

RACE RESULT

Active V3

Transponders

Features – Facts – Applications



A success story being continued



ActiveBasic V3



ActivePro V3



**ActivePro V3
Performance**



MotorKart V3

Thousands of events around the world rely on RACE RESULT active transponders as a guarantee for maximum precision and reliability under all conditions.

V3 is the third transponder generation and takes the product to the next level with significantly lower power consumption, greater resistance to interferences and significantly increased accuracy.

**100 %
Detection
Rate**

**Highest
Accuracy**

**Reliable in all
Temperatures**

**Long
Battery
Life**





Store Mode

**Tracking
Feature**



Tailored to your needs

The four V3 transponder options are tuned to different application scenarios. Different transponders can be used in the same race (e.g. ActivePro V3 Performance for elite athletes, ActivePro V3 for amateurs).

<p>ActiveBasic V3</p> 	<p>The budget choice. For clubs and events that appreciate the reliability of active technology and can do without highest accuracy, tracking and store mode.</p> <table border="1" data-bbox="531 533 1471 696"> <tbody> <tr> <td>Accuracy 0.2 s</td> <td>Max. Speed 60 km/h</td> <td>Warranty 4 years</td> <td>Activation Antenna 2D</td> </tr> <tr> <td>Store Mode -</td> <td>Tracking Mode -</td> <td>Tracking Lifetime -</td> <td>Temperature -25 °C - 70 °C</td> </tr> </tbody> </table>	Accuracy 0.2 s	Max. Speed 60 km/h	Warranty 4 years	Activation Antenna 2D	Store Mode -	Tracking Mode -	Tracking Lifetime -	Temperature -25 °C - 70 °C
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<p>ActivePro V3</p> 	<p>The best choice for most events. Combines high accuracy and speed with long battery life, store mode and tracking.</p> <table border="1" data-bbox="531 869 1471 1032"> <tbody> <tr> <td>Accuracy 0.004 s</td> <td>Max. Speed 120 km/h</td> <td>Warranty 5 years</td> <td>Activation Antenna 3D</td> </tr> <tr> <td>Store Mode ✓</td> <td>Tracking Mode ✓</td> <td>Tracking Lifetime 400 / 1000 days</td> <td>Temperature -25 °C - 70 °C</td> </tr> </tbody> </table>	Accuracy 0.004 s	Max. Speed 120 km/h	Warranty 5 years	Activation Antenna 3D	Store Mode ✓	Tracking Mode ✓	Tracking Lifetime 400 / 1000 days	Temperature -25 °C - 70 °C
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<p>ActivePro V3 Performance</p> 	<p>High-end transponders for pro races. Delivers the highest accuracy, most stable data transmission in sprint finishes, additional tracking data and store mode.</p> <table border="1" data-bbox="531 1209 1471 1373"> <tbody> <tr> <td>Accuracy 0.004 s</td> <td>Max. Speed 150 km/h</td> <td>Warranty 3.5 years</td> <td>Activation Antenna 3D</td> </tr> <tr> <td>Store Mode ✓</td> <td>Tracking Mode ✓</td> <td>Tracking Lifetime 150 / 300 days</td> <td>Temperature -25 °C - 70 °C</td> </tr> </tbody> </table>	Accuracy 0.004 s	Max. Speed 150 km/h	Warranty 3.5 years	Activation Antenna 3D	Store Mode ✓	Tracking Mode ✓	Tracking Lifetime 150 / 300 days	Temperature -25 °C - 70 °C
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<p>MotorKart V3</p> 	<p>Special transponder for timing go-karts, trimmed for avoiding electrical interferences and detection heights < 0.5m. Ensures highest reliability and precision over tens of thousands of rounds of kart racing.</p> <table border="1" data-bbox="531 1581 1471 1744"> <tbody> <tr> <td>Accuracy 0.004 s</td> <td>Max. Speed 120 km/h</td> <td>Warranty 3.5 years</td> <td>Activation Antenna 3D</td> </tr> <tr> <td>Store Mode ✓</td> <td>Tracking Mode ✓</td> <td>Tracking Lifetime 150 / 300 days</td> <td>Temperature -25 °C - 70 °C</td> </tr> </tbody> </table>	Accuracy 0.004 s	Max. Speed 120 km/h	Warranty 3.5 years	Activation Antenna 3D	Store Mode ✓	Tracking Mode ✓	Tracking Lifetime 150 / 300 days	Temperature -25 °C - 70 °C
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V3 Advantages

✓ No hidden costs

Once you purchase the transponder, it's yours! There are no follow-up costs such as activation or subscription fees, renewal costs, expiration dates etc.

