SmarTracles



BUYER'S GUIDE 2022



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Berlin

18,67 km/h

00:01.87 min

00:03.54 min

00:05.27 min

00:08.77 min

00:12.53 min

00-14.39 min

400 m

01:17.13

180 spm

Õ

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Smart Run or Diagnostics?

SMART RUN

More than timing

Running data for short-, middle- and long distance runs, agility tests and run-ups.

- total time and split times
- distance
- step frequency
- number of steps
- speed

Easy smartphone app

Livestream timing results

Suitable for single runs and single athletes

DIAGNOSTICS

Performance Diagnostics

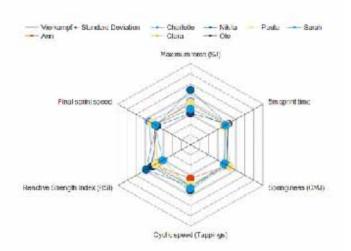
Measure

- sprint tests
- agility tests
- jump tests
- Cooper test
- tappings tests

Data editing, overview and export with the SmarTracks Diagnostics PC software.

Running data incl. running time, split times, running distance, step frequency, number of steps, step length, and speed

For groups and single athletes. You can do multiple tests and multiple athletes with one measurement.



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What can you do with the different SmarTracks products?

Application			SMART RUN APP	SMART RUN APP	DIAGNOSTICS SOFTWARE
Measuring Device			SMARTPHONE	DX SENSOR	DX SENSOR
		Timing	M	Ø	Ø
		Step Info		Ø	
24	RUNNING &	Long Jump Run-Up			
\sim	RUN-UPS	Triple Jump Run-Up			
		Pole Vault Run-Up			
		Cooper Test			
		Custom			
		Arrowhead			Ø
N.	AGILITY TESTS	Illinois			
. A.S.		3 Cone Drill			
		5-10-5 Shuttle			
		Drop Jump			
	VERTICAL JUMPS	Countermovement Jump			
		Squat Jump			
	TAPPINGS	Tappings			



What data do you get?

Application			SMAR	r un	DIAGNOSTICS
Measuring device			Smartphone	DX Sensor	DX Sensor
Running	Time Speed Livestream Start Options Steps Cooper Test	Total Time [0.01sec] Split Time [0.01sec] Speed [m/s], [km/h], [min/km] Time [0.01sec] Force Explosion Countdown Number of Steps Step Frequency [Hz] Steps per Minute Step Length 8 or 12 Minutes	전 전 전 전	2 2 2 2 2 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3	☑ ☑ (no min/km) ☑ ☑ ☑ ☑ ☑
Run-Ups (Long Jump, Triple Jump, Pole Vault)	For all Run-Ups For all Run-Ups	Total Time [0.01sec] Split Time [0.01sec] Number of Steps Step Length		ସ ସ	2 2 2 2
Agility Tests	Illinois (right and left) Arrowhead (right and left) Custom 3 Cone Drill 5-10-5 Shuttle	Total Time [0.01sec] Total Time [0.01sec] Total Time [0.01sec] Total Time [0.01sec] Split Time [0.01sec] Total Time [0.01sec] Split Time [0.01sec]		2 2 2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Tappings	Tappings	Duration [s] Avg. Frequency [Hz] Max. Frequency [Hz] Avg. Frequency [Hz] for 6 sec. and 15 sec. Number of contacts for 6 sec. and 15 sec.			2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Jumps	Squat Jump Drop Jump Countermovement Jump	Jump Height [cm] Jump Height [cm] Ground Contact Time [s] Reactive Strength Index [cm/s]** Jump Height [cm]			2 2 2 2 2
Athlete Management		Team Athlete Definition Single User Multiple Athletes with One Measurement Single Test with One Measurement Multiple Tests with One Measurement	Ø	1	2 2 2
Results	Exports SmarTracks Online	Run Export (mhtml) Multiple Run Export (mhtml) Diagnostics Export (json) Team Export (json) Radar Chart Team Online Result View Raw Data Backup Result Backup Result Restore	전 전 전	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

