

# TMS-REMOTE

TPMS Remote Monitoring Portal



TIRE MONITOR SYSTEM

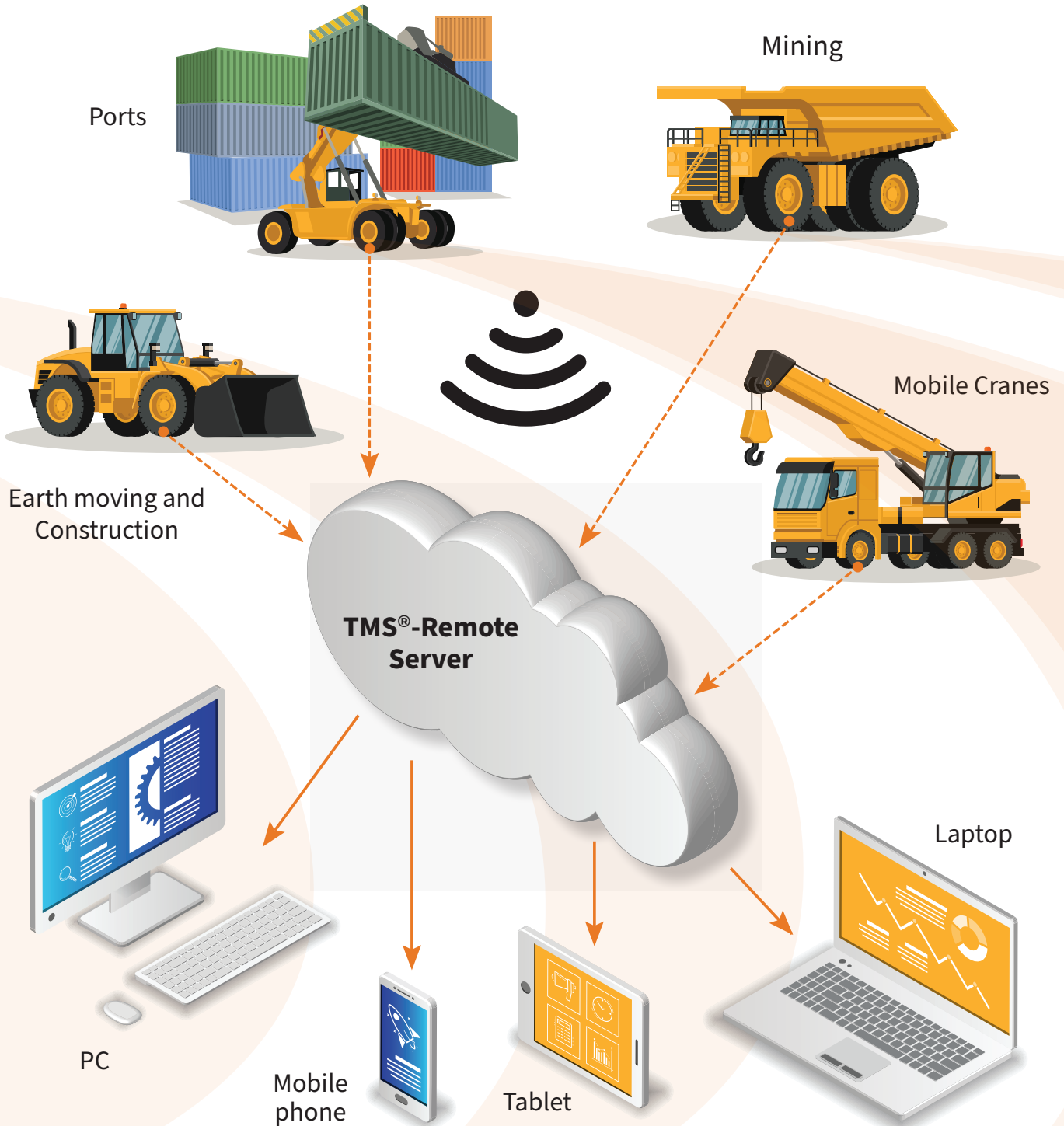
## TIRE MONITORING SYSTEMS FOR INDUSTRIAL & OFF THE ROAD VEHICLES



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# TPMS Remote Monitoring Portal



