



User manual



**A tyre pressure monitoring system
that sees more than most**

WELCOME TO OUR WORLD

TyreWatch is the market-leading supplier of tyre pressure monitoring systems for commercial vehicle fleets

Whether you're operating in the UK or further afield, TyreWatch is designed to give commercial fleet operators complete peace of mind. Our custom tyre pressure monitoring system (TPMS) is an integrated solution that provides a continuous, real-time condition report for each and every tyre within your fleet – meaning you're always one step ahead when it comes to scheduling maintenance or anticipating repairs.

Running tyres at incorrect pressures can be a serious – yet often underestimated – drain on resources, causing unnecessary fuel wastage, reduced service life and increased carbon emissions. More importantly, the vehicle's handling, braking and stability are also adversely affected. Incorrectly pressurised tyres remain the singular most common cause of avoidable roadside failure.

TyreWatch works seamlessly with your fleet to ensure safe and efficient delivery of your goods, services and passengers – on time, every time. Regardless of your fleet size, a TyreWatch system will keep you delivering on your promises.



A tyre pressure monitoring system that sees more than most

monitor: pressure, temperature, speed and location

inform: the driver and fleet operator of potential issues

prevent: avoidable roadside failures and downtime

MONITORED FLEETS ARE SAFER

TyreWatch efficiently analyses and reports on:

Tyre pressure:

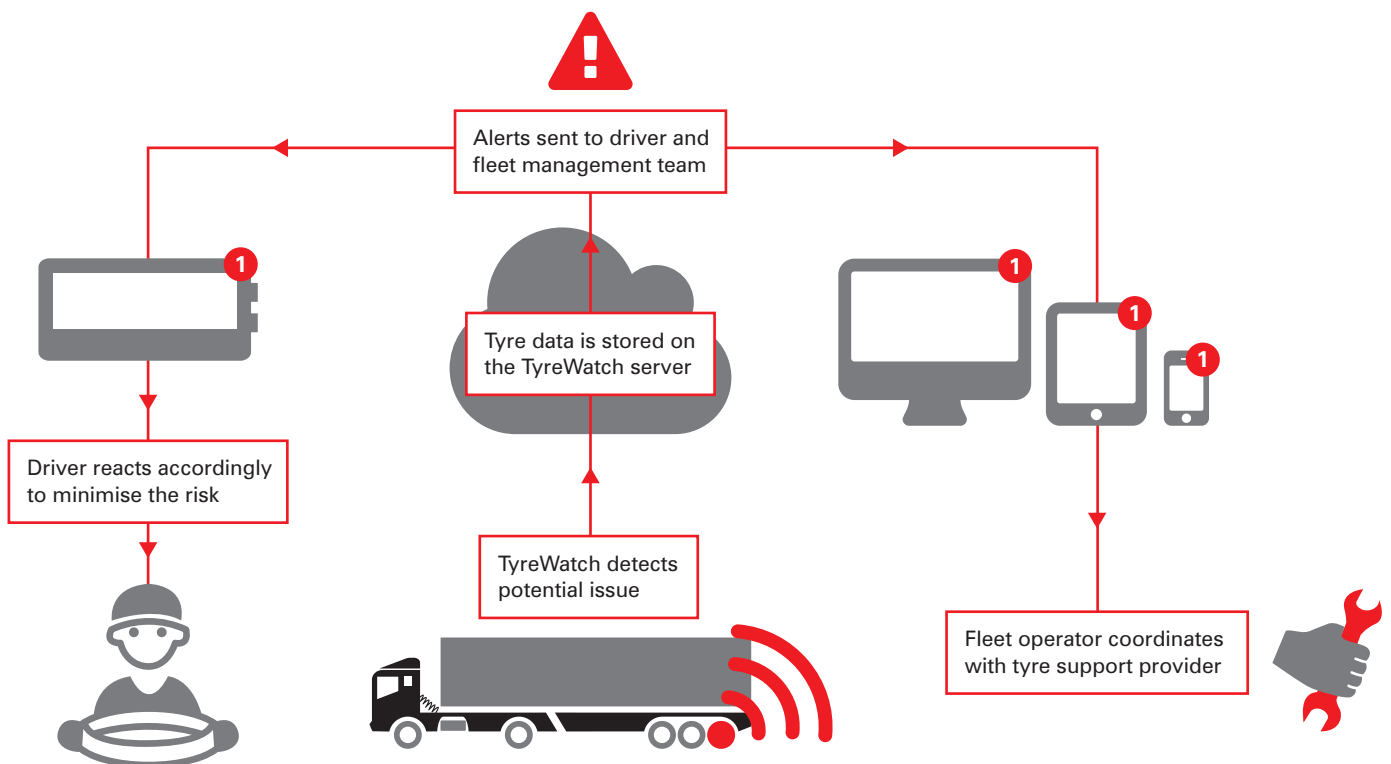
- Rapid pressure leakage: more than 5 psi deflation in 15 seconds
- 20% under baseline pressure
- 30% above baseline pressure