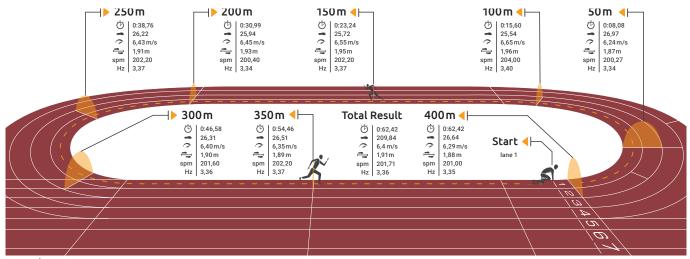
* Cooper Test time is given when there is a regular gate pattern of every 50 or 100m on a 400m round lane and when athlete passes Timing Gate on time

** Reactive Strength Index defined as Drop Jump Height [cm]/ Drop Jump Ground Contact Time [s]

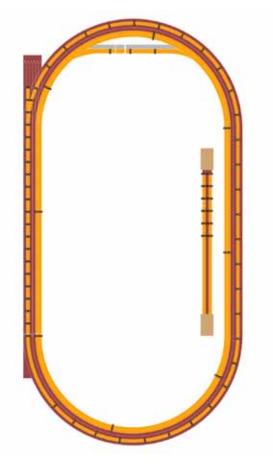


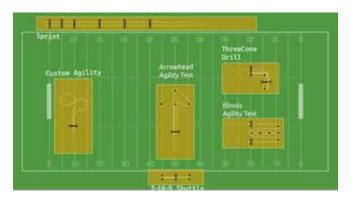
SmarTracks Locations: Timing Gates In-Ground

A SmarTracks Location has SmarTracks Timing Gates installed under the sports surface.



🝈 : Time in seconds 🕴 🖛 : Steps I 🤝 : Speed 🕴 😋 : Step length 🕴 spm: Steps per minute 🗏 Hz : Steps per second 🗏 👝 : Visualized magnetic gates





Timing Gates can be integrated into old and new sports surfaces. They are invisible, require no electronics, and are maintenance free.

Interested to know the possibilities for your sports location? Contact us!

Click here to view SmarTracks sports locations worlwide

The Timing Gates In-Ground can be used with the DX sensors, but you can also run with your smartphone and get basic timing and step information in the Smart Run app for free.



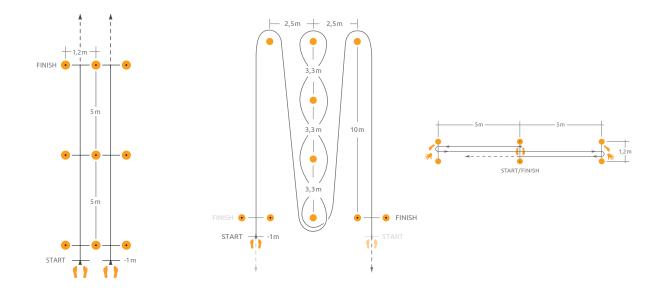


Timing Gates Mobile

If you do not have access to a SmarTracks sports location, you need **Mobile Gates**.

The Mobile Gates can be set up in any configuration you like, such as double sprints and agility tests. They are easy to set up and do not require electric wiring.



