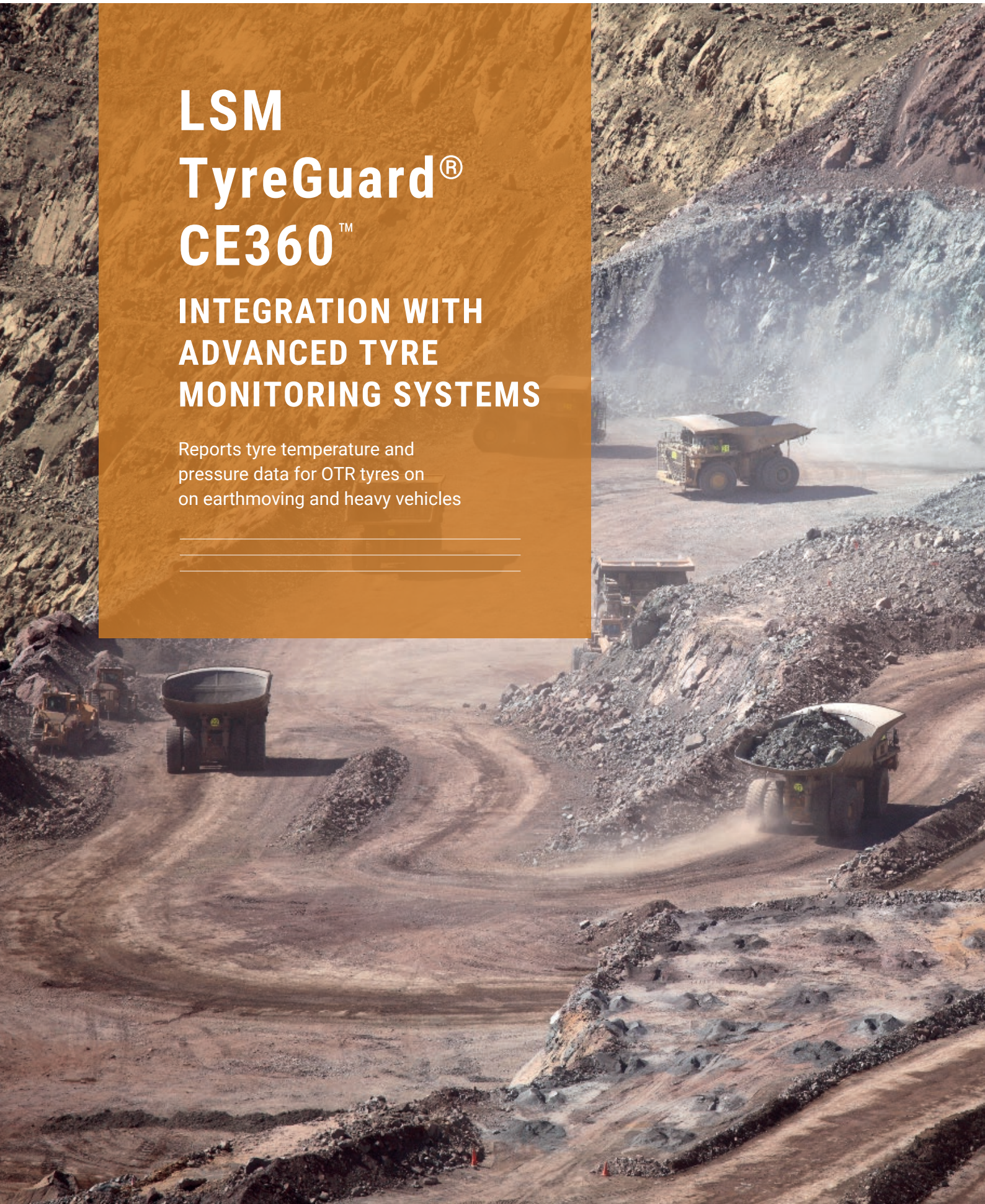
LSM TECHNOLOGIES

LSM TyreGuard® CE360™

INTEGRATION WITH ADVANCED TYRE MONITORING SYSTEMS

Reports tyre temperature and pressure data for OTR tyres on on earthmoving and heavy vehicles



STAY SAFE AND REDUCE TYRE COSTS

Maintaining proper tyre inflation pressure maximises tyre life and prevents premature wear. Providing real-time pressure information including critical low / high tyre pressure and temperature alarms helps to reduce tyre-related production interruptions by proactively monitoring.

