



**Are your tyres
slowing you down?**

| L | S | M |
TECHNOLOGIES

HDJ 360™ & GDJ 360™ Gauge

[Tyre Monitoring Systems
for Transit Bus Fleets](#)

A flat tyre can quickly disrupt your schedule, lead to expensive repairs, and is potentially dangerous.

- Maximise Tread-/ Tyre Service Life
- Increase Safety
- Avoid Wheel Well Fires (locked brakes / bearings / incorrect tyre pressurisation)
- Optimise Fuel Efficiency
- Enhance Vehicle Braking/ Traction / Control
- Labour savings in checking / recording Tyre Pressures
- Avoid Sudden Catastrophic Tyre Failure (eg Steers).
- Enhance Productivity and Schedules

HDJ / GDJ 360™ Tyre Monitoring System.....

Overview

- Continuously monitor tyre pressure and temperature data transmitted from wireless, valve-stem mounted tyre Sensors, displayed on one of two possible TMSystems and monitor/ displays (HDJ360™ and GDJ 360)™.
- Multiple built-in alert settings provide warnings to protect against FastLeak™ rapid deflation events, prolonged driving on underinflated tyres and excessive heat conditions.
- Are extensively tested and certified to **SAE J2848 Standards Tyre Pressure Monitoring Systems- Medium and Heavy Duty Highway Vehicles.**

Installation, programming and operation

- The display / monitor utilises 12-24 volt power and has patented sleep mode by wiring with constant power, ignition/switched power and ground.
- Using a simple, patented programming method, the last three digits of a laser etched serial ID number on each Sensor are entered to a specific wheel location on the monitor.
- The baseline tyre pressures are programmed into the monitor and can be unique for each wheel position to accommodate different optimal pressures (if required) for steer, drive, and trailer tyres.
- An external antenna is used and is mounted ensuring consistent RF signal reception from each tyre Sensor to the monitor.

Tyre Monitoring System Status Conditions

- **Normal:** all tyre positions are communication properly and tyres are inflated to within 12.5% of programmed baseline pressure.
- **FastLeak™ Alarm:** triggered when the pressure drops 31.0 Kpa within 16 seconds regardless of the baseline tyre pressure.
- **Under Pressure Level I Low Pressure Alarm:** initiated when a 12.5% drop from the programmed baseline tyre pressure occurs.
- **Extreme Under Pressure Level II Low Pressure Alarm:** activated with a 25% drop from the programmed baseline tyre pressure.
- **High Pressure Alarm:** warns when there's a 25% increase over the programmed baseline tyre pressure.
- **High Temperature Alarm:** activates when tyre's / rim's reach a temperature of 80°C.
- **Lost Signal Alarm:** indicates a temporary interruption of RF signal reception, or if continual condition persists, the tyre Sensor is missing or battery depleted- indicating replacement.



.....for Transit Bus Fleets

Value

Tyre life is increased and tyre related repair and maintenance costs decrease when optimum tyre pressures are maintained.

- Eliminates the potential errors, time and labour costs to manually check and record tyre pressures.
- Up to 36 tyres (Sensors) can be accurately checked and monitored with the TMSystems
- Real-time tyre pressure / temperature alerts help to prevent catastrophic tyre failures, which help reduce expensive road repair calls and minimises down time and maximises productivity.
- There are no additional software requirements or monthly maintenance fees.
- The TM System deliver a rapid return on investment (ROI).
- Enhanced Safety (fires, catastrophic failures, braking, traction, control, etc.)

Durability

The system was designed for the extremes of the road and the changing weather conditions.

- The wireless Sensors contain an innovative three-piece seal design to maximise valve core depression and minimise potential leaks.
- An encapsulation process utilises 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 upto 4-6 years.



Ease of Operation

The HDJ / GDJ 360™ TMSystems provide the driver with the assurance that the bus tyres are inflated to the correct pressures.

- At any time, maintenance staff or the driver can see the current tyre pressures for each tyre at the press of a button.
- Audible alerts and visual warnings provide the tyre location along with a digital pressure readout when a tyre pressure or temperature problem develops.

Monitor Display Options

Two monitor display options are available to view tyre pressure data. Our HDJ360 monitor / display can be mounted on the dash, whilst the or GDJ360 Gauge Display can be integrated into the instrument panel.



HDJ360™ Monitor / Display



GDJ360™ Gauge Display

HDJ / GDJ 360™

Tyre Monitoring System for Transit Bus Fleets

Component Specifications



HDJ 360 Monitor/Display

Power Requirement:	12- 24 Vdc
Current Draw at 12VDC:	Normal Mode: < 77mA
Alarm and Backlight:	<115mA
Sleep Mode:	<70mA
Tyre Positions:	1 to 36 wheels
Low Pressure Alerts:	12.5% and 25% < baseline tyre pressure
FastLeak™ Alert:	31 kpa drop within 16 seconds
High Pressure Alert (optional):	25% > baseline pressure
High Temperature Alert:	80 DegC
Dimensions:	143.83 mm



Wireless Sensors

Pressure Range:	168.95 to 1296.22 Kpa
Accuracy:	+/- 13.8 Kpa over the pressure range
Operating Frequency:	434.10MHz
Operating Temperature Range:	- 12°C to +125°C
Storage Temperature Range:	-12°C to +125°C
Battery:	Internal, non-rechargeable & non-replaceable
Low Voltage Shutdown:	2.2V
Dimensions (mm):	29.53 W x 33.09 H
Weight:	25.53 grams

GDJ 360 Gauge Display

Electrical Characteristics
Operating limits: 9 to 32 Vdc
Electrical Inputs
Battery/ignition: 9 to 32 Vdc
volts Input current: 500 mA
Data bus: SAE J1939 (CAN) 250K
Electrical Outputs
Switch to ground: One, 500 mA
Display Characteristics
Type: Positive mode, transfective,
LCD dot matrix Aperture
Size (mm): 308W x 16.29H



Remote Antenna Kit

Attaches to the monitor and mounted to cross member of tractor to ensure signal reception reliability
Cable: Coaxial
Length: 35 ft.



Signal Booster

Modulation Mode: FSK
Operating Frequency: 434.10MHz
Input Voltage Range: 12VDC



Web Based Telemetry / integration / Tools

LSM Technologies SAFETRAC System

LSM Technologies also provide their [SAFETRAC](#) full Telematics Fleet Management and Web Based Portal for data collection / management, analysis and reporting of all Tyre Temperature and Pressure Data and Alerts / Events.

Other Telematic Systems

Whilst we offer a complete Fleet Management / Web based Telemetry System, we also offer our customers a path to integrate our TMS system technology into other preferred Telemetry Providers.

SmartLink Tool

Our [SmartLink Tool](#) is a robust Tablet used by Maintenance / Fleet Managers that need to quickly check their Fleet TMS systems. By simply pointing the SmartLink Tool at the Bus / Vehicle, the entire Vehicle Tyre Sensors can be downloaded via RF communication. The SmartLink Tool can also be utilised as an alternative for rapid programming of replacement Sensors.



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