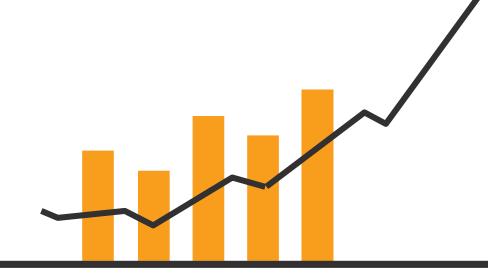


# THE SMARTRACKS FAMILY

The SmarTracks product family offers professional athletes, coaches and ambitious sports enthusiasts the perfect solution for recording and documenting athletic performance.

#### What SmarTracks offers you:

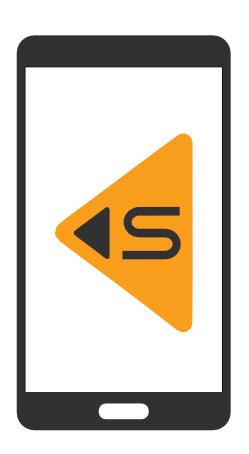
- Performance diagnostics without complex technical setup
- Time and cost efficiency
- Reliable and precise data



## **SmarTracks Diagnostics**

The SmarTracks Diagnostics software and sensor offers professional and efficient performance diagnostics. Tailored to the individual training needs and goals of various sports, SmarTracks Diagnostics provides powerful support for speed, endurance and strength training. SmarTracks Diagnostics has the unique capacity of measuring different types of assessments using the same system. This means an athlete can perform runs, tappings, jumps and agility tests all in consecutive order, without having to change measuring equipment.





#### SmarTracks Run

SmarTracks Run is an application that records all relevant parameters with the help of the smartphone sensors and displays them directly in the app. In addition to the app, which is available for free in the basic version, you only need a standard running belt to place the smartphone on your lower back.







## SmarTracks Timing Gates

The SmarTracks Timing Gates are magnetic barriers that allow precise time measurement down to the millisecond range. Our Timing Gates are durable and are characterized by their fast, uncomplicated setup. The Timing Gates exist in a mobile and an integrated version. The Timing Gates Mobile you can set up anywhere, without any electronics or sensitive equipment. The Timing Gates In-Ground are permanently integrated into the ground and require no additional setup after the first installation. In combination with our SmarTracks Diagnostics system or the free SmarTracks Run app, the Timing Gates enable a precise data analysis of performance tests, whether on the track or on the field.



# SMARTRACKS DIAGNOSTICS

#### Sprint- and run analysis

SmarTracks Diagnostics allows you to efficiently and accurately measure relevant performance parameters in the areas of speed, endurance, and strength. Assessments are directly recorded with a high-tech, lightweight sensor, and are then analyzed and displayed in the Diagnostics software. From the results of the tests you can create a comprehensive athletic profile, which can then help to work out an effective control of training and work load of the respective athlete!



### 1. Speed

An athlete's ability to sprint is a performance-limiting factor in many sports, especially in field sports or athletics. In conjunction with our Timing Gates, you can measure and analyze any distances and intervals. Each track can be measured down to 5m intervals. For example in the running disciplines, the interval parameters allow for the exit and entry of the curves to be considered more closely. This is often referred to as a critical factor that can certainly decide on the outcome of a race. Not only does Diagnostics provide you with accurate time tracking, but also other important parameters such as the number of steps and step frequency.



#### 2. Endurance

To test the endurance capabilities of athletes, SmarTracks Diagnostics includes the Cooper Test. The aim of the test is to run as far as you possibly can in 12 minutes. The test can be set up on a track with integrated Timing Gates, as well as with Timing Gates Mobile on any field of sufficient size.



### 3. Jumps

Explosive - fast and fast-paced actions are among the most important physical requirements for an athlete. Based on the jumping ability of an athlete you can gain feedback on the rapid-force capability of the leg muscles. In addition to other conditional properties such as stamina and strength, the rapid-force capability directly refers to general performance issues. With three different jump variants - Drop Jump, Countermovement Jump, Squat Jump - SmarTracks offers you the possibility to adjust tests individually to your sport and its requirements.

#### **Parameter:**

- Jump height in cm (all)
- Ground contact time for Drop Jumps
- Reactive Strength Index (RSI) for Drop Jumps



#### 4. Tapping

The tapping test is a test for determining cyclic speed. It is particularly suitable for the sighting of speed-force talents. SmarTracks Diagnostics captures the tapping frequency, which is the number of ground contacts per second measured in Hertz. The tapping performance depends on the one hand on coordinative performance and on the other hand on respective individual strength level.



### 5. Agility (COD)

The Agility (COD) of an athlete is his ability to change directions at maximum speed, including the ability to stop and accelerate. With SmarTracks Diagnostics we provide you with different assessments to determine the agility of your athletes specific to their sport, such as: 5-10-5 Shuttle, Illinois Agility Test, Three Cone Drill, a customizable agility test, and more. Whether soccer, handball, basketball or American football, we offer a suitable test for it!

In addition to the end times, SmarTracks also measures specific sections of the agility test to give even more insight into an athlete's performance. For example, in the case of Three Cone Drill, it is possible to differentiate in which area the athlete loses speed or shines particularly well.



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