

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 ² 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	
Loop detection antenna	3D activation antenna - detects equally in any orientation
Detection speed	150km/h (90 mph)
Timing accuracy	1/100th second ¹⁾
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 ²⁾	7 years / 200,000 passings
Guaranteed battery life ³⁾⁴⁾⁵⁾	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 ⁵⁾	-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



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