

THS Facts

The Neuron Tyre Health System, THS, is a new way of monitoring and managing the tyre health of your trucks and trailers. Real-time, online monitoring provides a wide range of benefits compared to standard TPMS solutions.

Remote monitoring of the vehicle's tyre health at all time. Get warning by LED Indicator, e-mail and App notification if deflation occurs, or temperature rises above set alarm level. Keep a constant eye on your tyres for your entire fleet to reduce wear and cost of tyres and lower fuel consumption and emission. Compare tyre performance brand by brand. Plan maintenance and shorten the stay at workshop.

Handle change of trailer and tyres in the app on your smart phone or on web.

ADR Approved for use on ADR vehicles



The system consists of:

- A sensor for each tyre that is fitted inside the wheel
- A gateway communicates wirelessly with each sensor*
- LED Indicator to be placed in cab
- An ambient sensor with bracket
- Cable (14 meters) for power supply
- App and web access for monitoring

FEATURES	BENEFITS
• Online – Warning to both driver and fleet manager	• Real-Time temperature and pressure monitoring
• Monitor entire fleet of trucks, trailers and buses	• Predict and plan maintenance
• Easy and efficient installation	• Magnetic fixing, no need for glue
• Up to 5 years of battery life**	• Easy to re-use in new tyre
• Early warning of slow-leaks	• Prevents unwanted stops and tyre explosions
• Approved for use on ADR vehicles ADR	• Enhanced safety transporting dangerous goods

* Some trailers may require a separate gateway to achieve full coverage of all sensors and hence increased license cost.

** Calculated at normal use and temperatures

Use of any kind of balancing medium may shorten life time of sensor and is therefore not recommended.

THS Facts

Technical Description

The sensors communicate with a gateway placed underneath the vehicle. The gateway transmits the measurement data over the cellular network to the cloud where the data is stored and accessible for the user. Normally the sensors measure every 10 second and transmits data every other minute to the gateway. The gateway also transmits data every other minute. If the pressure should drop more than 0.2 bars within 10 second, the sensor will transmit immediately, and the measurement be flagged and pushed through the gateway instantly.

The gateway is fitted with an eSIM with automatic roaming. This means that the gateway automatically chooses the best cellular network in the area ensuring excellent cellular connection at all time.

Why Neuron THS

The benefits of tyre pressure monitoring on trucks are known and proven. Lower fuel consumption and environmental impact, increased lifetime of the tyres and more up-time the most known. Adding online capabilities gives you a whole new set of benefits.

Remote monitoring of the truck and trailer's tyre health at all time. Warning by e-mail, App notification and LED indicator in cab if deflation occurs, not only when driving but also when truck and trailer are parked for short or longer periods. Collect and analyze tyre health data from your entire fleet to reduce wear and cost of tyres and fuel consumption. Compare tyre performance brand by brand. Detect defects in wheel alignment and suspension. Plan maintenance and shorten the stay at workshop. Handle change of trailer and change of tyres in the app on your smart phone.

Installation

THS is extremely easy and cost effective to install. The sensors are fitted with a magnet that fix the sensor to the cord inside the tyre. This means that when retrofitting the sensor, the tyre does not need to be taken of the rim, just push the tyre in at one side and the sensor is easily placed inside. This also mean that the sensor can easily be moved to a new tyre when change is needed.

For quick and easy registration of sensors EL-Watch have developed the Tap & Tell solution. By using the app to activate the Tap & Tell mode and hitting the tyre gently with a hammer the sensor detects the impact and is registered in correct position on the vehicle. This means that sensors may be fitted inside the tyre prior to mounting it on the vehicle and there is no need to keep track of which sensor is in which tyre. This also simplify the change between summer and winter tyres.

Specifications

Pressure range	0-25 Bars
Wireless Operating Frequency	868MHz
Cellular Network	4G LTE with 3G and 2 G fallback
Input Voltage	Typ. 24V (Min 9V, Max 36V)
Power Consumption	Typ. 1W (Max 2.5W)
IP Grade	IP68