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# Blue Trident

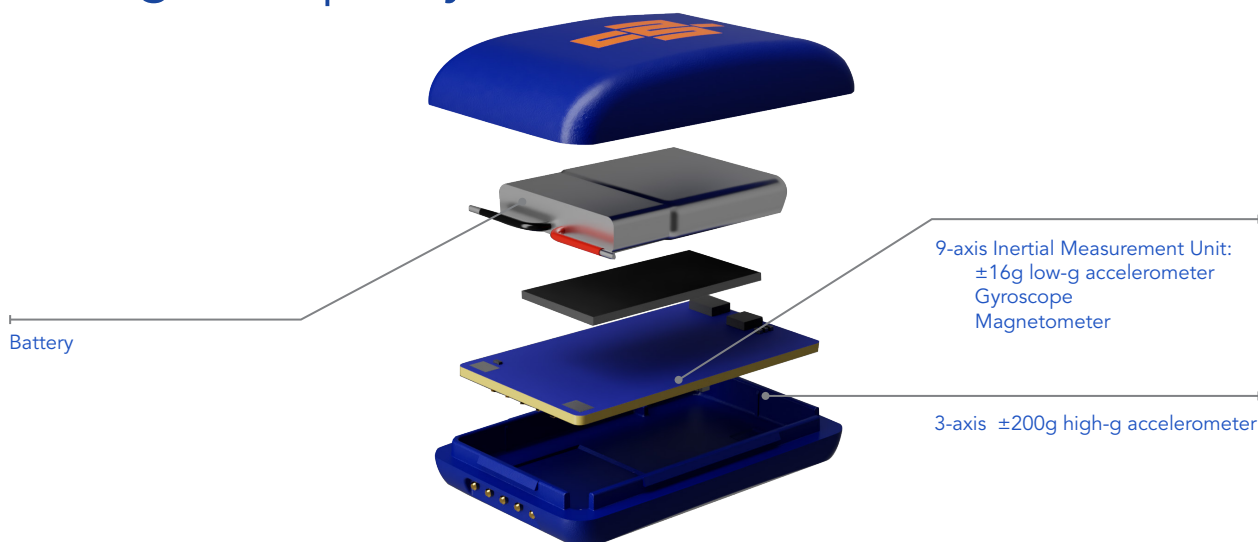
New Dual-g IMU

Measuring high-fidelity  
limb and body movement



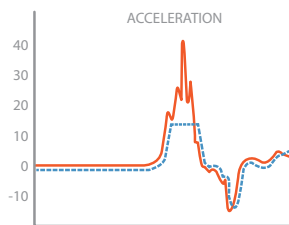
# Blue Trident: new Dual-g IMU with high-g sensor

## Engineered to capture the highest quality data



### Capture the largest accelerations possible

Blue Trident takes the capture of inertial data to a whole new level.



High and low g sensors capture data simultaneously, avoiding saturation

Blue Trident is the focal point of an ecosystem to track, analyse and optimise performance for athletes and teams -- from grassroots to elite -- and sports scientists, practitioners, researchers and biomechanists. The ecosystem is ideal for use with running-based sports, including basketball, rugby and football, alongside cricket, swimming and more.

With its dual-g IMU, capable of capturing up to 200g, Blue Trident easily handles even the highest peaks of elite athlete movement. The low g sensor tracks lower intensity movements at 16g and both sensors measure movement simultaneously, ensuring high-fidelity data capture, eliminating sensor saturation.

Building on the success of its predecessor, data download is five times faster (a one-hour capture takes three minutes), it's 25 per cent smaller and lighter, and battery life is now up to 12 hours.

Blue Trident is also IP68 rated, for use in water, adverse weather or underwater treadmills.

The sensor records the impact of each movement, storing the data in the 16GB of onboard memory, or streamed via Bluetooth 5 to an iOS device for review and analysis.

Anyone from athletes in the field to researchers in the lab can record performance data and process it through one of three platforms: Vicon Capture.U, the free iOS mobile app to deliver real-time data review and analysis, overlaid on video; IMU Step, the lower limb load monitoring tool to aid return-to-running and reduce reinjury risk; and Vicon's Nexus 2.10 software, to integrate inertial data into optical mocap.

General		Accelerometer range	Low-g ±16g / High-g ±200g
Dimensions	42 x 27 x 11mm	Accelerometer frequency	Low-g 1125Hz / High-g 1600Hz
Weight	9.5g	Gyroscope sensor	16 bit
IP68		Gyroscope axes	3 axis
Bluetooth 5		Gyroscope range	±2000°/sec
Battery	12 hr life***	Gyroscope frequency	1125Hz
Charge time	1.5 hr	Magnetometer sensor	16 bit
Sensor		Magnetometer axes	3 axis
Accelerometer sensor	Low-g 16 bit / High-g 13 bit	Magnetometer range	±4900µT
Accelerometer axes	3 axis	Magnetometer frequency	100Hz

(\*\*\* maximum length, depends on sensor usage)