



Road gators eating at
your bottom line?

Bite Back.



Doran 360HD™

The Best Value in Tire Pressure Monitoring Systems for Your Fleet

Proper tire inflation improves tire performance, maximizes tread-life, increases the safety of driving, and optimizes fuel efficiency.

- Continuously monitors tire pressure and temperature data
- Multiple built-in alert settings provide warnings to protect against FastLeak™ events, driving on low tire pressures and high temperatures
- Simple installation, programming and operation



How It Works

The Doran 360HD™ tire pressure monitoring system includes a display that is mounted in the cab of the truck that continuously monitors tire pressure and temperature data received through radio frequency signals transmitted from wireless sensors that are mounted in place of the valve stem caps on each tire.



Real-Time Pressure Alerts

The display creates the following visual and audible alerts when problems with the tire pressure develop including:

- **FastLeak™ warning:** triggered when the pressure drops 4.5psi within 16 seconds regardless of the baseline tire pressure
- **Level I low pressure warning:** initiated when a 12.5% drop from the programmed baseline tire pressure occurs
- **Level II low pressure warning:** activated with a 25% drop from the programmed baseline tire pressure
- **High pressure alarm (optional):** can be set to provide warnings with a 25% increase over the programmed baseline tire pressure

Benefits to the Fleet Manager

Simple Installation

The initial installation and programming of a Doran 360HD™ is expected to take an hour by following these basic steps:

- Mount and hardwire the 12-volt display/monitor in the cab
 - A remote antenna kit is recommended to move the reception point out of the cab to improve the reliability of the RF signal reception
- Use the three-digit laser etched serial number on each sensor to program each wheel position with baseline tire pressure
- Install the wireless sensors by simply screwing them on to the valve stem

Value

- Tire life is increased and tire related repair and maintenance costs decrease when optimum tire pressures are maintained
 - Eliminates the potential errors, time and labor costs to manually check tire pressures
 - Up to 36 tires can be accurately checked with a digital tire pressure for each wheel position in less than 30 seconds
- Real-time tire pressure alerts help to prevent on-highway catastrophic tire failures which reduces expensive road calls and minimizes down time
- The system works just as well with traditional dual-tire configurations and single tire applications
- There are no additional software requirements or monthly maintenance fees
- The system can deliver an estimated return on investment* in as little as nine months per truck



Green Means Good™



FastLeak™ Warning

... was specifically designed for trucks, tractor-only and married tractor/trailer applications.

Ease of Operation

The Doran 360HD™ system provides the driver with the assurance that the truck tires are inflated to the correct pressures.

- The patented Green Means Good™ at-a-glance indicator light provides the driver with confirmation that all tires are properly inflated
- At any time, the current tire pressure for each tire can be seen at the press of a button
- Audible alerts and visual warnings provide the tire location along with a digital pressure readout when a tire pressure problem develops

Durability

The system was designed for the extremes of the road and the changing weather conditions of driving coast to coast

- The wireless sensors contain an innovative three piece seal design to maximize valve core depression and minimize potential leaks
- An encapsulation process utilizing high-grade materials to provide component security and air tight construction is used to build the sensors
- The improved lithium-ion battery design in the sensors provides an estimated life of 3-5 years
- Each of the components of the FCC approved Doran 360™ TPMS has been successfully tested to SAE standards for temperature, vibration and chemical/water resistance at an independent a2La accredited testing facility

Driver Accountability

- A date/time stamp for each pressure alarm (up to 32) is stored in the monitor
- The monitor can be “locked” to prevent accidental reprogramming and/or tampering with the programmed settings

CSA 2010 Compliance Assistance

- Drivers and maintenance staff can know ahead of time if tires are flat or underinflated and take action to avoid preventable penalties.
 - The Safety Measurement System component indicates that flat tires have a Violation Severity Weight of 8 (out of 10) and tires that are found to be underinflated carry a Violation Severity Weight of 3 (out of 10)

Additional Features

- A built-in high temperature alarm will be activated at 175°F to provide warnings for excessive heat that can identify other potential wheel problems and protect the sensor
- An optional patented Sleep Mode setting will continue to monitor the tire pressures while the ignition is turned off and silence the alarm until the ignition is turned back on

Integration with on-board computing/mobile communication providers

- Doran has successfully integrated with a number of third-party providers to take the data and warnings of the truck
- Back-end reporting tools and e-mail/text message alerts can heighten awareness throughout the organization





Doran 360HD™

Tire Pressure Monitoring System for Fleets

Component Specifications



Wireless Sensors (#3602 and #3604)

Pressure Range: 10 to 188 PSI
Accuracy: +/- 2 PSI over the pressure range
Operating Frequency: 434.10MHz
Operating Temperature Range: -40°F to +257°F
Storage Temperature Range: - 40°F to +257°F
Battery: internal, non-rechargeable & non-replaceable
Low Voltage Shutdown: 2.2V
Dimensions: 1.16" W x 1.30" H
Weight: 0.83 oz

#3604 sensors include additional built-in low-frequency activation capability for walk-around tire checks

Flow-Through Valve Stem Extensions

Provides easier access to the valve stem for putting air in tires and eliminates the need to remove the sensor; bracket attaches to the lug nut to provide stability

#3649: straight for inside dual tires and singles



#3650: angled for outside dual tires



Flow-Through Adapters (#3639)

Stainless steel flow-through adapter installs over the current valve stem eliminate the need to remove the sensor to put air in the tire



Monitor/Display

Power Requirement: 12/24 VDC
Current Draw at 12VDC: Normal Mode: < 77mA
 Alarm and Backlight: < 115mA
 Sleep Mode: < 70mA

Tire Positions: 1 to 36 wheels
Low Pressure Alerts: 12.5% and 25% below the baseline tire pressure
FastLeak™ Alert: 4.5psi drop within 16 seconds
High Pressure Alert (optional): 25% above the programmed baseline pressure
High Temperature Alert: 175°F
Dimensions: 5.65" W x 2.16" L x 1.14" D
Weight: 5.40 oz

Remote Antenna Kit (#3623)

Attaches to the monitor and mounted to cross member of tractor to ensure signal reception reliability

Cable: coaxial
Length: 35'



Exterior Signal Booster (#3625)

Modulation Mode: FSK
Operating Frequency: 434.10MHz
Input Voltage Range: 12VDC
Dimensions: W: 4.875" x H: 7.0"
Weight: 16 oz



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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