



**TIRE MONITORING SYSTEMS
FOR INDUSTRIAL AND
OFF THE ROAD VEHICLES**

WHO IS TMS?

Tire Monitor System (TMS) is a designer and manufacturer of high quality, high reliability Tire Pressure Monitoring Systems (TPMS) for industrial vehicles. We have been developing and supporting TPMS systems for approaching three decades and are a key supplier of TPMS to all industries, from mining to airport transportation, construction to cargo handling.

We understand the importance of keeping industrial vehicles running safely and efficiently in the harshest and most demanding environments - our range of products has been proven to handle extremes of temperature, vibration and temperature cycling.

We specialize in providing superior TPMS solutions that won't let you down, to help our customers achieve maximum uptime, productivity and profitability, with safety being at the forefront of everything we offer.

Our team of experts has vast experience in designing, manufacturing and distributing advanced TPMS technology that meets the needs of the demanding Off the Road (OTR) market, providing accurate, real-time data that helps operators and managers make informed decisions about tire maintenance and replacement schedules.

Here today, here tomorrow

"The team here at TMS pride ourselves on manufacturing robust and proven equipment that you can trust in the field. Our systems are used in all sorts of markets on all vehicle types and with all tire manufacturers."

Let us demonstrate the benefits that our satisfied users are already experiencing - safety, savings and sustainability."

Tim McLeman | Managing Director



SAFETY, SAVINGS & SUSTAINABILITY

These are the watchwords of our TPMS by TMS.

Safety is of paramount importance in the industrial workplace. With our TPMS system, operators will be promptly warned of any problems with tire pressure or temperature before they cause a safety issue.

Tire running costs on industrial sites are a significant cost to the business. Investing in our TPMS will lead to significant **Savings** due to improved fuel efficiency from running vehicles with optimal tire pressure and temperature, by allowing prompt tire replacement or re-treading and preventing unplanned downtime.

Reducing carbon emissions through lower fuel usage, minimising tires going to landfill sites and reducing scarce resources involved in the manufacturing of new tires all reduce the environmental footprint. **Sustainability** and carbon savings of this nature can then be reported across the business, a benefit which would be difficult to achieve without a credible TPMS system.