Tyre temperature:

- Alerts when tyre temperature reaches 80 °C

Vehicle speed:

- Crucial, as excessive speed is a major cause of rapid tyre attrition



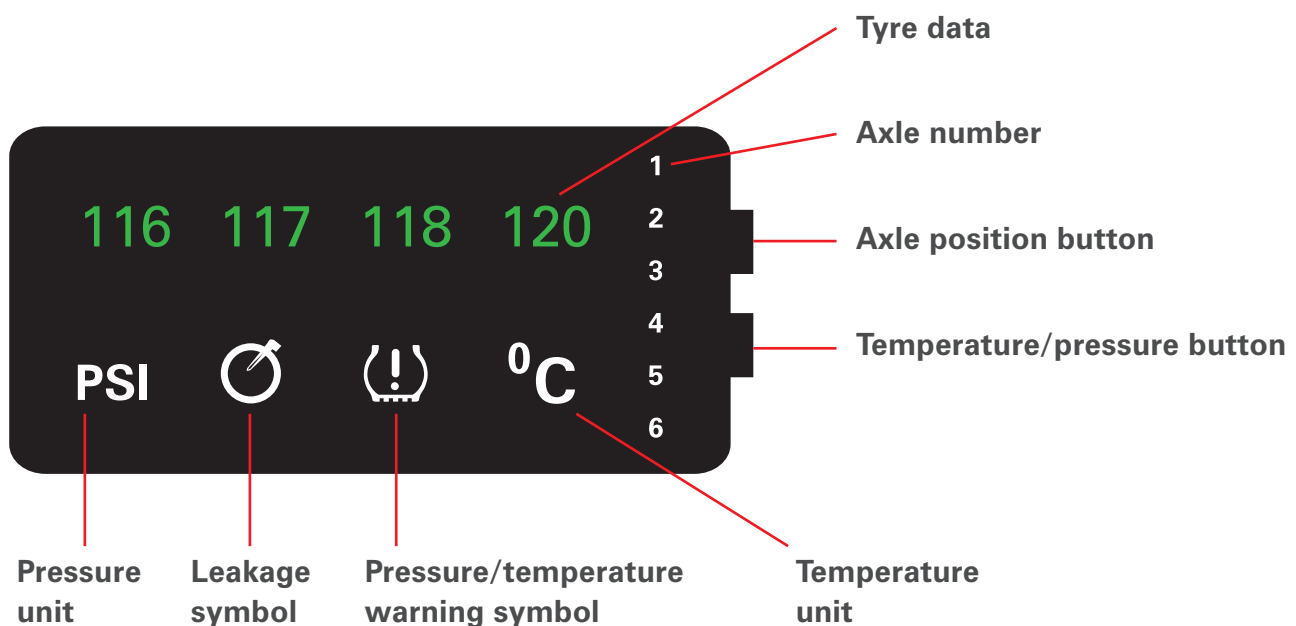
	In cab	Web interface	Email
Real-time tyre pressure monitoring	✓	✓	–
Real-time tyre temperature monitoring	✓	✓	–
Tyre pressure alert	✓	✓	✓
Tyre temperature alert	✓	✓	✓
Rapid pressure loss	✓	✓	✓
Vehicle positioning and tracking	✓	✓	–
Speed alert	–	–	✓

