



**Smart Marshalling**  
**TRACK**

# Smart Marshalling TRACK

Using experience from Formula 1 and its support series, EM Motorsport has developed a new Marshalling System suitable for all venues and championships that wish to improve on-track safety during races, circuit events or track days.

The brand-new **Smart Marshalling TRACK** is compatible with any type of racing, track or road vehicle and is perfect for informing track users of any hazards. It can be installed on up to 165 cars during the same event and can manage up to 65 cars on track at the same time.

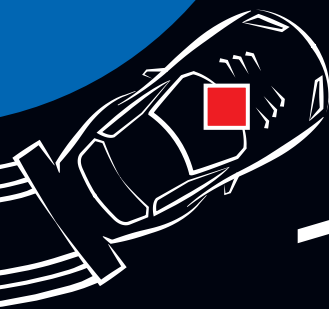
The Race Director can monitor accurate real-time GPS data of all vehicles on the circuit. The device can also detect an incident through the Accident Severity Index (ASI) and immediately take action where necessary. Race Control will have a clear view of yellow flags in real time and on the log file, while **Smart Marshalling TRACK** also monitors car speeds through these areas, including slow zones and Full Course Yellow periods, to ensure drivers are respecting them. Any post-race dispute about speeding in a dangerous situation can be definitively and quickly resolved.

Thanks to the satellite system embedded in **Smart Marshalling TRACK** and the bi-directional communication between vehicle and Race Control, all the necessary information to ensure correct race management is presented in real time. Time critical decisions such as deployment of the Safety Car are taken based on the available data, with **Smart Marshalling TRACK** helping to choose the best course of action in the shortest possible time.

## EM Motorsport's Smart Marshalling system

brings Formula 1 technology to the wider motorsport market.

The integrated **GPS tracking** provides real-time positioning data to Race Control via Sub GHz radio (*ISM band*), while bi-directional communication informs drivers of the track status with LED signalling. The data can be downloaded through an integrated **Wi-Fi system** for analysis.





## Specifications

### Main Features

- Internal 3 axis 16G accelerometer
- GPS receiver
- CAN bus interface
- CAN logging capability
- 4GB of logging memory
- Internal battery up to 8 hours
- Logging of data at up to 10Hz
- Real-time clock provides time stamping of data
- Wi-Fi network interface
- Bluetooth capable
- Multi-colour LED status indicator
- ISM Sub GHz band radio communication
- Fully integrated with EM Motorsport EFS software

### Radio messages

#### From vehicle

- GPS position
- GPS status
- GPS speed
- Battery level
- Radio quality
- ASI (Accident Severity Index)

#### To vehicle

- Track sector flags (Yellow, Double Yellow)
- Track status (SC, FCY, SZ, VSC, Code 60)
- Session suspended
- Custom flags (Blue, Black, Black/White, Black/Orange)

### Technical Overview

#### Environmental

- Operating temp (internal) -15 to + 85°C
- Ingress Protection IP66
- Voltage input supply 8 to 19 VDC

#### Accelerometer

- Axis 3
- Range 100 g
- Sample rate 5 KHz

#### Interface

- Bluetooth 5.2 / BLE
- WiFi 2.4 GHz

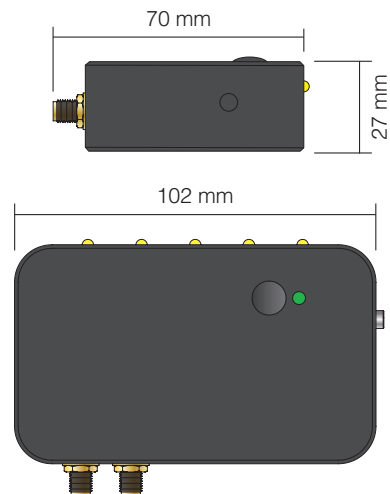
#### Mechanical

- Size(max) 100 x 60 x 25 mm
- Weight 140 grams
- Connector (Charging/Power) USB Type-C
- Connector (GPS) - Optional SMA female
- Connector (Radio) SMA female

#### GPS receiver

- Rate 10 Hz
- Band L1 (+ SBAS)

### Size



#### Battery

- On Power time 8 Hours
- Type LiPo
- Specification 3000mAh
- Charging time (3.15A charger) 1.5 Hours

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