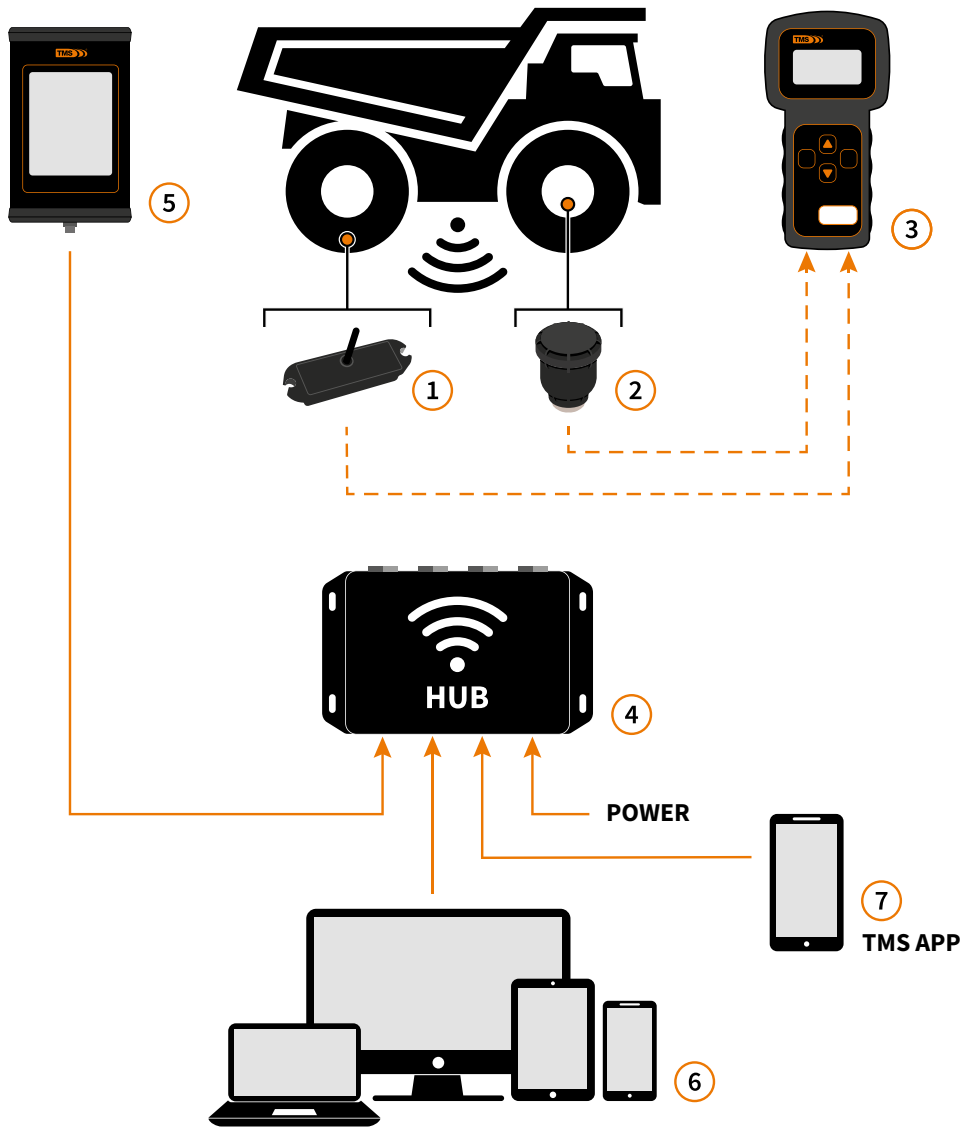
BENEFITS OF USING A QUALITY TPMS

- **Safety:** Properly inflated tires are critical to safe industrial vehicle operation. Incorrectly inflated tires can impact the handling, braking and steering. TPMS provides real-time monitoring of tire pressure and temperature, alerting drivers to potential issues before they become safety hazards.
- **Efficiency:** By maintaining the recommended tire pressure, TPMS can improve fuel efficiency, optimize tire performance and extend tire life, saving money on fuel and tire replacements.
- **Reduced downtime:** Tire failures can cause costly downtime and delays in operations. TPMS can help prevent these issues by alerting operators and managers to potential tire problems before they cause equipment damage or breakdowns.
- **Sustainability:** As well as carbon reduction from fuel savings, TPMS ensures tires are always used within the advised operating parameters; this protects the tire casing so allowing re-treading to be carried out. Being able to extend the working life by re-treading tires will have an environmental impact by reducing the use of these precious resources.
- **Temperature monitoring:** With the Internal Sensors you can also monitor and log the tire temperature accurately. This is essential in applications where the tires are highly stressed (like mining and earth moving). Users can then avoid operating beyond the maximum threshold where thermal separation can occur or even a serious safety issue.
- **Enhanced performance:** With real-time data on tire pressure and temperature, fleet managers can make informed decisions about tire maintenance and replacements leading to enhanced performance and productivity.
- **Compliance:** Many industries and regulatory bodies require OTR vehicles to be equipped with TPMS. By investing in a reliable TPMS system, companies can ensure compliance and avoid costly fines or legal issues.
- **Comprehensive logging:** All events are logged giving asset managers the data to analyze in order to plan ahead.

Overall, buying a TPMS for industrial vehicles can help improve safety, increase efficiency, reduce downtime, ensure compliance and sustainability, and enhance overall performance.

Isn't it time you made the move?