IN-CAB DISPLAY OVERVIEW

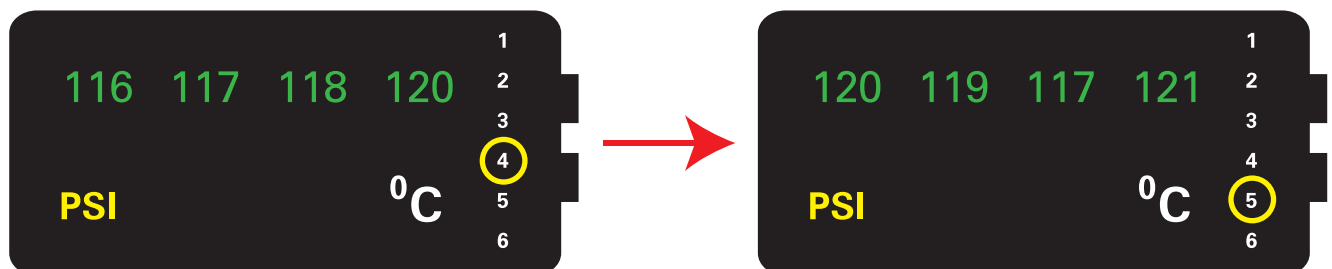
Your vehicle is installed with TyreWatch, configured to the individual specifications of your vehicle: with sensors mounted securely within the wheels, intelligent technology continually collects information from both tractor and trailer units.

As soon as the ignition is switched on, TyreWatch is activated. On the in-cab display, tyre data (pressure/temperature) is displayed axle by axle. Axles 1, 2 and 3 give data for the tractor unit. If TyreWatch is also installed in your trailer, axles 4, 5 and 6 give data for the trailer unit.

Normally the display is set up to show tyre pressures, but there is a button on the right hand side that can switch between pressure and temperature.



The display will show each axle's tyre data for 5 seconds in rotation. If the tyre data on this axle is within the set parameters, it will automatically switch to the next axle.



INFORMATION IS EVERYTHING (page 1 of 2)

When TyreWatch detects an issue, it immediately informs both the driver and the fleet management office so action can be taken

INFORM

Typically, non-urgent issues such as slow pressure loss from a leaky valve, or a modest temperature increase from a mechanical defect on an axle for example, can be fixed once the driver returns to base. The nature of the fault is minor, but with this knowledge the driver can proceed with caution and avoid potential escalation or exacerbation of the fault.

Low tyre pressure

20% under baseline pressure

In-cab display

- Stays on problem axle
- Warning sound
- (!) symbol appears
- Problem tyre flashes

Action

- Pull over where convenient and safe
- Thoroughly check the tyre
- Continue to destination, monitoring the display
- Inform depot on arrival



High tyre pressure

30% above baseline pressure

In-cab display

- Stays on problem axle
- Warning sound
- (!) symbol appears
- Problem tyre flashes

Action

- Pull over where convenient and safe
- Thoroughly check the tyre
- Continue to destination, monitoring the display
- Inform depot on arrival



INFORMATION IS EVERYTHING (page 2 of 2)

When TyreWatch detects an issue, it immediately informs both the driver and the fleet management office so action can be taken

PREVENT

Should TyreWatch detect rapid pressure leakage or high temperatures – the main causes of tyre failure – it generates an urgent stop alert. The driver can then pull over in full control of the vehicle, preventing imminent tyre failure.