**REDUCE TYRE COSTS, CUT VEHICLE DOWNTIME AND IMPROVE SAFETY**

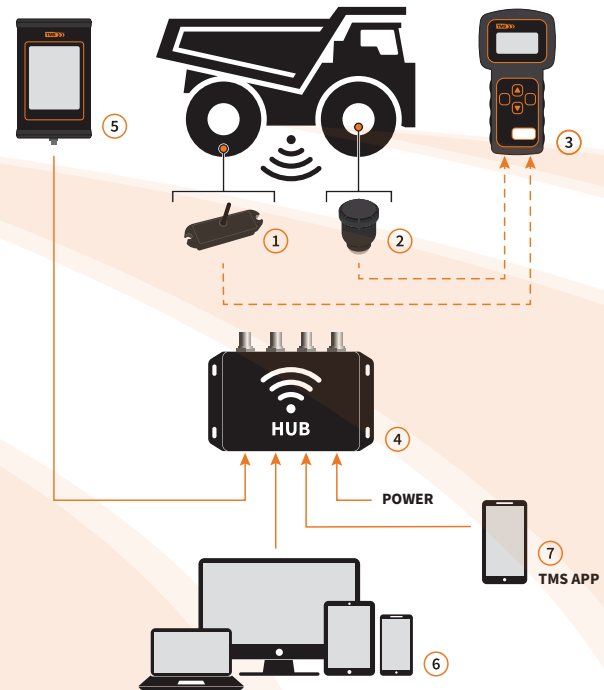
## What is TMS-Remote?

**TMS-Remote** is an INDEPENDENT tire pressure monitoring system (TPMS) software system designed to connect to our own TPMS hardware. The system will display all aspects of each system, including tire pressure, temperature, and GPS location.

The system works by reading sensors fitted to each tire, constantly checking the pressure and temperature. Readings are sent back to the server and stored within **TMS-Remote**, which will then send alerts if the pressure or temperature exceeds set parameters.

## The Complete Package

TMS® is well known as a designer and manufacturer of innovative TPMS solutions for industrial and Off-the-Road (OTR) vehicles. These systems monitor and log all pressure and temperature data and wirelessly transmit this information to the operator. With the addition of **TMS-Remote**, this data on the vehicle is made available off the vehicle. The vehicle package includes the Sensors, The Hub and the optional Operator Interface and this package is completed with the addition of the Telematics unit, custom firmware and Web portal. The Telematics is used to receive data from the TPMS hardware and transmit to the server. The server then collects and processes the TPMS data, allows users to view information from a web page and provides Alerts (Warnings) and Alarms.



## What are the benefits of TMS-Remote?

The many benefits of using a reliable TPMS system are well documented. Please see our website for comprehensive details at [www.tiremonitorsystem.com](http://www.tiremonitorsystem.com)

However, the **TMS-Remote** remote monitoring portal significantly enhances these benefits. The standalone system will indicate abnormal tire parameters to the operator and also log and time-stamp all the data but, with the addition of **TMS-Remote**, this information is made available remotely, to Fleet Managers for example, as it happens.

### Real time information

With the use of the latest Telematics technology, the vehicle location and tire data is available at all times. Data is provided each minute through the local cellular network, with location being provided through GPS. If a vehicle goes out of range for a period, the data is still logged and time-stamped and simply buffered on the vehicle. As soon as its cellular signal is available, this data is transmitted to the portal.

### Instant Overview

This means a Fleet Manager can have a simple overview of the whole fleet anywhere in the world. All they need is an internet connection and they can see up-to-date readings of all pressures and temperatures on every wheel on every vehicle across the whole fleet.

### Alerts and Alarms

Alerts and Alarms are sent to designated users as soon as they are received by our server. The Alert contains the information necessary to allow you to take immediate corrective action.

Alerts are email and SMS based and can be sent to multiple people.

### Regular summary emails

You will receive a regular summary email at a frequency that you choose, advising you of the status of your fleet at that point in time, including a summary of any issues.