Give us a call to see how TMS can help your business



- ① Internal Sensor
- ② External Sensor
- ③ Sensor Reader (used to activate & check sensors)
- ④ Hub
- ⑤ Display (Operator Interface)
- ⑥ Client Equipment
- ⑦ TMS App

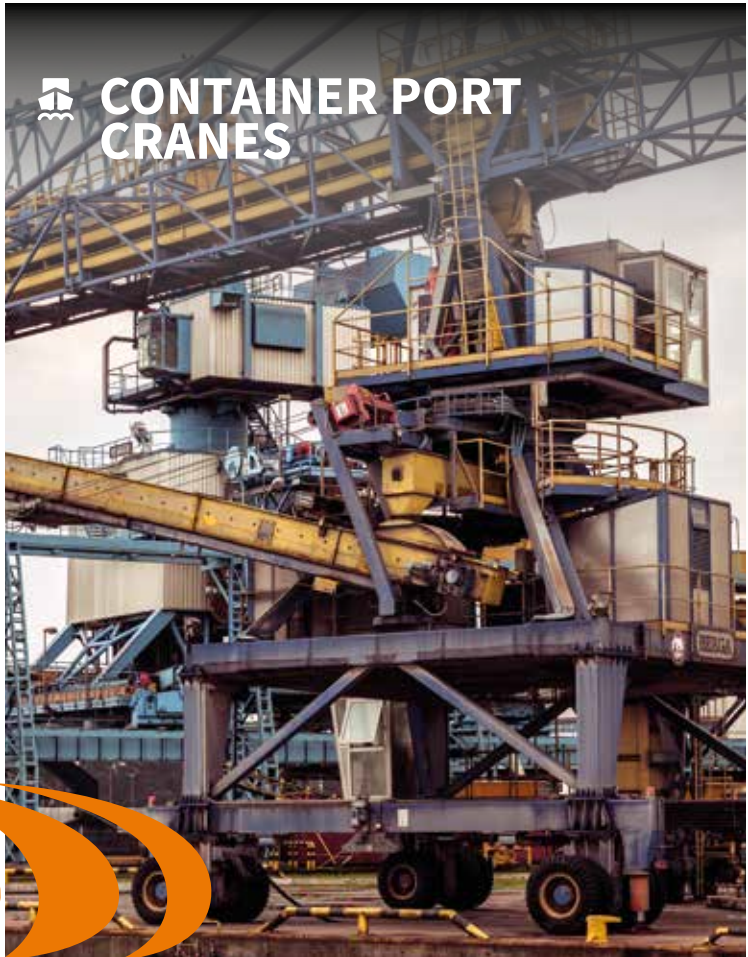
**INDEPENDENT TPMS FOR
ALL TIRE SIZES FROM ANY
MANUFACTURER**



 MINING



 EARTH MOVING & CONSTRUCTION



 CONTAINER PORT CRANES

INDUSTRIES WE SUPPORT



 **DEFENSE**



TMS
TIRE MONITOR SYSTEM

 **MASS TRANSIT SYSTEMS**



 **MOBILE CRANES**

All parts are designed and manufactured at our facilities in the UK using the latest automated production, assembly and testing techniques.

INTERNAL SENSORS

Internal Sensors are used when you need accurate measurement of both pressure and temperature. Each sensor has a unique four-digit identity code (ID)



- Mounting:** Inside the tire on tire patch/magnetic mount on wheel
- Environment:** Dry, clean gas filled tires
- Pressure range:** 6-200psi
- Temperature range:** -20 to 100 °C (-4 to 212 °F)
- Dimensions:** 112 x 31 x 18mm. 60g (4.41 x 1.22 x 0.71". 2.1oz)
- Transmission:** On change of pressure and every 5 minutes
- Variants:** FCC certified

EXTERNAL SENSORS

External Sensors are mounted on the large bore valve. With the use of an additional T-piece it's possible to inflate and pressure-check the tires without removing the sensor. Each sensor has a unique four-digit identity code (ID)

- Mounting:** External directly onto large bore valves
- Environment:** Dry, clean gas filled tires
- Pressure range:** 6-200psi
- Temperature range:** -20 to 100 °C (-4 to 212 °F)
- Dimensions:** 52 x 40mm diameter. 95g (2.05 x 1.57" diameter. 3.4oz)
- Transmission:** On change of pressure and every 5 minutes
- Variants:** FCC certified. 433 or 315MHz frequencies



SENSOR READER

A low frequency activator is used to initiate a data transmission and take sensors out of hibernation mode. The Reader checks ID code, pressure, temperature and sensor battery.