Rapid pressure leakage

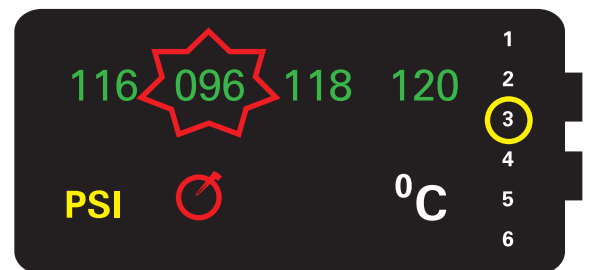
More than 5 psi deflation in 15 seconds

In-cab display

- Stays on problem axle
- Warning sound
-  symbol appears
- Problem tyre flashes

Action

- Pull over where convenient and safe
- Thoroughly check the tyre
- Only continue if no visible deflation or damage
- Inform depot



High tyre temperature

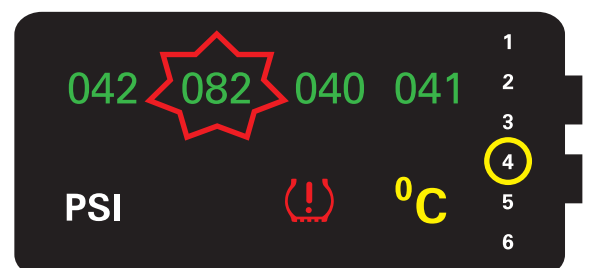
Tyre temperature reaches 80 °C

In-cab display

- Stays on problem axle
- Warning sound
-  symbol appears
- Problem tyre flashes

Action

- Pull over where convenient and safe
- Thoroughly check the tyre
- Continue to destination, monitoring the display
- Inform depot on arrival



RESETTING THE BASELINE PRESSURES

As part of the installation process the baseline pressures have been set for your vehicle. Always keep your cold tyre pressures at the baseline levels specified by your tyre service provider and/or tyre manufacturer. Both under-inflation and over-inflation may shorten the battery life of the sensors, and invalidate the 5 year guarantee on this product.

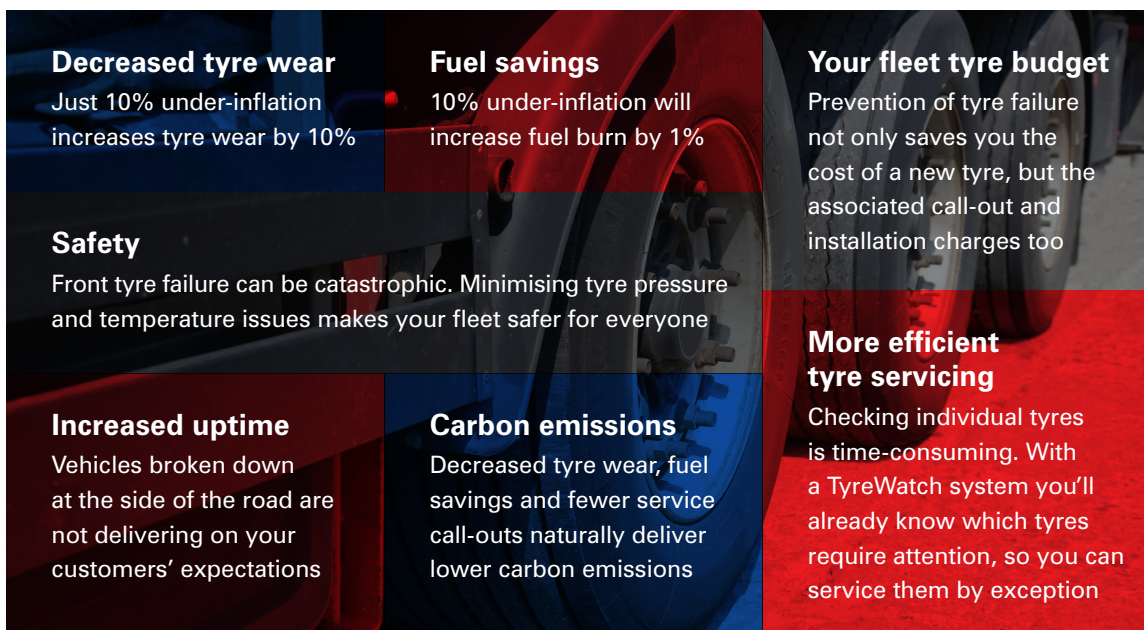
If you need to reset these baseline pressures, please follow the instructions:

