



RAISE YIELDS, REDUCE RUNNING COSTS

Agriculturalists have long studied the impact tyre inflation has on crop yields. Over-inflated tyres cause soil compaction, restricting the supply of nutrients and water to roots, hindering microbial development and encouraging water stagnation.

Over-inflated tyres also create higher rolling resistance, forcing farmers to spend much more than necessary on fuel and labour. Further, the uneven tread wear from over-inflation dramatically shortens the working life of tyres.

Erring on the side of under-inflation will similarly result in decreased tyre life.

AN EASY WAY TO OPTIMISE TYRE PRESSURES

LSM TyreGuard® integrates into the Doran AG360 TMSystem and is designed to continuously monitor agricultural vehicle tyres, with valve-stem-mounted tyre pressure sensors. At any time, operators can see the current tyre pressure for each vehicle tyre at the press of a button. Only having to target those tyres that need pressure adjustment saves labour time.

The LSM TyreGuard® AG360's in-cab display provides the operator / driver with live tyre pressure and temperature information, with audio and visual alarms to enable immediate corrective action.

FOR ALL TYPES OF AGRICULTURAL & FORESTRY VEHICLES

- LSM Technologies provides a complete array
 of its TyreGuard® TMSystems that will suit all
 agricultural and forestry vehicles from light
 vehicles, tractors, harvesters, rigid trucks,
 semitrailers, log haulers, debarkers, log handers,
 etc anything with a pneumatic tyre.
- Correct tyre pressures are also critical for travelling irrigators and especially for lateralmoves and centre-pivots to provide smooth operation, alignment and avoid overloading of drive motors.
- TheLSM TyreGuard® AG360 can map all lateral / centre pivot span tyres and report via LSM FSM® Fleet Safety and Tracking Manager online telematics to immediately alert the manager (via any mobile device or PC) to an issue with any tyre.

ALERTS

When pressure or temperature limits are incorrect, the system will signal an alarm alerting the driver to the problem and its location on the vehicle or rig.

Level I Low Pressure warning:

Issued when a 12.5% drop from the programmed baseline tyre pressure occurs.

Level II Low Pressure warning:

Occurs when a 25% drop from the programmed baseline tyre pressure takes place.

High Pressure alarm (optional):

This can be set to provide warnings with a 25% increase over the programmed baseline tyre pressure

High Temperature warning:

Triggers a "HOT" wheel over-temperature alert >80°C.



SYSTEM ON AND MONITORING



HIGH PRESSURE ALERT



HIGH TEMPERATURE ALERT





FIT FOR PURPOSE

The LSM TyreGuard AG360™ System was designed for the special requirements of tyres operating at low pressures on large agricultural and forestry Equipment.

- Patent pending seal design with built-in filter is the world's first sensor to withstand conditioner fluids and water ballast in tyres.
- The sensor electronics are secured with a potting material to provide component stability, extreme temperature resistance and airtight construction.
- Proven and robust technology that is purpose-built to survive and function efficiently, even in operational and environmental extremes.
- Provides the highest level of accuracy, durability, reliability and protection for your pneumatic tyres.
- The long life lithium-ion battery in the sensors provides an estimated life of up to five years.
- Tested and certified to SAE 2848 Standard Tyre Pressure Systems Management (CTIS) type for Medium and Heavy Duty Highway Vehicles, and SAE J1455 Standard Recommended Environmental Practices for Electronic Equipment Design in Heavy-Duty Vehicle Applications.

EASY TO INSTALL AND OPERATE

The whole system is easy to install and proven to decrease tyre wear, reduce tyre maintenance costs and lengthen tyre life. Most importantly, you'll see reduced soil compaction and higher yields at harvest.

TYPICAL APPLICATIONS

- Tractors and harvesters.
- Travelling irrigators.
- Lateral Moves and Centre Pivots
- Log Handlers and Loaders
- Other LSM TyreGuard® TMSystems are also available, designed for Light Vehicles, Rigid Trucks, Semi-Trailers anything with a pneumatic tyre.

LSM TyreGuard® SMARTLINK™ TABLET

Maintenance tools such as our LSM TyreGuard® "walk-round" SmartLink Tablet are also available to assist with checking of vehicle tyres and programming tyre sensors when required.

