VICON
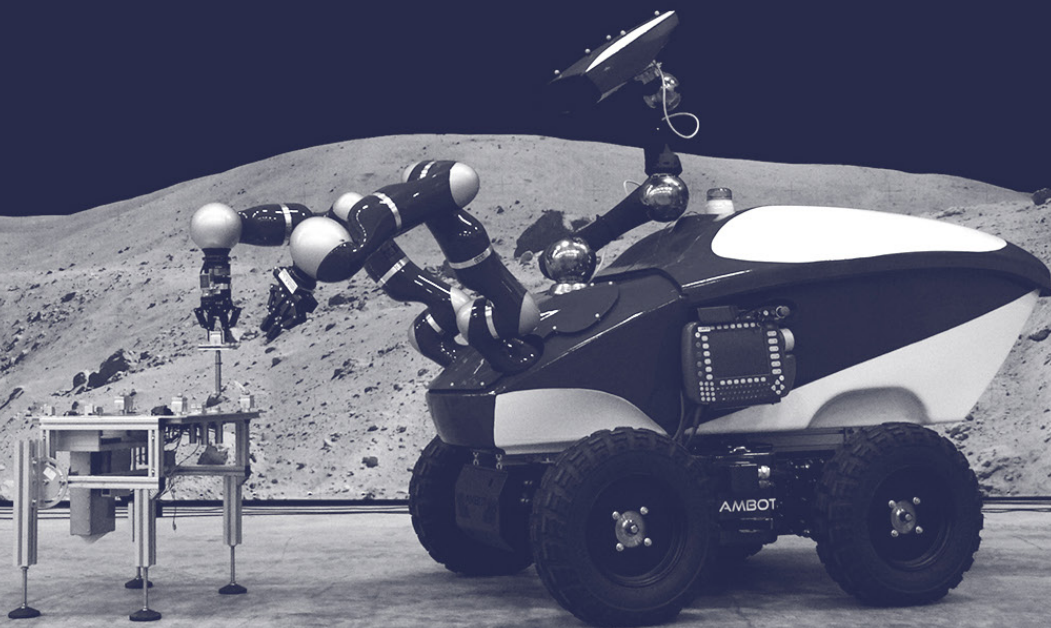
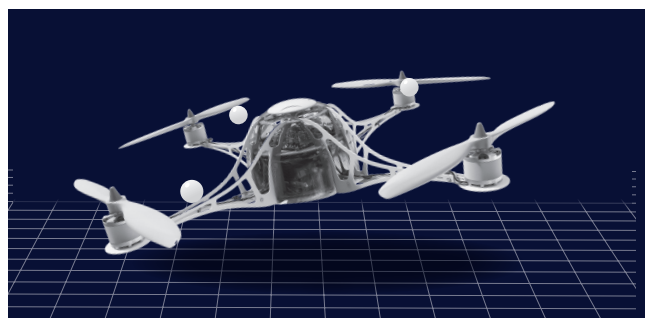# ACCURACY IN MOTION

UNMATCHED DYNAMIC ACCURACY TO 0.017MM

Our equipment and software are trusted by customers working in fields such as aerospace, robotics, UAV, ergonomics, metrology and virtual reality to provide dynamic measurements down to 0.017 mm (mean) - that's 1/5 the width of a human hair.

That accuracy has been tested to exhaustion and our systems are now metrically validated as the most accurate optical tracking solution in the world. And perhaps more importantly, our highly trained expert team of support engineers will install your system and make sure that our 35 years of experience translates to the best possible performance for your system.

TRACKER

Working in conjunction with Vicon's high-precision optical cameras, our Tracker software is designed for demanding, and technically complex engineering applications. Built to handle whatever novel problem our customers need to solve, Tracker works both with Vicon's passive cameras and with our active marker technology for applications such as VR.

MOTION CAPTURE

VICON

Contact us today to find out more.
info@vicon.com
vicon.com

FAST, RELIABLE DATA FOR VR

Tracker can process data in as little as 1.5ms, at more than 500 frames per second, which is up to five times less than other systems.

With the added ability to recognize rigid bodies in 2D, your data will continue even if the markers become visible to only one camera. This results in fewer gaps and more reliable data.

REAL-TIME SYSTEM MODELING WITH SIMULINK

Vicon is now the only optical motion capture provider to be able to offer low latency real-time modeling of robots out of-the-box. Streaming data by UDP, Tracker talks directly to Mathworks' Simulink package for hardware in loop (HIL) testing.

FLEXIBLE INTEGRATION

Tracker's robust integration methods enable you to read data in UDP, TCP, and the VRPN Open Source protocol. VRPN allows support in the following 3D applications:

Unreal
Unity
Ros
Siemens Jack

Tracker's support of the Vicon DataStream allows both Unicast TCP connections and Multicast UDP connections. This is useful when latency is critical, such as transmitting real-time data over Wireless data links for UAV tracking, controlling the flight of a helicopter or path of a robot.

	High-End Volume	Mid-Range Volume
Total Number of Capture Frames	41993	62525
Reference Value (Measured Bar Length, r, mm)	320.880	320.880
Mean Observed Bar Length (l, mm)	320.863	320.897
Accuracy of Mean to Reference Value (or 'Trueness', $|l\text{-}r|$, mm)	0.017	0.017
Standard Deviation of Observations (σ, mm)	0.198	0.321
Root Mean Squared Error (RMSE, mm)	0.201	0.324

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