, market-leading stadium installation, a portable training solution, and everything in between.



CLEARSKY | The Future Of Player Monitoring

■ Anchor nodes track every movement your players make



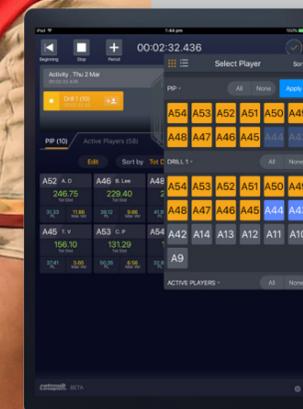
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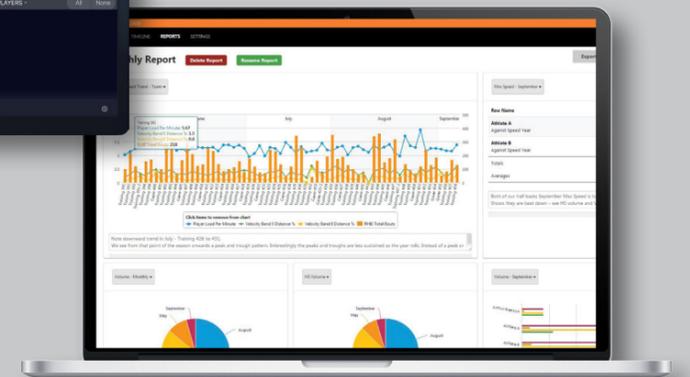
PRECISE

# REAL-TIME POSITIONAL ACCURACY

The most precise monitoring system in sport, accurate down to 10cm. The truest view of player movement available, in real time.



All data is viewable in real time on OpenField on the sidelines or on an iOS mobile device.



“

FROM OUR EXPERIENCES  
WITH CLEARSKY, WE ARE VERY  
IMPRESSED

by the accuracy of the positional data. In addition, with the integrated inertial sensor data (IMA) and portability of the system, ClearSky is ideal for use in both indoor and outdoor team sports.”

”

**MATT  
SPENCER**

*Associate Professor  
Norwegian School of  
Sport Sciences*

**PROVEN**

**BACKED BY  
RESEARCH,  
TEAMS AND  
LEAGUES**

The only independently validated local positioning system in sport. FIFA-approved, proven in eight sports, brought to you by the industry inventors.

**1250**

Elite teams globally using Catapult tracking technology

**250**

Number of professional competitions tracked using ClearSky

**57**

Number of countries using Catapult around the world

**13**

Number of sports using ClearSky around the world

**2016**

Year ClearSky was approved by FIFA and MLB for official use

**108**

Peer-reviewed scientific research papers validating Catapult's technology

**24**

Patents in wearable technology for measuring elite player movement

**19**

Stadiums and venues with ClearSky installed



UNOBTRUSIVE

# SMALL, POWERFUL, VERSATILE

Increased player buy-in with the smallest and lightest monitoring device, which works independently as an inertial measurement unit without anchor nodes installed.





CLEARSKY IS THE  
GOLD STANDARD OF  
IN-STADIUM PLAYER TRACKING



**DR CRAIG  
DUNCAN**  
*Head of Sport Science  
Federation Football  
Australia*

COMPREHENSIVE

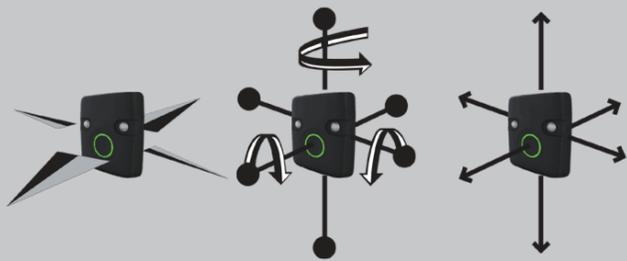
# POSITIONAL, INERTIAL, TACTICAL

The future of player monitoring combines positional, physical, and event data, closing the loop on performance and tactical analysis.



 John Smith	
PLAYERLOAD	1003
HEART RATE	160
VELOCITY	10m/s
DISTANCE	443.4m

# CLEARSKY



CLEARSKY | The Future Of Player Monitoring

## POSITIONAL TRACKING

- **Tracking Engine:** Up to 20 Hz LPS variable update rate
- **Wireless:** Bluetooth connectivity for ingesting external wireless device connectivity
- **Real-time data:** Using license free ultra wideband up to 100 players simultaneous @ 10Hz
- ClearSky uses **ultra wideband (UWB)**, a very low energy level for short-range
- **High-bandwidth communications** over a large portion of the radio spectrum

## INERTIAL SENSORS

- A market-leading **Microelectromechanical (MEMS)** device when not used with anchor nodes, enabling full inertial sensor data with no installation
- **Accelerometers:** 3D, +/-2,4,8 or 16g range (selectable), up to 1000Hz sample rate. 100Hz default
- **Gyroscopes 3D:** Up to 4000deg/sec upto 1000Hz sample rate. 100Hz default.
- **Magnetometers 3D:** Up to 1200 uT. Sample rate upto 100Hz. Default 100Hz.

## DEVICE COMPONENTRY

- Almost **70% smaller** and **lighter** than OptimEye S5
- **Smart button** surrounded by multi-use LED that signifies battery life, connectivity and heart rate integration
- **Heart Rate Polar compatible pickup:** Polar T31 Coded pickup compatibility. **Smart vest compatible,** smart sensors built into special garments
- **Memory:** 60 Hours of data storage
- **Battery:** Five hours
- **High Speed USB connectivity** when using multi-charger case. Charge and upload 28 devices at once.
- **NFC / Bluetooth** connectivity
- Two-pickup electrocardiogram recording (identify PQRTS wave)
- Auto player identification with integration of smart garment

**Catapult.**

In conjunction with the NRL, host broadcasters Channel Nine, the QRL, NSWRL, and sponsor Telstra, the State of Origin 'Telstra Tracker' displayed live on-screen metrics showing players field positioning throughout the game.



“

# THIS IS A VERY EXCITING INITIATIVE

for the game which will have significant benefits not only for our fans but for players as well. With this advanced technology, viewers will be able to access new insights into how the game is played and it will no doubt further highlight the unbelievable athletic qualities of the best of the best in rugby league.

”

**DAVID SILVERTON**  
Head of Strategy  
National Rugby League

# CATAPULT IS THE GLOBAL LEADER IN PLAYER ANALYTICS

We protect thousands of elite players at the intersection of sports science and analytics.

Our research-based approach to innovation enables insight in to player risk, readiness and return to play—empowering coaches across the globe—with scientifically-validated metrics for the advancement of player performance.

To learn more, contact  
[enquiries@catapultsports.com](mailto:enquiries@catapultsports.com)

+1 312 762 5332  
[catapultsports.com](http://catapultsports.com)



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