Tractors/trucks/PSVs

- With cold tyres, switch the ignition on to activate TyreWatch
- Push and hold the button at the back for 4 seconds. The display will then show '000' readings
- Wait until all readings change to positive pressures
- The baseline pressures are now reset

Trailers

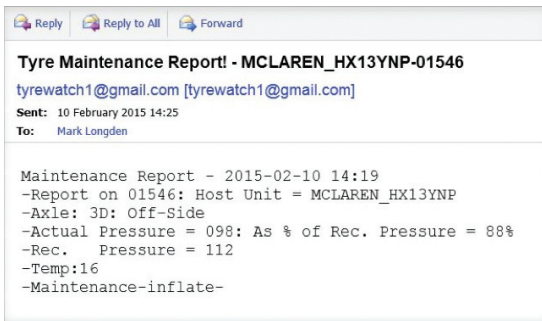
- With cold tyres, switch the ignition on to activate TyreWatch
- Locate the sender unit mounted on the trailer control unit
- Push and hold the green button for 8 seconds until the green LED turns red
- Wait until the red LED disappears
- The baseline pressures are now reset



Decreased tyre wear Just 10% under-inflation increases tyre wear by 10%	Fuel savings 10% under-inflation will increase fuel burn by 1%	Your fleet tyre budget Prevention of tyre failure not only saves you the cost of a new tyre, but the associated call-out and installation charges too
Safety Front tyre failure can be catastrophic. Minimising tyre pressure and temperature issues makes your fleet safer for everyone		More efficient tyre servicing Checking individual tyres is time-consuming. With a TyreWatch system you'll already know which tyres require attention, so you can service them by exception
Increased uptime Vehicles broken down at the side of the road are not delivering on your customers' expectations	Carbon emissions Decreased tyre wear, fuel savings and fewer service call-outs naturally deliver lower carbon emissions	

EMAIL ALERTS

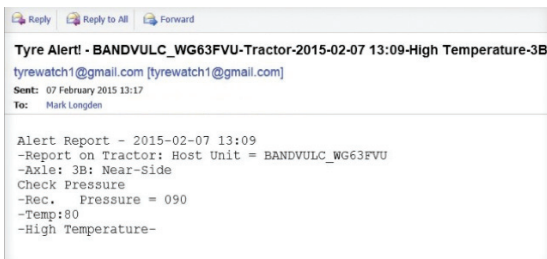
There are 3 types of email that your fleet office may receive from TyreWatch:



1. Tyre alert – Inform

Low or high tyre pressure alerts

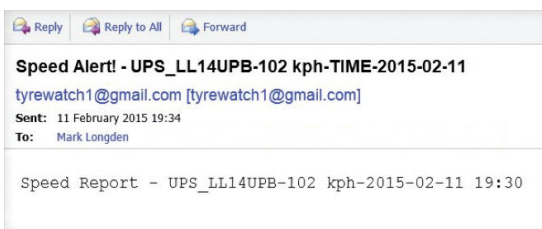
This email alert is generated if pressures are 10% below or 25% above their baseline, or if temperatures reach over 70°C. If pressures continue to 20% below or 30% above the baseline, or temperatures reach above 80°C, a further alert is generated on the in-cab display.