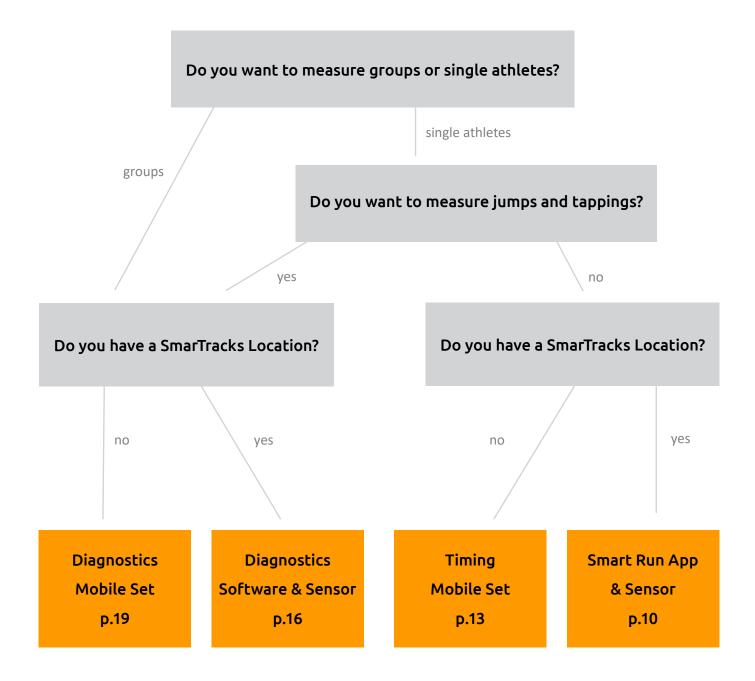


Our Diagnostics Mobile Sets come with 4 or 2 Mobile Gates, with which you can performs all tests. If you need more Gates for for example parallel sprint lanes or additional intervals, you can add as many Gates as needed.

NOTE: The Mobile Gates are also compatible with the Timing Gates In-Ground. So if you have a SmarTracks Location, you can use the Mobile Gates to add more intervals.

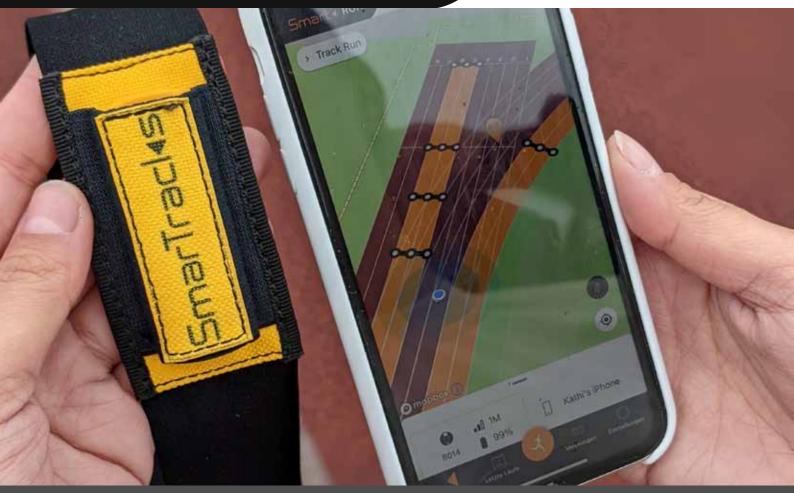


PRODUCTS - What do I need?



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SMART RUN APP & DX5.0 SENSOR

MEASURE YOUR RUNS ON A SMARTRACKS LOCATION

Measure runs on a sports location that has the Timing Gates In-Ground, and receive high-resolution timing and step information.



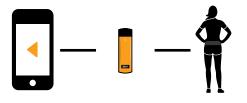


Smart Run App & DX5.0 Sensor

Number of users and measurements

Single user

One run per measurement



Results

- total time and split times (livestreamed and in result overview)
- distance
- step frequency
- number of steps
- speed

Shown in:

Smart Run app

SmarTracks Online

	Time	Total Time [0.01sec]	2 2
		Split Time [0.01sec]	\mathbf{V}
	Speed	Speed [m/s], [km/h], [min/km]	\square
	Livestream	Time [0.01sec]	\checkmark
	Start Options	Force Explosion	
Running		Countdown	
	Steps	Number of Steps	\square
		Step Frequency [Hz]	\checkmark
		Steps per Minute	\square
		Step Length	
	Cooper Test	8 or 12 Minutes	
	For all Due Line		\checkmark
Run-Ups	For all Run-Ups	Total Time [0.01sec]	
(Long Jump, Triple		Split Time [0.01sec]	
Jump, Pole Vault)	For all Run-Ups	Number of Steps	$\mathbf{\nabla}$
		Step Length	
	Illinois (right and left)	Total Time [0.01sec]	\checkmark
	Arrowhead (right and left)	Total Time [0.01sec]	\square
	Custom	Total Time [0.01sec]	\square
Agility Tests	3 Cone Drill	Total Time [0.01sec]	
		Split Time [0.01sec]	
	5-10-5 Shuttle	Total Time [0.01sec]	
		Split Time [0.01sec]	
		opine mine [0101300]	