### Simple to install

**TMS-Remote** is easy to implement as it is a Web-based application. Once setup, you simply need to log into the website to view your fleet of vehicles and all tyre pressures/temperatures.

### Data security

Tire Monitor System Ltd is completely independent so you can rest assured that the data collected is yours and remains yours to use as you see fit.

### Mobile availability

**TMS-Remote** is also available as an App for Android Smartphones, making it possible for field staff to always be up-to-date wherever they are.

## TMS-Remote Screens

All the screens on the informative web interface are user friendly and designed to provide the critical information at a glance, with full data and diagnostics available when required. These are the mains screens available:

### Overview of the complete fleet – Fleet Status

From a single screen, you can see all wheels on all vehicles in the fleet and instantly see any abnormal events. With a simple colour-coded summary screen, you can see both temperature and pressure issues and how recent these problems are. This screen will also confirm that signals for the GPS and sensors are being received. You can also see transmission problems and sensor battery issues.

The screenshot shows the 'Fleet Status' screen with a table of 15 vehicles. The table columns include Vehicle ID, Pos 1-6, Last Pressure, Last GPS, Last Speed (km/h), and Ignition. A legend on the left defines temperature levels (High Temp, Very High, High, Low, Very Low) and pressure levels (OK, Libe, Very Libe, Very Low) based on age and value. The table shows various status indicators like red and green flags and arrows.

#	Vehicle ID	Pos 1	Pos 2	Pos 3	Pos 4	Pos 5	Pos 6	Last Pressure	Last GPS	Last Speed (km/h)	Ignition
1	11323	111	104	101	110	105	100	1 hours ago	1 hours ago	0	OK
2	11334	99	99	99	100	101	100	10 days ago	10 days ago	0	OK
3	11336	102	103	105	97	105	105	15 seconds ago	15 seconds ago	0	OK
4	11337	100	100	100	100	100	100	2 days ago	2 days ago	0	OK
5	11370	100	100	100	100	100	100	5 days ago	5 days ago	0	OK
6	11372	107	109	111	96	113	109	a minute ago	a minute ago	0	OK
7	11373	114	112	112	112	112	107	a minute ago	a minute ago	0	OK
8	11374	98	98	98	98	98	98	28 days ago	28 days ago	11	OK
9	11376	96	96	100	102	101	101	a minute ago	a minute ago	0	OK
10	11377	100	100	107	113	114	111	44 seconds ago	44 seconds ago	33	OK
11	11378	110	114	109	108	110	111	27 seconds ago	27 seconds ago	36	OK
12	11381	111	112	0	105	100	103	35 minutes ago	35 minutes ago	0	OK
13	11652	102	104	99	102	103	105	a minute ago	a minute ago	0	OK
14	11659	109	105	102	102	0	107	16 seconds ago	16 seconds ago	0	OK
15	11672	100	99	107	107	107	107	48 seconds ago	48 seconds ago	1	OK

### Legend

< 1hr Ago	1 to 4 Hrs Ago	4 to 24 Hrs Ago	>24 Hrs Ago
High Temp	High Temp	High Temp	High Temp
Very High	Very High	Very High	Very High
High	High	High	High
OK	OK	OK	OK
Low	Low	Low	Low
Very Low	Very Low	Very Low	Very Low
Waiting	Waiting	Waiting	Missing
Low Battery	Ignition On	Ignition Off	

### Overview of a Vehicle – Vehicle Status

When looking into vehicle issues, it is useful to drill down to a particular vehicle to check the full status. Along with the regular pressure and temperature information, it also shows signal strength for each sensor and when a transmission was last received. Using the same colour-coding, it is easy to see both Alert/Alarm type and the age of this indication.

These readings are shown against a representation of the wheel layout, along with the vehicle location on a Google Map screen.