- Power:** Rechargeable with PSU supplied
- Display:** Backlit
- Languages:** English, Spanish, Russian
- Altitude:** Built in sensor to compensate for altitude
- Pressure:** Displays pressure calculated to 18 °C (64 °F)
- Variants:** 433 or 315MHz frequencies



SYSTEM COMPONENTS



HUB

The Hub is the heart of the TPMS system and interfaces with up to 24 sensors, the Display and all external equipment. To ensure seamless operation even in the most extreme environments, the Hub has four independent antennas connected to four independent receiver channels to ensure that you'll always be able to receive the necessary data.

Outputs: 2 x RS232, 1 x USB

Clock: Real time clock

Memory: Time stamped log of up to 1.4million events

Power: 11.5 to 36VDC

Dimensions: 126 x 82 x 44mm. 355g (4.96 x 3.23 x 1.73". 12.5oz)

Operating range: -10 to 55 °C (14 to 131 °F)

Configuration: Through TMS App

Variants: 433 or 315MHz frequencies



DISPLAY (OPERATOR INTERFACE)

The TMS34 displays the tire pressure data for each allocated wheel (up to 24 wheels). Alarms are generated both visually and audibly (if required). Real time tire data can be checked by the driver at any time.

Display: Touch screen with auto-adjust for brightness

Power: Directly from the TMS Hub

Dimensions: 125 x 80 x 30mm. 220g (4.92 x 3.15 x 1.18". 7.8oz)

Sensor: Replacement sensors can be configured from the Display

KITS

Specific kits can be prepared to suit your particular requirement or vehicle.

Give us a call and we can provide a custom solution to your exact vehicle requirements.





TMS APP

For use with Smartphones, Tablets and PCs. Connects directly to the TMS Hub in order to configure the system, change alert settings, download the data log and graphically review the pressure and temperature data log.

This Progressive Web App (PWA) operates like any native mobile App and is fully functional when offline so ideal for working in remote locations.

Security is assured as the App uses HTTPS encryption to send any data and your data is never stored within the App, this always remains on your device.



Setup your complete fleet in the App

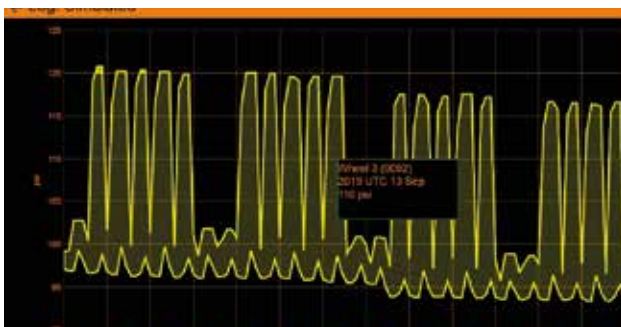
Configure all settings including wheel layouts and numbering, alarm levels and sensor changes.



