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Deflated by mounting tyre costs?

Tyre Pressure / Temperature Monitoring Systems for OTR Tyres

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Designed to withstand the extreme operating conditions of OTR tyre applications with simple installation and low maintenance

Why Monitoring Tyre Pressures (Temperatures) on OTR Tyres Matters

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

The CE360 OTR[™] Tyre Pressure Monitoring System is designed to handle environments at mines (surface and underground), quarries, construction sites and ports to provide accurate and reliable digital tyre pressure (temperature) readings for the OTR Tyres on your equipment.



How It Works

The CE360 OTR™ Tyre Pressure Monitoring System

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 cab. Wheel positions are programmed into the display with a customisable baseline pressure setting for each tyre.

The LCD in-cab display features a Green Means Good™ LED indicator light and an interactive screen to see the current tyre pressure status and real-time pressures in the tyres.

The in-cab monitor/display can operate as a stand-alone system for the equipment operator or it can be integrated with telematics devices to provide off-vehicle communication of tyre pressure and temperature data. For telematics integrations and additional off-equipment communication capabilities, a black box monitor is available with pre-wired data harnesses for RS232 or J1939 data outputs.



Features & Benefits

Quick Installation and Simple Programming

It is expected to take approximately 60 minutes. Installation involves providing 12v-24v power to the monitor/display, routing, mounting an external antenna mounting for more reliable sensor signal reception, programming the sensors with the baseline pressure for each wheel position to be monitored and screwing the sensor on to the valve stem.

Off-Vehicle Data Communication Integration

The CE360 OTR™ system can be integrated to third party telematics providers or our Web Based <u>FSM™- Fleet Safety +</u> <u>Maintenance Telemetry Management System</u> to transmit / record / report tyre pressure/ temperature data off equipment.

Wireless Digital Tyre Checks

The CE360 OTR[™] tyre pressure sensors wirelessly transmit digital tyre pressure/temperature data using the SmartLink[™] TMS Tablet. With this feature, <u>the SmartLink[™] Tablet</u> can be used to access tyre pressure data by reading individual sensor data and collecting data from all sensors programmed into the One-Click[™] Transceiver with the **Equipment Walk Around** feature. The technician will also have the option to save the accessed data for review later on the tablet or PC.

CE360[™] TMS WARNINGS & ALERTS

Level 1	12.5% below programmed
Low Pressure	baseline pressure
Level 2	25% below programmed
Low Pressure	baseline pressure
High Pressure	25% above programmed
(Optional)	baseline pressure
High Temperature	Activated when air in sensor reaches 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, quarry and other off-the-road vehicle applications.

Features

- Patent pending seal design with built-in filter 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 the 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

In addition to rigorous field testing, the large bore OTR tyre sensor has successfully passed tests using SAE standards for temperature, vibration, and chemical/water resistance at an independent a2La accredited testing facility.

The OTR tyre sensor can also provide digital tyre pressure and temperature data to the <u>SmartLink™ TMS Tablet</u> for fast and accurate walk-around tyre checks.



CE 360[™] TYRE PRESSURE / TEMPERATURE MONITORING SYSTEMS

SmartLink[™]TMS Tablet

The new <u>SmartLink™ TMS Tablet</u> 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.



The **Read Individual Sensor** feature allows the technician to hold the tablet at a reasonable distance from the tyre sensor and tap on the on-screen sensor image to trigger the data transfer.

The option to read data from the tablet instead of climbing in and out of the equipment cab will save time and improve accuracy for tyre pressure checks.

The **Equipment Walk Around** features is a fast and easy way to capture and store tyre pressure and temperature data for each vehicle. It's designed for the technician to press and hold a tyre location to transfer the tyre pressure and temperature data for each wheel position.



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By utilising a **SmartLink™ One-Click™ Transceiver**. The tyre pressure and temperature data on each vehicle is transferred from the transceiver to the SmartLink™ TMS tablet, to instantly display data from all tyres that are programmed to each piece of equipment.

Additional data, such as tread depth, tyre serial number and customised wheel position IDs can also be entered.

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







Monitor/Display



Power Requirement: 12/24v Current Draw: Normal Mode: <77mA Alarm and Backlight: <115mA Sleep Mode: <70mA Tyre Positions: 1 to 36 Wheels Dimensions: 143.83 x 54.98 x 29.0 mm. Weight: 153.04 grams Approx. size of chalkboard eraser



SmartLink™

One-Click™ Transceiver

Power Requirement: 12/24v Dimensions: 114.55 x 95.46 x 38.18mm. Weight:228 grams.

SmartLink™ TMS Tablet



Rechargeable: 120v Dimensions: 286.38 x 190.92 x 38.18 mm. Weight: 1.25 kg Screen Size: 203.64 mm Operating System: Android Storage Capacity: 3.5 GB USB Cable Included

Large Bore OTR Tyre Pressure Sensor



Each sensor is laser-etched with a unique 12-digit serial number that is used to program the sensor with the baseline pressure setting to a specific wheel position in the Monitor.

Dimensions: 29.8 mm x 38.7 mm Weight: 48.19 grams Pressure Range: 69 to 1300 kpa Accuracy: +/- 13.8 kpa over the pressure range Operating Frequency: 434.10MHz Housing Material: High impact nylon Valve Stem Thread Size: Large Bore (482-26) 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.

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.

Click the links below to learn more about our Vehicle Safety Solutions:

- <u>Other Tyre Monitoring Systems</u>.
- FSM[™]- Fleet Safety + Maintenance Telemetry System.
- <u>Camera Viewing / Safety Systems</u>
- <u>Driver Fatigue Monitor</u>.

LSM Technologies- is a leader in Tyre Monitoring Systems and other Transportation S afety Technology.



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