Tyre pressure monitoring system

Constant monitoring of tyre pressure and temperature



Low tyre pressure affects fuel economy, road safety, and tyre lifespan – and can even impact the handling of the vehicle and grip on the road. In addition, high temperature in tyres can lead to devastating tyre fires and blowouts. Suffice to say, ensuring tyre pressure is correct is vital to road safety.

For maximum safety and full peace of mind, our tyre pressure monitoring system provides constant monitoring of the tyre pressure and temperature. In case of a problem, an immediate alert is issued to the driver.

What does our tyre pressure monitoring system do?

Ardent's tyre pressure monitoring system uses wireless LED valve caps which monitor the pressure inside the vehicle's tyres. These check tyre pressure every 12 seconds during operation, providing continual feedback on the tyre health. The system also monitors tyre temperature, delivering warnings when tyre temperature is high.



Continual tyre monitoring

Ensure tyres are checked around the clock: our system checks tyre pressure every 12 seconds during operation, providing the driver with live status updates.



Tyre temperature monitoring

Our system monitors tyre temperature and delivers driver warnings when high temperature is detected to reduce tyre blowouts.



Compatible with our driver messaging system

Our tyre pressure monitoring system interfaces with our driver messaging system to deliver convenient high temperature and low pressure voice warnings.

How our tyre pressure monitoring system works

Ardent's tyre pressure monitoring system is an easy-touse LED cap that fits directly onto the tyre pressure valve. The tyres must be inflated to the recommended pressure and the LED caps should be screwed onto the valves using the anti-theft tool provided.

If the pressure in the tyre drops below 4 PSI in light vehicles or 8 PSI in heavy vehicles, the LED cap will flash red and an alert will be delivered to the driver. The LED is distinct and can easily be seen by drivers and managers, making visual vehicle checks simple.

When the LED starts flashing, the cap should be removed using the anti-theft tool and the tyre inflated to the correct pressure. Once re-inflated, the LED cap can be screwed back onto the tyre pressure valve.

The tyre pressure monitoring system checks tyre pressure every 12 seconds while the vehicle is in motion, and every hour while the vehicle is stationary. If low pressure is detected while the vehicle is stationary, the display is updated and an alert is delivered as soon as the vehicle is restarted, ensuring that the tyre status is always up to date.

Our system also checks temperature, delivering an alert if high temperature is detected and reducing the risk of fire or blowout on the tyre.



Key technical specification

Pressure range	0 to 13 bar (0 to 188 PSI)
Pressure accuracy	+/- 0.1 bar (+/- 1.5 PSI)
Temperature accuracy	+/- 3 °C
Operational temperature	-40 °C to +80 °C
Storage temperature	-40 °C to +85 °C
Transmission power	< 10 dBm
Transmission frequency	433.92 MHz
Transmission range	Typically >7m in vehicle when screened by bodywork etc. Range can be extended with signal repeater

For the complete technical specification and operating instructions, please get in touch.

To find out more or to explore how we can help you enhance the safety of your vehicles, contact our sales team on +44 (0) 1423 326 740