Tests and data provided



Smart Run App & DX5.0 Sensor - Product Components

DX5.0 Timing (with TB40 Belt)
DX5.0 Timing
DX5.0 Timing sensor with a basic belt for timing.
Includes
1 Sensor DX5.0 Timing
1 TB40 Belt
Smart Run App (available in App Store, Google Play Store and Huawei AppGallery)*
*Free of charge. Certain functions in the Smart Run app require email registration.
NOTE: You can also use the DX5.0 Diagnostics sensor with the Smart Run App!
See p.25 for more information.





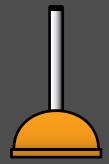


TIMING MOBILE SET

MEASURE YOUR RUNS ANYWHERE







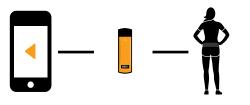


Timing Mobile Set

Number of users and measurements

Single user

One run per measurement



Results

- total time and split times (livestreamed and in result overview)
- distance
- step frequency
- number of steps
- speed

Shown in:

Smart Run app

SmarTracks Online

Data provided

	Time	Total Time [0.01sec]	\checkmark
		Split Time [0.01sec]	\checkmark
	Speed	Speed [m/s], [km/h], [min/km]	\square
	Livestream	Time [0.01sec]	\checkmark
	Start Options	Force Explosion	
Running		Countdown	
	Steps	Number of Steps	\checkmark
		Step Frequency [Hz]	
		Steps per Minute	\checkmark
		Step Length	
	Cooper Test	8 or 12 Minutes	
	•		
Run-Ups	For all Run-Ups	Total Time [0.01sec]	$\mathbf{\overline{\mathbf{A}}}$
(Long Jump, Triple		Split Time [0.01sec]	\square
Jump, Pole Vault)	For all Run-Ups	Number of Steps	\square
		Step Length	
	Illinois (right and left)	Total Time [0.01sec]	\checkmark
	Arrowhead (right and left)	Total Time [0.01sec]	
	Custom	Total Time [0.01sec]	
Agility Tests	3 Cone Drill	Total Time [0.01sec]	
Aginty rests			
		Split Time [0.01sec]	
	5-10-5 Shuttle	Total Time [0.01sec]	
		Split Time [0.01sec]	



Timing Mobile Set - Product Components

Timing Mobile Set (2 Gates)	Timing Mobile Set (4 Gates)
DX 5.0 Timing	DX 5.0 Timing
2 Gates	4 Gates
SmarTracks Timing Set for measuring runs profes- sionally. Includes the DX5.0 Timing sensor and 2 Timing Gates, in combination with the Smart Run mobile app.	SmarTracks Timing Set for professional timing anywhere. Includes the DX5.0 Timing sensor and 2 Timing Gates, in combination with the Smart Run mobile app.
Includes	Includes
1 Sensor DX5.0 Timing	1 Sensor DX5.0 Timing
1 TB40 Belt 2 Mobile Gates (4 x Cones, 4 x MCDs)	1 TB40 Belt 4 Mobile Gates (8 x Cones, 8 x MCDs)
2 Angle Holders	2 Angle Holders
1 Transportation Case	1 Transportation Case
1 Measuring Tape	1 Measuring Tape
Smart Run App*	Smart Run App*

*Free of charge. Certain functions in the Smart Run app require email registration.



