

# TrackTiming

by RACE RESULT

*Data Sheet (beta)*



# TrackTiming (beta) - Data Sheet

**TrackTiming** offers the simplest timing solution for **circuits**. The box has integrated software and a **Wi-Fi interface** allowing participants to register and retrieve live results using their own smartphone.

**TrackTiming** is designed for events where scoring relies on the **fastest lap time** (pump track, motorsports qualifying or training sessions).

**TrackTiming** is set up and configured in just a few steps. The **software** automatically calculates all valid laps and uses them to create ranking lists as well as an overview of personal lap times.

**Active transponders** ensure the highest precision. The assignment of transponders to participants is especially easy in the software. This means that a transponder can be assigned again and again throughout the day.

## Features

- Complete solution (hardware & operating system) for recording lap times
- Lap time recording with same start and finish point (classic lap race)
- Easily accessible result lists for participants and spectators
- 12V power input
- 100% detection rate
- High Precision: 0.001s
- Highest clock stability on the market: 0.28 ppm
- Connectivity through integrated Wi-Fi module; access with any Wi-Fi enabled device
- Setup within minutes
- Very easy transponder assignment incl. reassignment
- Ranking lists sorted by fastest lap
- Update via Ethernet to receive the latest software features

## Package

- TrackTiming Box incl. operating system
- Mains power adapter
- Loop cable
- Banana plugs
- Active transponders
- Active transponder holders



### 2.4 GHz RF & Loop Specification

Transponder 2.4 GHz channel frequencies main / backup (worldwide compliance)	1: 2.480MHz/ 2.405MHz 2: 2.405MHz/ 2.470MHz 3: 2.425MHz/ 2.465MHz 4: 2.475MHz/ 2.440MHz 5: 2.415MHz/ 2.445MHz 6: 2.460MHz/ 2.430MHz 7: 2.435MHz/ 2.455MHz 8: 2.450MHz/ 2.420MHz
2.4GHz TX power	17.5dBm
Loop frequency & data	125kHz Data-Packet = Loop ID + channel Packet rate: 150Hz OOK-modulation, manchester encoded, 16 bit anti-false-wakeup pattern
Loop power	100% = 250mA RMS regulated peak current
Loop length	5m - 25m, >0,5mm <sup>2</sup> standard 4mm banana plugs
Read range 25% loop power 100% loop power	60cm (2ft) 2m (6ft)
Detection rate read rate	100% > 250 chips per second burst for 4 seconds > 50 chips per second continuously
Internal data buffer	1,000 passings

### Active Transponders

Active Transponders	ActivePro V2
Loop detection antenna	3D activation antenna - detects equally in any orientation
Detection speed	150km/h (90 mph)
Timing accuracy	1/100th second <sup>1)</sup>
Precision sweet spot	at 30-60 km/h
Reaction time	250ms
Passings storage	64 passings up to 24 hours
Tracking mode	tracking rate 1 times per second
Deep sleep mode	reduces power consumption by 40%
Prewarn before passing for fast identification	yes
Expected battery life <sup>2)</sup>	7 years / 200,000 passings
Guaranteed battery life <sup>3)4)5)</sup>	5 years / 100,000 passings
Tracking lifetime	2,000 hours
Battery indicator	temperature compensated battery status data in passing
Dimensions	36 x 40 x 9mm
Weight	16.8 g
Housing	IP69 TPE molded case sealed with PU compound, 100% salt water proof
Temperature <sup>5)</sup>	-25°C to 70°C
Shock Resistance	>1,000 G

- 1) At 30% loop power & 30 cm wide loop
- 2) Expectation based on usage without Tracking
- 3) Whichever comes first
- 4) Battery consumption is cumulative, e.g. 50,000 passings & 1,000 Tracking hours exploit the guarantee
- 5) Battery Warranty limited to temperatures above -10°C

### Safety & Condition TrackTiming Box

Protection class with cable / antenna screwed on	IP52 - water resistant
Power	10-15V, 1.5A
Temperature	0°C - 50°C
Dimensions	220 x 160 x 95mm
Weight	1.5 kg
Wi-Fi	802.11b/g/n

### Active Chip Holder

Dimensions	50 x 58 x 20mm
Weight	14g (incl. 3 O-rings)
Material	High-impact resistant plastic
Compatible with	Active Basic, Active Pro, MotorKart
Contents	Active Chip Holder, 3 O-rings
Feature	Can be mounted on plain surfaces or tubes



## Headquarters Germany

### **race result AG**

Joseph-von-Fraunhofer-Straße 11  
76327 Pfinztal  
Germany

Phone +49 (721) 961 409 01  
info@raceresult.com  
www.raceresult.com