<p>Vehicle ID : <b>HD78211KM</b></p> <p>Last Pressure : 59 seconds ago</p> <p>Last GPS : 59 seconds ago</p> <p>Last Speed : 0 km/h</p>	<p>Last Location : 66HW+96, Teluk Pandan, East Kutai Regency, East Kalimantan, Indonesia</p> <p>Ignition State : Off</p> <p>Device ID : 862754050617322</p> <p>Comment : 20231010 Bromley</p>
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**E3B7** 1

123.5 PSI  
58 °C  
59 sec ago  
100%

Axle 1

**E3B8** 2

121.9 PSI  
55 °C  
59 sec ago  
100%

**E3B9** 3

117.1 PSI  
49 °C  
59 sec ago  
100%

**E3BA** 4

121.1 PSI  
53 °C  
59 sec ago  
100%

Axle 2

**E3BB** 5

120.7 PSI  
52 °C  
59 sec ago  
100%

**E3BC** 6

119.5 PSI  
47 °C  
59 sec ago  
100%

### Charts

Users can get a very deep understanding of the vehicles' behaviours using the comprehensive charting system. These can illustrate pressure, temperature, speed and altitude and show how these are correlated over time. It is a simple task to see how particular wheels are performing differently to others as an early indication of a problem. It is also useful to examine, in detail, what happened after an event to help avoid future problems. Charts can be drawn over any user-defined time period and you can zoom in using the interactive zoom feature. And it's also possible to see all wheels or just selected axles or wheels.



### Vehicle Readings

The data from each wheel is collected every minute and is available for further analysis. Again, data can be viewed from selected axles or wheels and also filtered for just the Alerts and Alarms.

If required, this comprehensive dataset can be downloaded in Excel format for further analysis as required. So, a full pressure and temperature history of each wheel position can be reviewed.

### Vehicle Track

By replaying the route a vehicle has travelled, you can see any events that have occurred during this route and exactly where they happened.

### Fleet Location through GPS

When you have a fleet of vehicles located across a wide area, this is an essential screen that gives an overview of the fleet locations, showing each vehicle with its user-defined reference on a Google Map screen. When you click on each individual vehicle, it will give you a current set of readings for each wheel on that vehicle.



### Vehicle Signal

Gathering the data from remote sites will only be as good as the mobile signal wherever the vehicle is located. This screen is used to assess the quality of the cellular signal that is passing the data over to the servers. This includes network speed, signal strength and network type 2G/3G/4G. It is shown graphically over the area that the vehicle has been travelling so making it easy to see any weak spots.

### Diagnostic screens

There are a number of additional screens used to check sensor transmission and the general health of the fleet. These can show missing sensor transmissions, Alerts per day and active sensor figures.



### Alarms and Alerts settings

The recommended pressure can be set per wheel and per vehicle. The Alarms and Alerts are then set for High Pressure (Alert), Very high Pressure (Alarm), Low Pressure (Alert), Very low pressure (Alarm) and High Temperature (Alarm). Users can also select the units of pressure that they prefer.

The screenshot shows the 'Alert Configuration' settings page. On the left, 'Alert Rules' are listed: 'Alert and Alarm messages will be sent immediately as they are encountered', 'Positions still in alert after 6 hours will send a reminder', 'Positions still in alarm after 2 hours will send a reminder', and 'Emails are free, SMS can incur charges'. The main area is titled 'Pressure' and includes a 'Configure alerts using' dropdown set to '%'. Under 'Low Pressure', there are settings for 'Low Pressure Alarm' (More Than 15% below the Recommended Pressure, Very Low button) and 'Low Pressure Alert' (More Than 10% below the Recommended Pressure, Low button). Under 'High Pressure', there are settings for 'High Pressure Alert' (More Than 22% above the Recommended Pressure, High button) and 'High Pressure Alarm' (More Than 28% above the Recommended Pressure, Very High button). A 'Temperature' section has a 'High Temperature Alarm' set to 'More Than 90 °C'. 'Save' and 'Cancel' buttons are at the bottom right.

### Free Trial

We are happy to provide a free of charge trial of the complete TPMS system along with **TMS-Remote**. You can try this on your vehicle on your own particular application. We are confident you will find the system extremely useful, easy to use and will quickly see the benefits in Savings, Safety and Sustainability.

**Get in touch today to arrange a trial**

## FURTHER INFORMATION



[www.tiremonitorsystem.com](http://www.tiremonitorsystem.com)

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