✓ Highest accuracy

Our active transponders already were among the most accurate timing solutions on the market. With the V3 transponder we were able to implement an even further improved timing algorithm. The result is a significantly improved accuracy - according to measurements, the best in this transponder class.

✓ Improved power consumption

Utilizing the latest semiconductor technology, V3 has a significantly reduced power consumption compared to any existing transponders. This allows for new functionalities, exceptionally long activation duration, more store mode and tracking mode usage.

✓ Unique features

With "Store Mode" and "Tracking Mode" the application scenarios of the RACE RESULT Active transponder* can be expanded. No other timing transponder on the market offers these functions. V3 consumes significantly less battery in tracking mode, so the feature can be used even more frequently.

✓ Works in any orientation

No matter what position the transponder is in when crossing the timing line, thanks to the 3D activation antenna, the times are always precisely recorded and transmitted. (The Active V2 Basic has a 2D antenna, so it must be mounted vertically.)

✓ High performance in low temperatures

V3 delivers reliable timing data even at low temperatures and low battery levels. Active transponder can be used from -25 °C to +70 °C.

✓ Extra transponder code

Store your own data on the transponder. An individually programmable and changeable code (0 ... 30000 / A-000 ... Z-999) is transmitted with each passing.

In addition, each transponder has a key-value-store that you can assign as you wish (e.g. "Owner" : "MyTiming-Company"). This code can be changed and read out via the Management Box.





✓ Ergonomic and robust

All active transponders are 100 % waterproof. With a weight of only 16.8 g and a size of 36 x 40 x 9 mm, they are comfortable to wear and easy to attach. Smooth edges increase comfort for athletes.



*Not available for ActiveBasic V3 transponders

Technical Specifications

	ActiveBasic V3	ActivePro V3	ActivePro V3 Performance	MotorKart V3
				
Warranty* / Battery Lifetime				
Years	4 years	5 years	3.5 years	3.5 years
Passings	50	100	50	300
Tracking fast / slow	–	400/1000 days	150/300 days	150/300 days
Detection				
Accuracy	0.2 s	0.004 s	0.004 s	0.004 s
Max. speed	60 km/h	120 km/h	150 km/h	120 km/h
Resolution**	0.001 s	0.001 s	0.001 s	0.001 s
2.4 GHz backup	dual	dual	quad	dual
Exit passing precision	170 ms	100 ms	50 ms	170 ms
Reaction time	500 ms	250 ms	125 ms	125 ms
Loop Antenna	2D	3D	3D	3D
Prewarn	–	–	✓	–
Detection Height	2 m	2 m	2m	0.5m
Tracking				
Max. time between Track Boxes	–	5 h	5 h	5 h
Max. time between Loops	–	25 h	25 h	25 h
Typical track ping range	–	50 m	200 m	50 m
Activation	–	Loop ID 8 + Channel ID 8	Loop ID 8 + Channel ID 8	Management Box
Adaptive track ping intervals	–	4 s / 1.75 s / 1 s	1 s / 0.5 s	1 s / 0.5 s
Store Mode				
Max. passings stored	–	64	128	128
Max. store time	–	12 h	24 h	12 h
Store Mode precision	Temperature compensated + -10 ppm			
Features				
Extra transponder code	✓	✓	✓	✓
Adaptive noise avoidance	✓	✓	–	–
Key-value store	✓	✓	✓	✓
Deep sleep mode	–	✓	✓	✓
General				
Dimensions	36 x 40 x 9 mm			
Weight	16.8 g			
Temperature	-25 °C – 70 °C			
Shock Resistance	> 1,000 G			
Housing	IP69 TPE molded case sealed with PU compound 100 % salt water proof			
Battery indicator	battery status data in passing			

Please note: All data apply to the optimal configuration of the RACE RESULT hardware. More information about the setup can be found in our Knowledge Base.

* the value reached first is applied

** when using Ubidium

Unique feature: Tracking Mode

Create live updates on maps and easily add many more split times to your race. Without much effort – without additional GPS trackers for the athletes!