LSM TyreGuard® integrates into the Doran CE360™ TMSystem and is designed to handle environments at mines (surface and underground), quarries, construction sites and ports to provide accurate and reliable digital tyre pressure and temperature readings for OTR Tyres.

The LSM TyreGuard® CE360™ OTR TMSystem continuously monitors air pressures (temperatures) in OTR tyres with valve-stem mounted tyre sensors. These large bore tyre pressure sensors transmit RF signals to a digital monitor/ display located in the operator cabin . Wheel positions are programmed into the display with a customisable baseline pressure setting for each tyre.

SYSTEM ON AND MONITORING

HIGH PRESSURE ALERT

HIGH TEMPERATURE ALERT

ALERTS

When pressure or temperature limits are incorrect, the system will signal an alarm alerting the driver to the problem and its location on your set-up.

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:
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.

LARGE BORE OTR TYRE SENSOR (CONDITIONER FLUID COMPATIBLE)

The large bore OTR tyre pressure sensor is designed to reliably perform in the harsh environments found in mining, quarrying and other off-the-road vehicle applications.

- Patent pending seal design with built-in filter is the world’s first sensor to withstand rim conditioners and other liquids present in OTR tyres.
- Three-piece field-replaceable brass seal for consistent valve core depression and to minimise potential for leaks.
- High performance lithium-ion battery for enhanced tolerance to temperature extremes and longer life.
- Large, high-impact nylon housing allows for additional potting material to protect the internal sensor components from damage caused by vibration, impact and extreme operating conditions.

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Call: +61 (0)7 3725 8100 Email: tech@lsm.com.au Web: lsm.com.au

FIT FOR PURPOSE

The LSM TyreGuard CE 360™ System was designed for the extremes of on and off-road and changing weather conditions.

- 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 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.

PREVENT ACCIDENTS - REDUCE COSTS

Tyre Service Life / Fuel Economy: Maintaining optimum set-point pressures mean tyres and tread last longer and reduce fuel consumption.

Increased Safety: Avoid tyre fires (locked brakes / bearing failures, tyre under-inflation) and potential accidents.

Braking / Traction / Control: Correct tyre inflation maximises control in both dry and wet conditions.

Cost downs / Productivity / Tyre Checks: Targeting tyres that require re-pressurisation saves on labour and associated productivity loss.

Equipment Damage Control: Catastrophic tyre failure, roll-overs and tyre explosions (pyrolysis).

LSM Technologies: safety for both your human and equipment assets.

More LSM TyreGuard® CE360™ information is available on our website:

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

The new SmartLink™ TMS Tablet offers several options that make tyre maintenance more accurate and efficient. The Off Road Equipment application provides options to transfer data from individual RF sensors or the SmartLink™ One-Click™ Transceiver to 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™ One-Click™ 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.

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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: 16 x tyre positions mapped for the truck and 20 x single trailer / tow vehicle
- 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

OTR TYRE PRESSURE SENSOR SEAL REPLACEMENT TOOL

- This seal replacement tool helps to safely and efficiently remove and replace the brass and temperature resistant sales in the large bore OTR tyre sensors.

LARGE BORE OTR TYRE PRESSURE SENSORS

- Pressure Range: 69 to 1300 kpa (10 to 188 psi)
- Accuracy: +/- 13.8 kpa (2 psi) over the pressure range
- Operating Frequency: 434.10 Mhz
- Housing Material: High impact nylon
- Valve Stem Thread Size: Large Bore (482-26)
- Low Voltage Shutdown: 2.2 V
- Dimensions: W 29.8 x H 38.7 mm
- Weight: 48.2 g

SPECIAL NOTE: Both internal and external mounted sensors are available.

OTR TYRE PRESSURE SENSOR SEAL KIT

- The OTR tyre sensor is made with brass and temperature resistant seals to ensure consistent valve core depression while minimizing the potential for leaks.
- The large bore OTR tyre sensor is designed to utilise a field replaceable seal kit which protects the internal electronics and components from rim conditioner.

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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.

AUSTRALIAN MADE AND OWNED

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.

AUSTRALIAN MADE AND OWNED

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

HOW TO ENQUIRE

Call: +61 (0)7 3725 8100 Email: tech@lsm.com.au Web: lsm.com.au

16 Bluestone Circuit, Seventeen Mile Rocks, QLD 4073

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