

Tire Pressure Monitoring Systems for OTR Tires

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

Maintaining proper tire inflation pressure maximizes tire life and prevents premature wear. Providing real-time pressure information including critical low tire pressure alarms helps to reduce tire-related production interruptions by proactively monitoring tire inflation pressures.

The Doran #3600TR™ Tire Pressure Monitoring System is designed to handle environments at mines (surface and underground), quarries, construction sites and ports to provide accurate and reliable digital tire pressure readings for the OTR tires on your equipment.

Doran 360[™] Tire Pressure Monitoring Systems

How It Works

The Doran 3600TR™ Tire Pressure Monitoring System

continuously monitors air pressures in OTR tires with valve-stem mounted tire pressure sensors. These large bore tire pressure sensors transmit RF signals to a digital monitor/display located in the cab. Wheel positions are programmed into the display with a customizable baseline pressure setting for each tire.

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

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 tire 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 Doran 3600TR[™] system can be integrated to third party telematics providers to transmit tire pressure/ temperature data and alarms off equipment through RS232, J1708, and J1939 data protocols.

Wireless Digital Tire Checks

The Doran 3600TR™ tire pressure sensors wirelessly transmit digital tire pressure/temperature data using the SmartLink™ TPMS Tablet. With this feature, the SmartLink™ Tablet can be used to access tire pressure data by reading individual sensor data and collecting data from all sensors programmed into the Doran 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.

| DORAN 360™ TPMS WARNINGS & ALERTS | |
|-----------------------------------|--|
| Level 1 Low Pressure | 12.5% below programmed baseline pressure |
| Level 2 Low Pressure | 25% below programmed baseline pressure |
| High Pressure (Optional) | 25% above programmed baseline pressure |
| High Temperature | Activated when air in sensor reaches 175°F |

Large Bore OTR Tire Presure Sensor

Item #3607

The Doran large bore
OTR tire 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 tires
- Three-piece, field replaceable brass seal for consistent valve core depression and to minimize 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 Doran OTR tire pressure sensor has successfully passed tests using SAE standards for temperature, vibration, and chemical/water resistance at an independent a2La accredited testing facility.

The #3607 OTR tire pressure sensor can also provide digital tire pressure and temperature data to the Doran SmartLink™ TPMS Tablet for fast and accurate walk-around tire checks.



SmartLink[™] TPMS Tablet

The new SmartLink™ TPMS Tablet offers several options that make tire 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 tire pressure and temperature data from Individual Sensor Readings, Equipment Walk Arounds or by transferring the data from the SmartLink™ One-Click™ Transceiver.



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

The **Read Individual Sensor** feature allows the technician to hold the tablet at a reasonable distance from the tire 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 tire pressure checks.

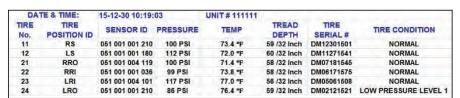


By utilizing a **Doran SmartLink™ One-Click™ Transceiver**, the tire pressure and temperature data on each vehicle is transferred from the transceiver to the SmartLink™ TPMS tablet, from all tires that are programmed to each piece of equipment.



Additional data, such as tread depth, tire serial number and customized 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 tire maintenance software program.



Data is stored and can be exported to PCs for use with tire maintenance programs









Specifications

Monitor/Display #3600CE



Power Requirement: 12/24v

Current Draw:

Normal Mode: <77mA Alarm and Backlight: <115mA Sleep

Mode: <70mA

Tire Positions: 1 to 36 Wheels
Dimensions: 5.65" W x 2.16" H x 1.14" D

Approx. size of chalkboard eraser

Weight: 5.40 oz

SmartLink™ One-Click™ Transceiver

#36660C-35-0TR



Power Requirement: 12/24v Dimensions: 4.5" W x 3.75" H x 1.5" D

Weight: 0.5lbs.

SmartLink™ TPMS Tablet #360SLT2



Model #: 360SLT2
Dimensions: 10" L x 5" W x 1" H
Screen Size: 7" Weight: 1.25 lbs
Operating System: Android Storage

Capacity: 8.0GB USB Cable Included

Large Bore OTR Tire Pressure Sensor #3607



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 Doran monitor.

Dimensions: 1.57"D x 1.55"H

Weight: 1.7oz

Pressure Range: 10 to 188psi

Accuracy: +/- 2psi over the pressure range Operating Frequency: 434.10MHz Housing

Material: High impact nylon Valve Stem Thread Size:

Large Bore (.482-26)

OTR Tire Pressure Sensor Seal Kit #3607-SK



The Doran #3607 OTR tire pressure sensor is made with brass and temperature resistant seals to ensure consistent valve core depression while minimizing the potential for leaks.

Doran large bore OTR tire pressure sensor is designed to utilize a field replaceable seal kit which protects the internal electronics and components from rim conditioner.

OTR Tire Pressure Sensor Seal Replacement Tool

#3607-T



This seal replacement tool helps to safely and effeciently remove and replace the brass and temperature resistant seals in the Doran large bore OTR tire pressure sensors.

About Doran Manufacturing, LLC: Cincinnati, OH-based Doran Manufacturing has been supplying high quality transportation safety products for over 35 years. In addition to tire pressure monitoring systems, Doran supplies LED and incandescent Exterior Light Monitors, Sleeping Child Checks®, Emergency Exit Monitors and a full range of LED lighting products to the school bus market. Doran continues to manufacture customized electric terminals and terminal boards in the original factory that was established in 1954.

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