2. Tyre alert – Prevent

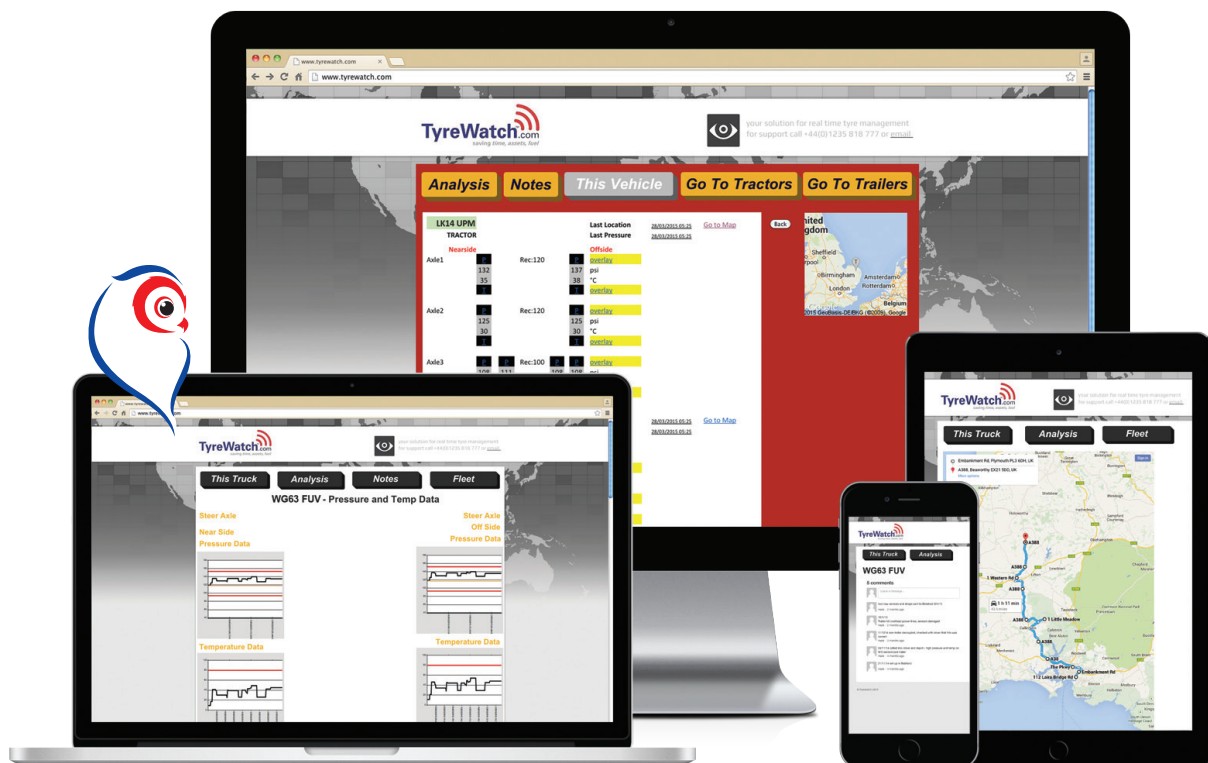
Rapid pressure leakage/high tyre temperature alert

This alert is generated at the same time as the in-cab display alerts the driver. It occurs if the pre-set baselines for tyre temperature or pressure are breached.