Create custom reports with clear graphics to indicate problem areas

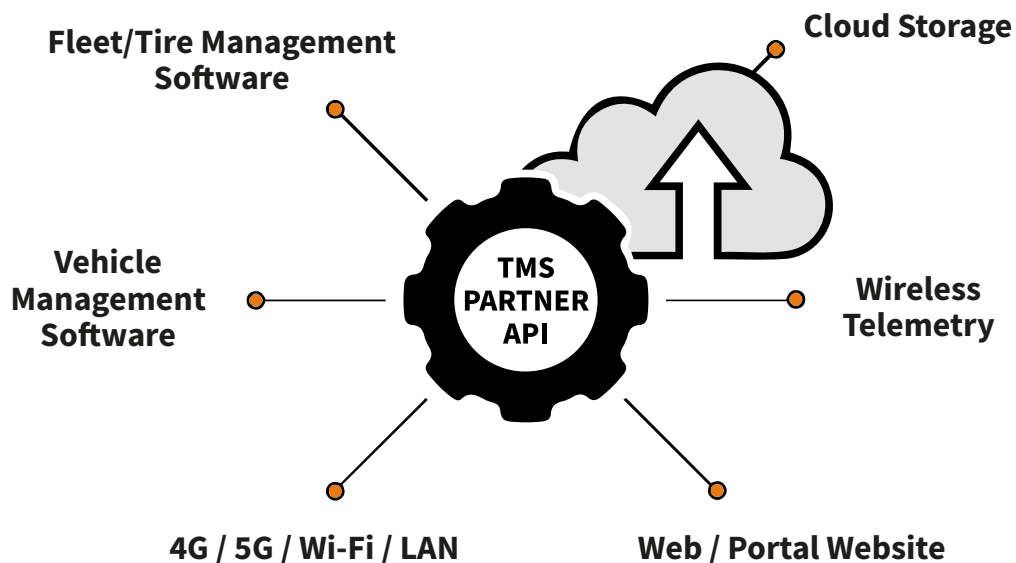


Display all data as charts or reports in the exact timeframe you require

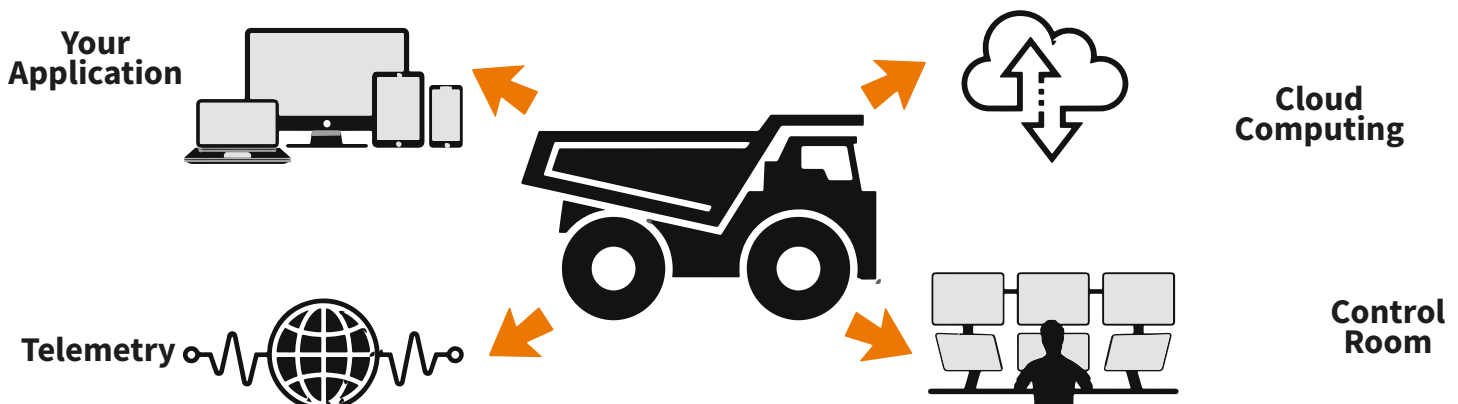


API INTEGRATION

The new TMS Hub allows our partners to seamlessly interconnect to the wider world using our fully documented Application Programming Interface (API). This links the real-time data from our sensors into the customer's specific software/platform.



