



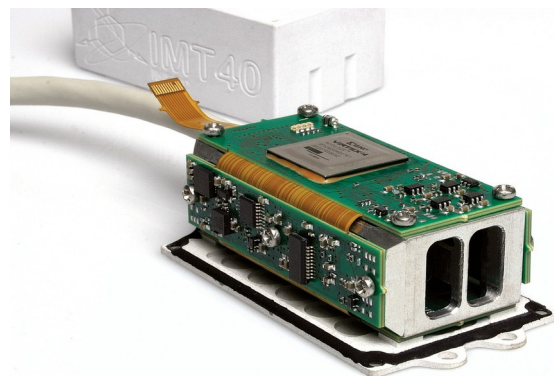
## IMT40 – Crash Test Measurement System

The IMT40 Crash Test Measurement System is designed to measure all details of rapid, violent motions. Specifically developed for studies of crash test dummy motion during impact, it allows car manufacturers to obtain previously unavailable data that will assist them in decreasing the risk of injury during a car crash. The IMT40 Crash Test Measurement System also provides an easy way of measuring many other types of rapid motions without any need for external reference systems such as cameras.

The IMT40 Crash Test Measurement System consists of a small Inertial Measurement Unit (IMU), a communication unit (that also can store data), and PC software for calculations and data display. The navigated data includes position/velocity/acceleration and attitude/angular rate/angular acceleration. The time signal can be synchronized by using an external trigger.

The IMT40 IMU is completely based on MEMS components, which results in its small size, ruggedness, shock tolerance, and cost effectiveness. The IMT40 Crash Test Measurement System is built around the proven Imego Butterfly Gyroscope (IBG20).

With better accuracy in angular measurements and higher sampling rates over long periods of time, the IMT40 is an excellent complement to camera systems. It provides continuously high quality data unimpeded by line-of-sight limitations, enabling the tracking of hidden objects. The



intuitive user interface permits extraction of all acceleration axes at any point of interest on the rigid body to which the IMT40 is mounted. The 6 DOF-system allows dynamic extraction of the gravity vector.

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