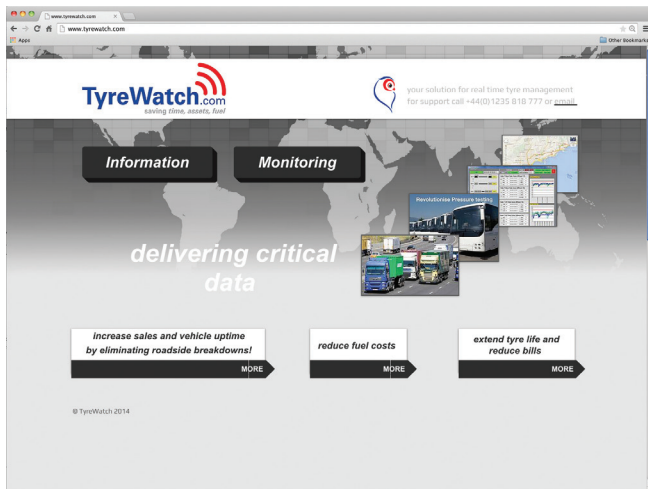


3. Speed alert (optional)

This email is generated if the vehicle is tracked going faster than 95 kph. Excessive speed is a major cause of rapid tyre attrition.



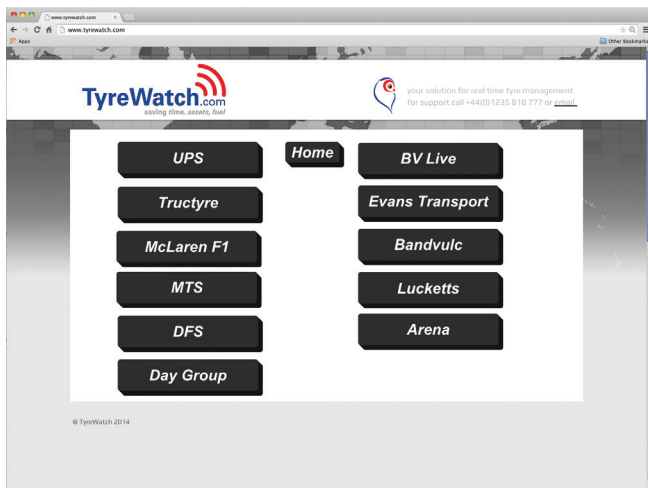
WEB INTERFACE (page 1 of 2)



Home page: www.tyrewatch.com

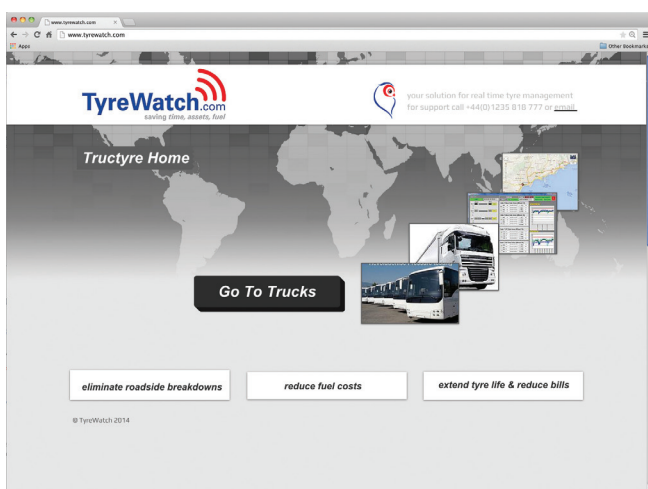
Click on 'monitoring' to reach the monitoring menu

Use password: tyrewatch



Select your fleet from the list

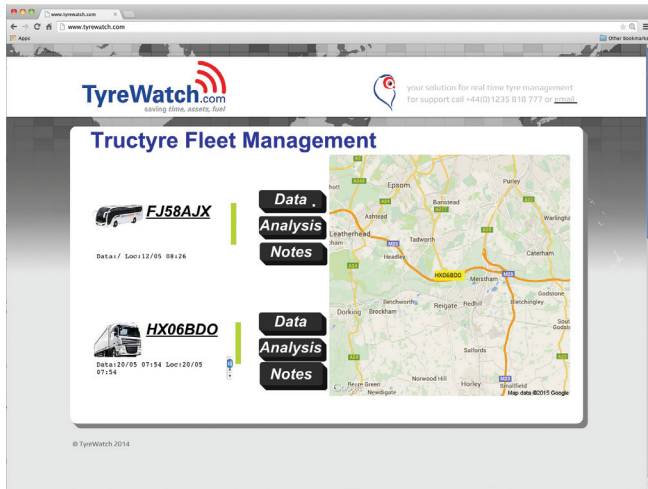
Use the password we provided on email after you returned the Commissioning Sheet