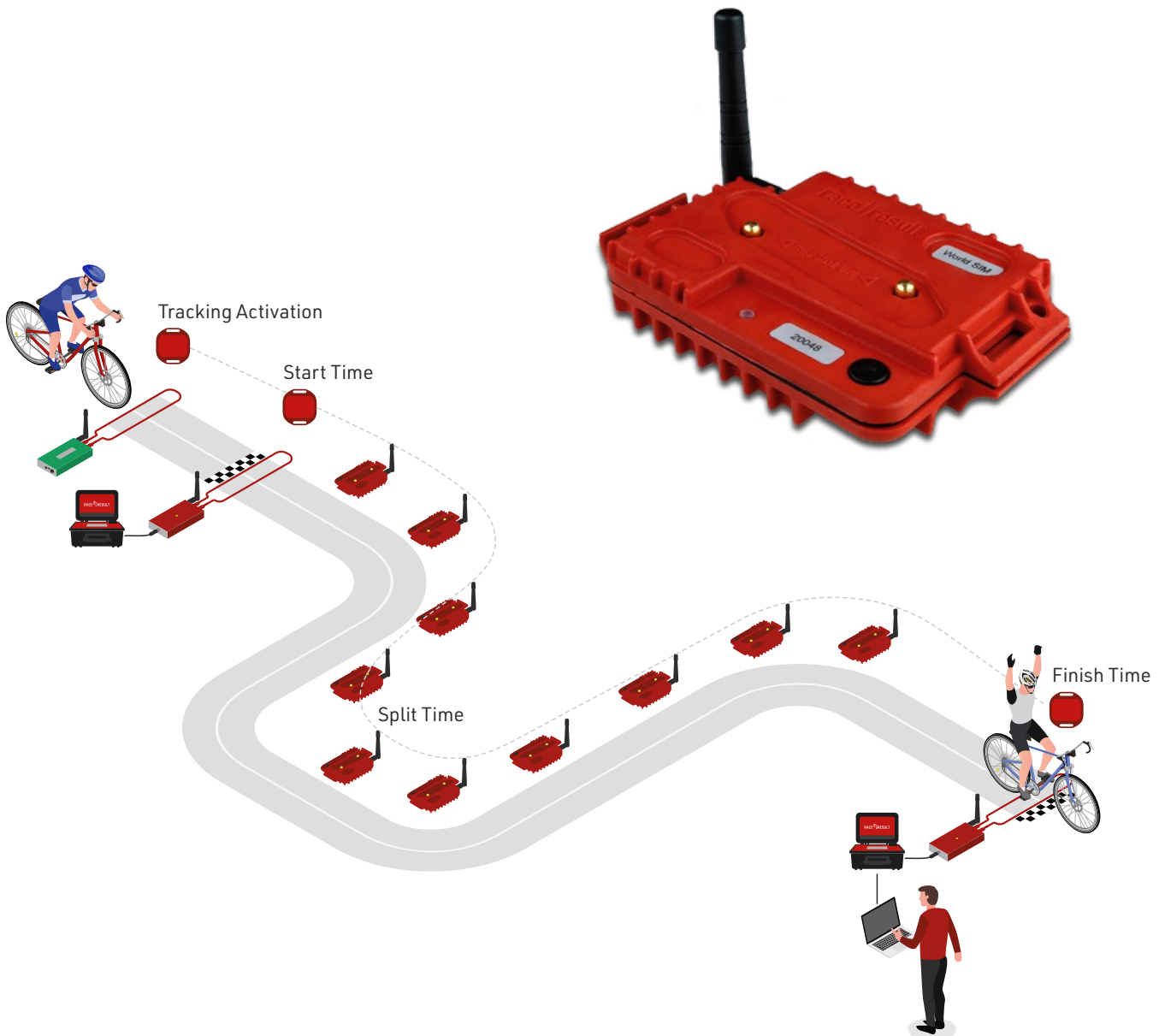
The active transponders* send a ping in tracking mode, which is received by track boxes along the route. The Track Boxes forward the transponder signal, including GPS location and time, to the timing software or to a preconfigured URL. The accuracy is around 1s.

Application Scenario: Triathlon bike course live update

The Track Boxes are attached to street signs via integrated magnets and need no detection loop on the road. They wirelessly detect the athletes passing by. On a map, spectators can follow the progress of their favorite athletes.

Application scenario: Checkpoint on remote location

For a mountain bike race, a volunteer brings the Track Box to the top of a mountain pass. Without needing to carry a whole timing system to the remote location, you can now get live data of participants reaching the checkpoint and can provide this data to the race officials.