DIAGNOSTICS SOFTWARE & SENSOR

PERFORMANCE DIAGNOSTICS FOR PEOPLE TRAINING ON A SMARTRACKS SPORTS LOCATION



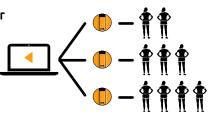


Diagnostics Software & Sensor

Number of users and measurements

Measure several athletes simultaneously

Measure multiple tests with one sensor



Results shown in

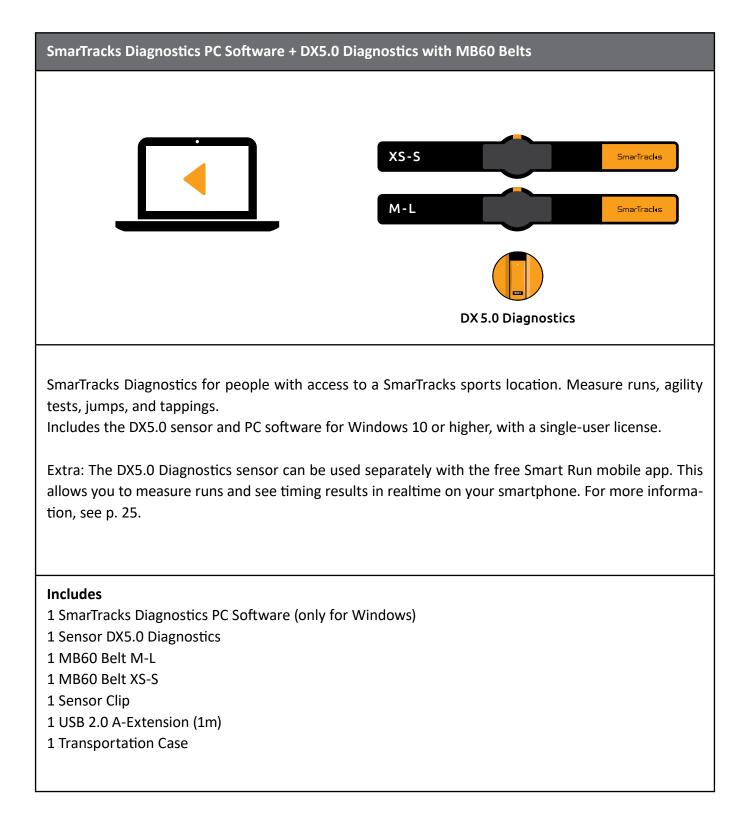
Diagnostics PC software Exports (mhtml, JSON)

Tests and data provided

Application			SMART RUN	DIAGNOSTICS
Running	Time Speed Livestream Start Options Steps Cooper Test	Total Time [0.01sec] Split Time [0.01sec] Speed [m/s], [km/h], [min/km] Time [0.01sec] Force Explosion Countdown Number of Steps Step Frequency [Hz] Steps per Minute Step Length 8 or 12 Minutes	N N N N N N	□ □ (no min/km) □ □ □ □ □ □ □ □ □ □ □ □ □
Run-Ups (Long Jump, Triple Jump, Pole Vault)	For all Run-Ups For all Run-Ups	Total Time [0.01sec] Split Time [0.01sec] Number of Steps Step Length	র ত ত	図 図 図
Agility Tests	Illinois (right and left) Arrowhead (right and left) Custom 3 Cone Drill 5-10-5 Shuttle	Total Time [0.01sec] Total Time [0.01sec] Total Time [0.01sec] Total Time [0.01sec] Split Time [0.01sec] Split Time [0.01sec]	2 2 2	
Tappings	Tappings	Duration [s] Avg. Frequency [Hz] Max. Frequency [Hz] Avg. Frequency [Hz] for 6 sec. and 15 sec. Number of contacts for 6 sec. and 15 sec.		図 図 図
Jumps	Squat Jump Drop Jump Countermovement Jump	Jump Height [cm] Jump Height [cm] Ground Contact Time [s] Reactive Strength Index [cm/s] Jump Height [cm]		図 図 図



Diagnostics Software & Sensor - Product Components



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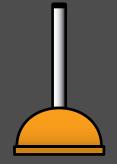


DIAGNOSTICS MOBILE SET

PERFORMANCE DIAGNOSTICS ANYWHERE YOU NEED IT







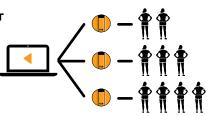


Diagnostics Mobile Set

Number of users and measurements

Measure several athletes simultaneously

Measure multiple tests with one sensor



Results shown in

Diagnostics PC software Exports (mhtml, JSON)

