

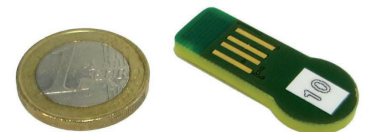
## Sensors and Data Acquisition for Smart Textiles

For the development of high-quality sports equipment, the increase in performance is the utmost requirement. However, it is not always trivial to find a direct correlation between the construction of sports equipment and the immediate power values of an athlete.

Miniaturized MEMS sensors can provide here the necessary information for the targeted development of high quality sports equipment as functional apparel and shoes. Together with the adidas – FUTURE TEAM, we develop MEMS sensors for different applications. Typical examples are e.g. the fast multi- channel data logger for motion sensors with up to 6 IMUs @ 1 kHz sample rate or the wireless climate sensor network for humidity measurements within apparel and shoes.



Fast data logger system for motion sensing



The Wireless Climate Network (WCN) is a set of 10 compact BLE transmitter with humidity and temperature sensors. Simultaneous wireless read out by Android smart watch and Windows-PC allows versatile measurement setups for different applications.

**Project duration:**

since 2005

**Project management:**

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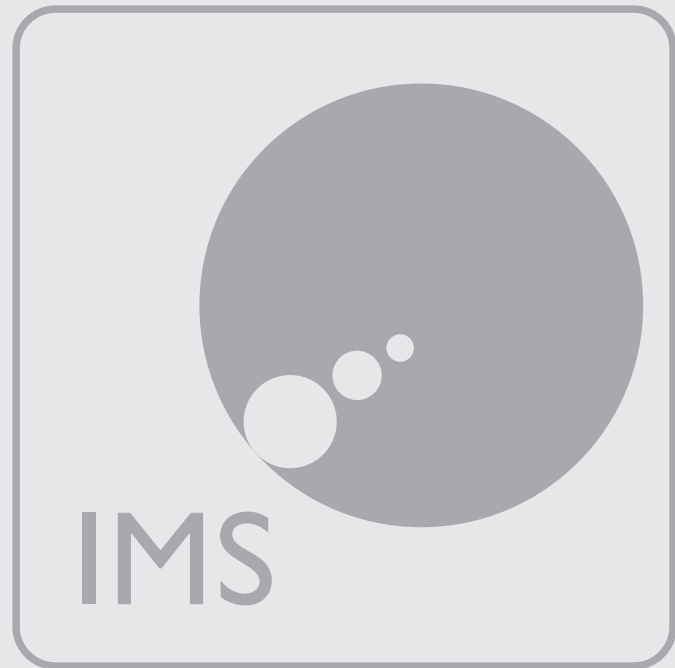
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**Project partners:**

adidas – FUTURE TEAM

**Funding:**

adidas AG



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