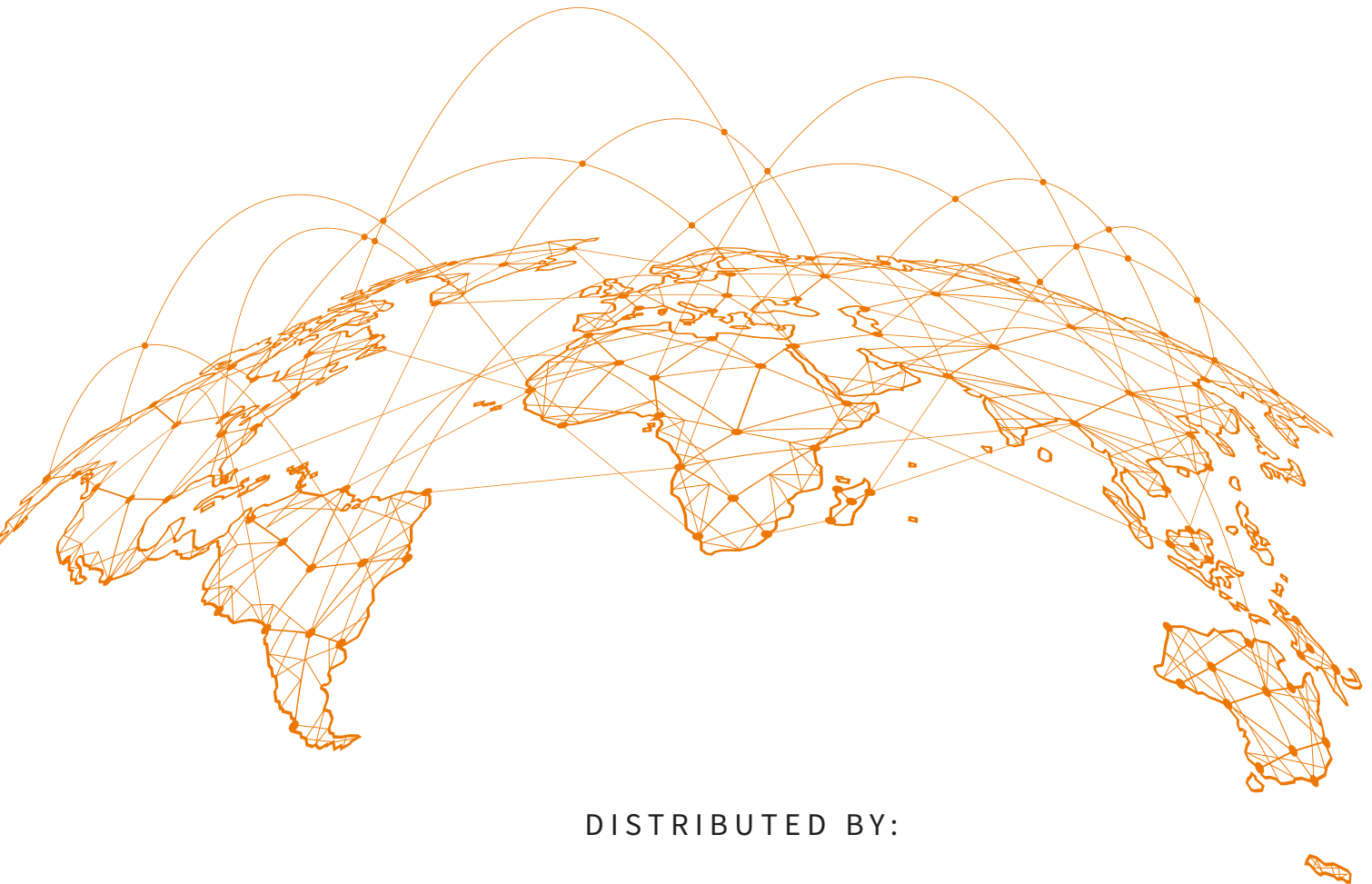
- **Custom applications** can be created to display the TMS data in a specific way to suit the needs of the user.
- The API is designed to allow our partners to **easily integrate** the TMS pressure and temperature data regardless of programming language, platform or infrastructure.
- Allows closer **collaboration and integration** for our partners.
- **Stable and user-friendly** interface.
- Additional benefits of **improved security and faster development**.



WANT TO KNOW MORE? CALL OUR SUPPORT TEAM TODAY TO GET ALL YOUR QUESTIONS ANSWERED

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