Data provided

Application			SMART RUN	DIAGNOSTICS
Running	Time Speed Livestream Start Options Steps Cooper Test	Total Time [0.01sec] Split Time [0.01sec] Speed [m/s], [km/h], [min/km] Time [0.01sec] Force Explosion Countdown Number of Steps Step Frequency [Hz] Steps per Minute Step Length 8 or 12 Minutes	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □
Run-Ups (Long Jump, Triple Jump, Pole Vault)	For all Run-Ups For all Run-Ups	Total Time [0.01sec] Split Time [0.01sec] Number of Steps Step Length	র এ এ	2 2 2 2
Agility Tests	Illinois (right and left) Arrowhead (right and left) Custom 3 Cone Drill 5-10-5 Shuttle	Total Time [0.01sec] Total Time [0.01sec] Total Time [0.01sec] Total Time [0.01sec] Split Time [0.01sec] Split Time [0.01sec]	ত ত ত	図 図 図 図
Tappings	Tappings	Duration [s] Avg. Frequency [Hz] Max. Frequency [Hz] Avg. Frequency [Hz] for 6 sec. and 15 sec. Number of contacts for 6 sec. and 15 sec.		図 図 図
Jumps	Squat Jump Drop Jump Countermovement Jump	Jump Height [cm] Jump Height [cm] Ground Contact Time [s] Reactive Strength Index [cm/s] Jump Height [cm]		図 図 図

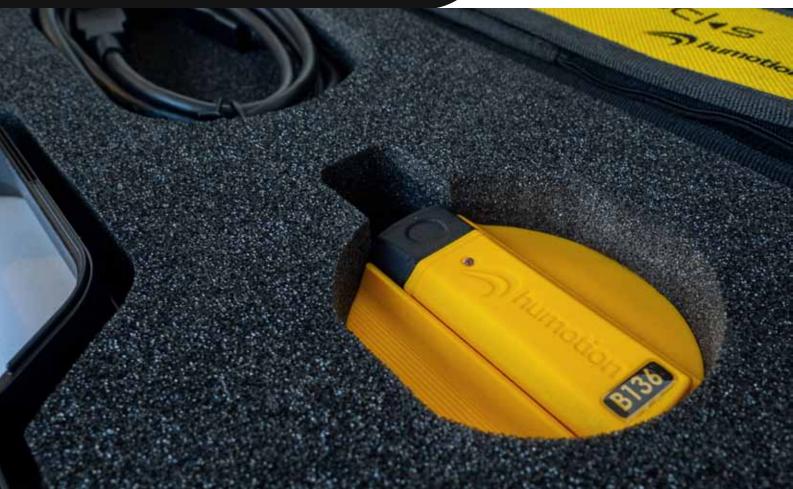


Diagnostics Mobile Set - Product Components

Diagnostics Mobile Set (DX5.0)	
	DX 5.0 Diagnostics
SmarTracks Diagnostics Set for performance diagnost and tappings. Includes the DX5.0 Diagnostics sensor, 4 Timing Gates gle user license (for Windows 10 or higher). Extra: The DX5.0 Diagnostics sensor can be used sep allows you to measure runs and see timing results in tion, see p. 25.	s and SmarTracks Diagnostics software with a sin- arately with the free Smart Run mobile app. This
Includes 1 SmarTracks Diagnostics PC Software (only for Windo 1 Sensor DX5.0 Diagnostics 1 MB60 Belt M-L 1 MB60 Belt XS-S 1 Sensor Clip 4 Timing Gates (8 x Cones, 8 x MCDs) 2 Angle Holders 1 Sensor Box 1 Measuring Tape 1 USB 2.0 A-Extension (2m) 1 Transportation Case	ows)







SENSORS WHAT SENSORS ARE THERE?