Quickly access and record digital tyre pressure and temperature data from individual sensor readings, equipment walk arounds or by transferring the data from the SmartLink $^{\text{\tiny{M}}}$ One-Click $^{\text{\tiny{M}}}$ Transceiver.

Additional data such as tread depth, tyre serial number and even photos of tyre and wheel condition can be taken during inspection.

All of the data can be saved for each piece of equipment to be transferred off the tablet to a tyre maintenance software program.

- Dimensions: W 286 mm x H 191 mm x D 38 mm
- Screen Size: 203 mm
- Weight: 1.25 kg
- · Operating System: Android
- Storage Capacity: 3.5 GB
- USB Cable Included



More LSM
TyreGuard®
AG360™
information is
available on
our website:





COMPONENTS



MONITOR/DISPLAY

- Power Requirement: 12 / 24 Vdc
- Current Draw at (eg at 12 Vdc): Normal Mode: <77 mA
- Alarm and Backlight: <115 mA
- Sleep Mode: <70 mA
- Tyre Positions: 20 x tyre positions mapped for the truck and each vehicle or group (low loaders) up to 180 tyres
- Dimensions: W 144 mm x L 55 mm x D 29 mm
- Weight: 153 g



ONE-CLICK TRANSCEIVER

- Dimensions: W 124 mm x H 178 mm
- Modulations Mode: FSK
- Operating Frequency: 434.10 Mhz
- Input Voltage Range: 12/ 24 Vdc
- Current Draw: 75mA at 12/24 Vdc
- Operating Temperature Range: -40° C to +85° C
- Weight: 454 g with cord



REMOTE ANTENNA KIT

- Cable: coaxial
- Length: 3 m or 10.5 m



WIRELESS TYRE PRESSURE SENSORS

- Pressure Range: 0-800 kpa
- Accuracy: +/- 6.89 kpa (0 to 414) kpa
- Operating Frequency: 434.10 Mhz
- Operating Temperature Range: -40° C to +125° C
- Low Frequency Activation: Yes
- · Housing Material: High Impact Nylon
- Potting: Encapsulates Internal Components

	LARGE BORE	STANDARD BORE
Width	39.89 mm	29.21 mm
Height	39.37 mm	32.77 mm
Weight	48.19 g	23.53 g
Use With Ballast or Rim Conditioner	YES	NO
Replaceable Seal	YES	NO

ALSO AVAILABLE



LSM TyreGuard® SMARTLINK™ TABLET

- Dimensions: W 286 mm x H 191 mm x D 38 mm
- Screen Size: 203 mm
- Weight: 1.25 kg
- Operating System: Android
- Storage Capacity: 3.5 GB
- USB Cable Included



LSM FSM® TELEMATICS AND / OR LSM SENTINEL® (pat.pend.) VSS INTEGRATION



LSM FSM® FLEET SAFETY (TRACKING) MANAGER

LSM TyreGuard® Tyre Monitoring Systems works hand in hand with the LSM FSM® Fleet Safety (Tracking) Manager Telematics System to provide real time data and alerts back to base, ensuring a proactive approach to enhance workplace (and public) OH&S, equipment damage control, maintenance cost-downs and productivity.

LSM FSM® is an in-house world first Australian designed and developed SaaS software that allows users to be provided with more than just fleet tracking, but also integration of LSM product technologies, that can be accessed via any internet connected PC or mobile device. LSM FSM® Fleet Safety (Tracking) Manager is an intuitive web browser interface with single-click access to fleet dashboards, customise reports, compliance tools as well as real-time, user-defined alerts.

It is scalable from a single vehicle or asset up to thousands, providing immediate alerts as required via SMS and email, anywhere in the world, 24/7.

Australian designed and made for Australian industry.



FSM® Fleet Safety Tracking Manager

LSM SENTINEL® (pat. pend.) VSS (VEHICLE SAFETY SYSTEM INTEGRATION)

LSM TyreGuard® Tyre Monitoring Systems also integrate into the LSM Sentinel® (pat. pend.) VSS Vehicle Safety System.

This is especially advantageous where most vehicle cabins have limited "real estate," avoiding a clutter of monitors or displays. The LSM Sentinel® in-cabin display provides driver / operator alerts for *all* LSM connected OH&S mitigation technologies, all on a single monitor.

Australian designed and made for Australian industry.



LSM Sentinel® (pat. pend.) VSS Vehicle Safety System



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