Click on 'go to trucks' button to reach your fleet list

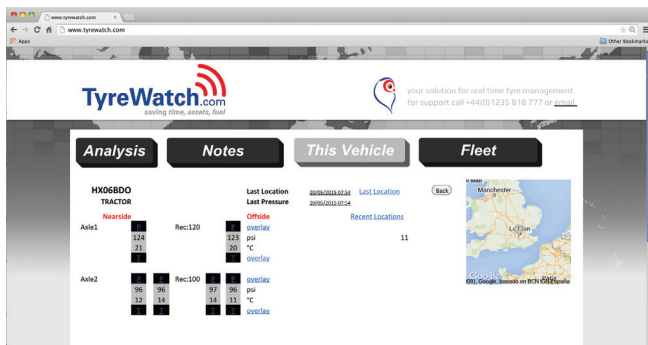
WEB INTERFACE (page 2 of 2)

You will now be at your home page

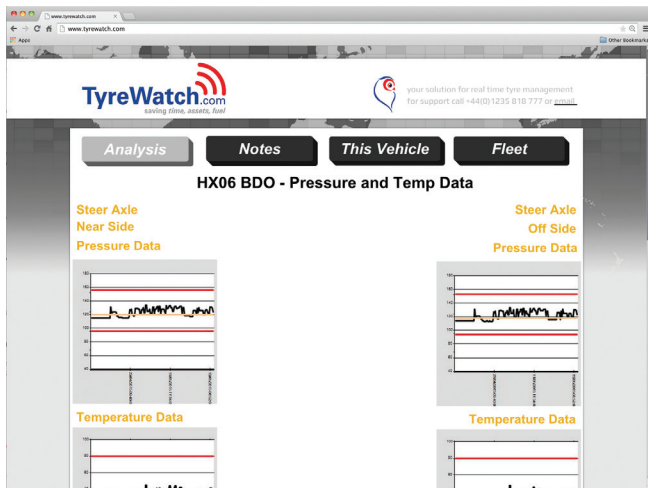


Click on 'data' to view tyre pressure and temperature data for individual vehicles

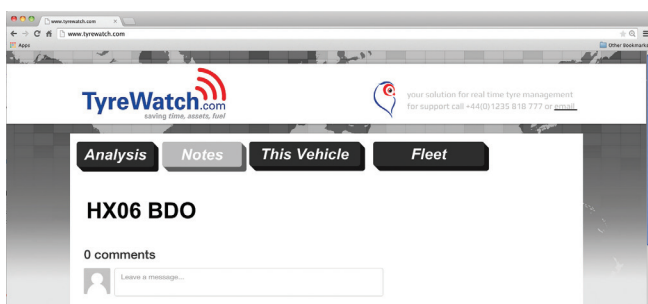
At any time, click 'fleet' to view data on your other vehicles



Click on 'analysis' to view historical data



Click on 'notes' to view user input notes on the vehicle. You can also enter your own information here



TECHNICAL

Alerts	
Tyre pressure alert	<20% baseline, >30% baseline
Tyre temperature alert	>80 °C
Rapid pressure loss alert	>5 psi in 15 seconds
Tyre pressure range	5-188 psi
Tyre pressure accuracy	+/- 3 psi
Tyre temperature range	-40 °C to +105 °C
Tyre temperature accuracy	+/- 3 °C
Speed alert	>95 kph

Specifications	
GSM module	850/900/1800/1900 Mhz
GPS frequency	GPS (L1)
Positioning accuracy	<30m
Humidity	5-95%
Power	<500mA
Voltage	12-24V
Battery life	5 years

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