Sensor Comparison

Sensor			DX5.0 TIMING	DX5.0 [IAGNOSTICS
Application			SMART RUN APP	SMART RUN APP	SMARTRACKS DIAGNOSTICS
For teams or single athletes			Single athlete	Single athlete	Single athlete & teams
Running	Time Speed Livestream Start Options Steps Cooper Test	Total Time [0.01sec] Split Time [0.01sec] Speed [m/s], [km/h], [min/km] Time [0.01sec] Force Explosion Countdown Number of Steps Step Frequency [Hz] Steps per Minute Step Length 8 or 12 Minutes	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	☑ ☑ (no min/km) ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑ ☑
Run-Ups (Long Jump, Triple Jump, Pole Vault)	For all Run-Ups For all Run-Ups	Total Time [0.01sec] Split Time [0.01sec] Number of Steps Step Length	2 2 2	2 2 2	2 2 2 2
Agility Tests	Illinois (right and left) Arrowhead (right and left) Custom 3 Cone Drill 5-10-5 Shuttle	Total Time [0.01sec] Total Time [0.01sec] Total Time [0.01sec] Total Time [0.01sec] Split Time [0.01sec] Split Time [0.01sec]	2 2	2 2 2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Tappings	Tappings	Duration [s] Avg. Frequency [Hz] Max. Frequency [Hz] Avg. Frequency [Hz] for 6 sec. and 15 sec. Number of contacts for 6 sec. and 15 sec.			년 전 전 전
Jumps	Squat Jump Drop Jump Countermovement Jump	Jump Height [cm] Jump Height [cm] Ground Contact Time [s] Reactive Strength Index [cm/s] Jump Height [cm]			ୟ ସ ସ ସ



DX5.0 Timing Sensor With Smart Run App

The DX5.0 Timing Sensor is to be used with the Smart Run App.

You will receive livestream timing results on your smartphone and after the run you can view all your run data on your smartphone and on the SmarTracks online website.

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Data provided

Application			SMART RUN	DIAGNOSTICS SOFTWARE
Running	Time Speed Livestream Start Options Steps Cooper Test	Total Time [0.01sec] Split Time [0.01sec] Speed [m/s], [km/h], [min/km] Time [0.01sec] Force Explosion Countdown Number of Steps Step Frequency [Hz] Steps per Minute Step Length 8 or 12 Minutes	년 전 전 전 전	not compatible
Run-Ups (Long Jump, Triple Jump, Pole Vault)	For all Run-Ups For all Run-Ups	Total Time [0.01sec] Split Time [0.01sec] Number of Steps Step Length	년 전 전	
Agility Tests	Illinois (right and left) Arrowhead (right and left) Custom 3 Cone Drill 5-10-5 Shuttle	Total Time [0.01sec] Total Time [0.01sec] Total Time [0.01sec] Total Time [0.01sec] Split Time [0.01sec] Total Time [0.01sec] Split Time [0.01sec]	☑ ☑	



DX5.0 Diagnostics Sensor

With Smart Run App and SmarTracks Diagnostics Software

If you have a DX5.0 Diagnostics sensor, you can use it with both the Smar-Tracks Diagnostics software and the Smart Run app.

Note: You cannot combine the measurements of software and app. For example, you cannot start a measurement with the app and then analyze it with the Diagnostics software.