* Tracking Mode and Store Mode not supported on ActiveBasic V3

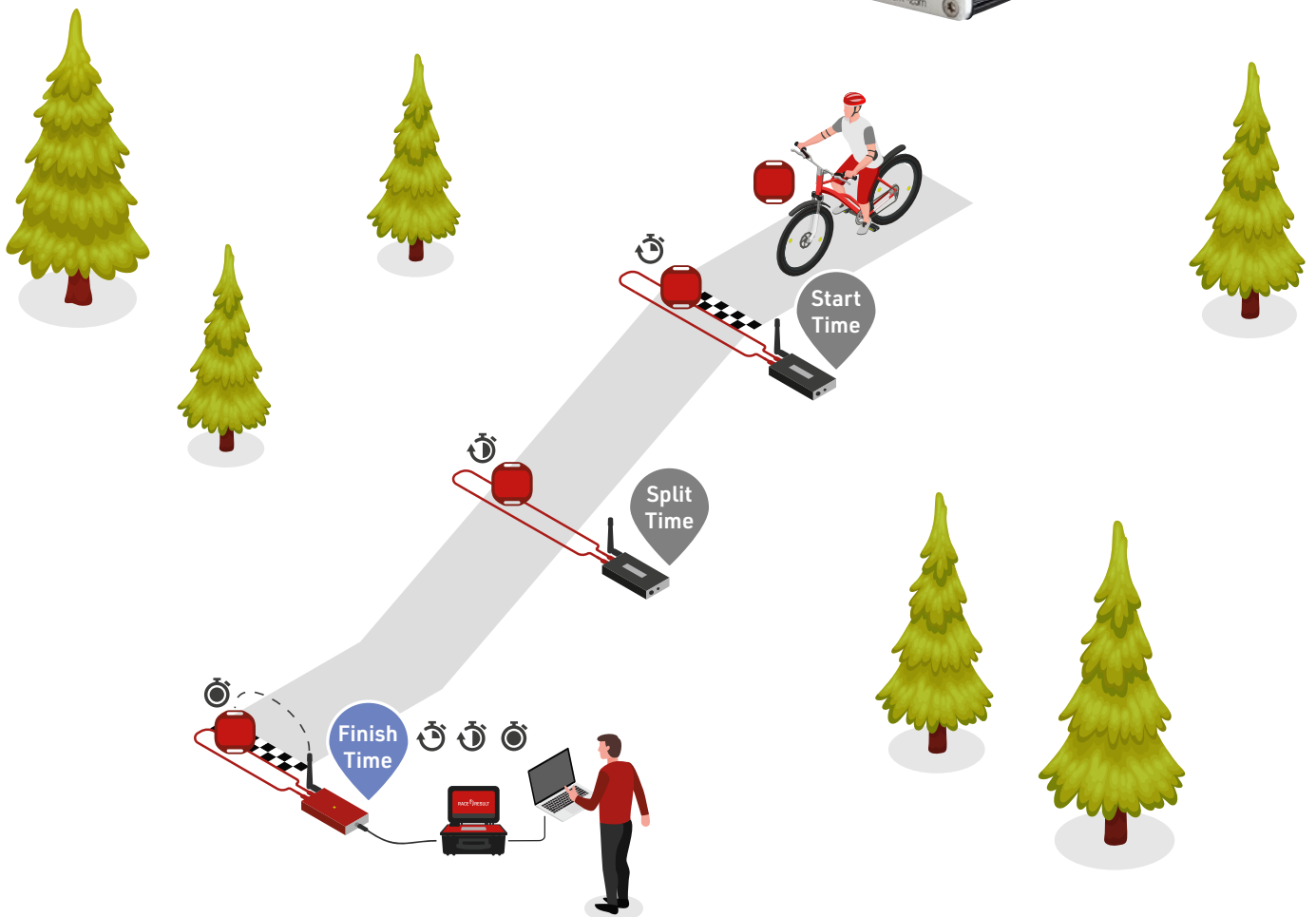
Unique feature: Store Mode

Save split times on the transponder* and transmit them at the next main timing location.

When live timing at remote split points is not possible or necessary, you can use the Store Mode to save split times on the transponder. You can do this for example with our small and handy Loop Box. At a later timing point all saved split times will be collected from the transponder with a timing system and transmitted to the software.

Application Scenario: MTB Downhill

The start time is recorded by a Loop Box and stored in the transponder, as are the sector times along the course. At the finish line, the transponder transmits all times collected to the main timing system. The software now calculates the overall and sector times. Instead of several main timing systems, you only need one, and add the smaller and cheaper Loop Boxes to start and split points. Neither a cable connection nor mobile phone reception is necessary at those timing points.



* Tracking Mode and Store Mode not supported on ActiveBasic V3 Basic



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