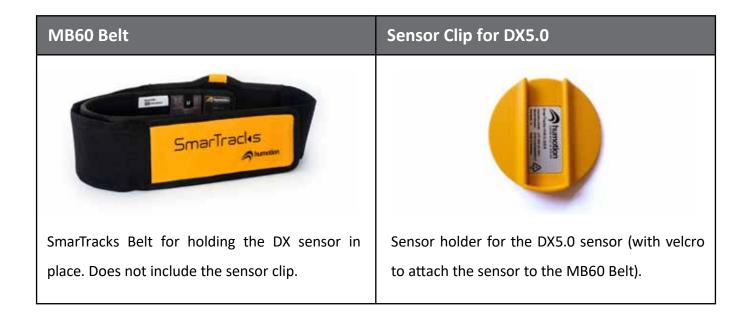


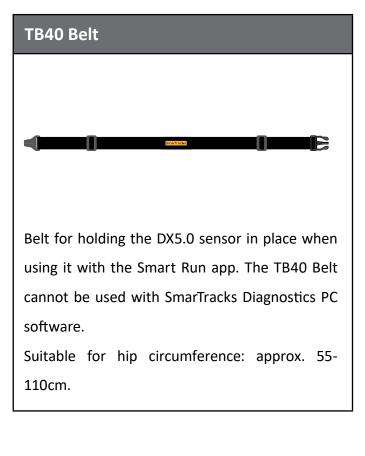
Data provided

Application			SMART	DIAGNOSTICS
			RUN	
Running	Time Speed Livestream Start Options Steps Cooper Test	Total Time [0.01sec] Split Time [0.01sec] Speed [m/s], [km/h], [min/km] Time [0.01sec] Force Explosion Countdown Number of Steps Step Frequency [Hz] Steps per Minute Step Length 8 or 12 Minutes	고 고 고 고	☑ ☑ ☑ (no min/km) ☑ ☑ ☑ ☑ ☑
Run-Ups (Long Jump, Tripl Jump, Pole Vault		Total Time [0.01sec] Split Time [0.01sec] Number of Steps Step Length	ୟ ସ ସ	図 図 図
Agility Tests	Illinois (right and left) Arrowhead (right and left) Custom 3 Cone Drill 5-10-5 Shuttle	Total Time [0.01sec] Total Time [0.01sec] Total Time [0.01sec] Total Time [0.01sec] Split Time [0.01sec] Split Time [0.01sec]	2 2 2	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Tappings	Tappings	Duration [s] Avg. Frequency [Hz] Max. Frequency [Hz] Avg. Frequency [Hz] for 6 sec. and 15 sec. Number of contacts for 6 sec. and 15 sec.		図 図 図
Jumps	Squat Jump Drop Jump Countermovement Jump	Jump Height [cm] Jump Height [cm] Ground Contact Time [s] Reactive Strength Index [cm/s] Jump Height [cm]		図 図 図



Accessories







Accessories

Mobile Gates (Set of 4)	Mobile Gates (Set of 2)	
4 Timing Gates (8 MCDs and 8 cones) in a trans-	2 Timing Gates (4 MCDs and 4 cones) in a trans-	
portation case.	portation case.	

Cones (Set of 8)	Angle Holders (Set of 4)
8 cones (for marking the field or as holders for Mobile Gate MCDs).	4 MCD holders for an angled setup of Mobile Ga- tes (required for certain agility tests).



Technical Requirements for App and PC Software

Technical requirements for Smart Run app, used without a DX5.0

Accelerometer, Gyroscope and Magnetometer (each in three axes) Android 8 or newer iOS 11 or newer Measuring rate of min. 100 Hz Good quality sensors

Technical requirements for Smart Run app, used with a DX5.0

Accelerometer (in three axes) Android 8 or newer iOS 11 or newer Bluetooth 4+

Technical requirements for SmarTracks Diagnostics PC software

Windows 10 (from version 1909) 15" display Intel i5 equivalent or better RAM: ≥ 8GB, 16GB is preferred Storage: SSD or similar Disk space: For application: minimum 1GB For recorded data: minimum 10GB 1 free USB Type A interface

The PC software cannot run on MacOS.



Belt Info

MB60

The MB60 Belt is placed on your lower back with the sensor in a **vertical** position. The belt should be placed so that the top edges of the belt are at the same height as the top of your hip bones.



Size XS-S	Size M-L
(confection size S)	(confection size M)
Weight: 62g Length: 80cm Width: 60cm	Weight: 130g Length: 112cm Width: 60cm
Washable at 30°C (Material: 55% Viscose, 23% Po- lyamide, 20% Polyester, 2% Polychloride)	Washable at 30°C (Material: 62% Viscose, 20% Po- lyamide, 16% Polyester, 2% Polychloride)
Suitable for waist size: approx. 52cm – 75cm	Suitable for waist size: approx. 71cm – 110cm.

TB40

The TB40 Belt is placed on your lower back with the sensor in a **horizontal** position. The belt should be placed so that the top edges of the belt are at the same height as the top of your hip bones.

The TB40 Belt cannot be used in combination with the SmarTracks Diagnostics PC software!

The TB40 Belt is single-size, suitable for hip circumference of ca. 55-110cm.





Contact Information

If you want to place an order, or if you have any questions about Humotion's products and services, please contact us using the contact details below:

E-mail: info@humotion.net Telephone: +49 (0) 251 590 805 0 Fax: +49 (0) 251 590 805 99

For more information on SmarTracks, visit www.smartracks.run.

For more information on other products and services by Humotion, visit www.humotion.net.