

CANbus Telematics

Real-Time Vehicle
Intelligence



CANbus telematics:

Unlocking the Full Picture of Fleet Performance

Fleet operators seeking greater visibility into vehicle health and driver behaviour are increasingly turning to CANbus telematics, which provides real-time data directly from onboard vehicle systems.

Unlike standard GPS tracking, which monitors location and speed, CANbus (Controller Area Network bus) technology connects to the communication system used by a vehicle's electronic control units. This enables fleet managers to access live operational data covering everything from fuel consumption to component diagnostics.

Real-time vehicle data delivers the insights that location tracking alone cannot provide.

How CANbus Integration Works!

CANbus is the protocol that allows a vehicle's ECUs—including those managing the engine, gearbox and braking systems—to communicate with each other. When integrated with a telematics platform such as Fleet Focus, this data becomes accessible to fleet managers remotely.

The system provides continuous monitoring across both electric and diesel fleets, covering battery state-of-charge, fuel levels, AdBlue status and power take-off activation.

Operational decisions are only as good as the data behind them!



Electric and ICE Vehicle Monitoring

For operators running electric vehicles, CANbus telematics delivers live battery charge status, predicted range based on actual driving conditions, and detailed charging event records.

Diesel and petrol fleets benefit from accurate fuel tank readings, consumption rate analysis and range predictions. The data also helps identify fuel efficiency trends, enabling operators to detect wasteful driving habits or potential fuel theft before they impact the bottom line.

For Euro VI vehicles, AdBlue levels are monitored continuously, with alerts issued before tanks reach critical levels that could trigger engine derating. Historical consumption data allows operators to identify anomalies and schedule maintenance proactively.

Precise consumption monitoring underpins effective cost management.

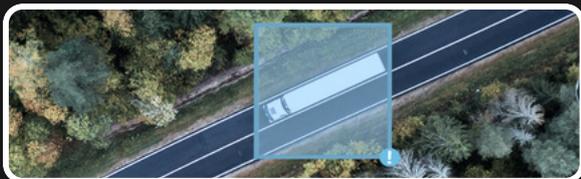


PTO and Specialist Applications

As fleets transition toward electrification and vehicles become increasingly connected, access to real-time operational data is expected to become standard practice.

CANbus telematics offers operators the means to manage mixed fleets, reduce total cost of ownership and maintain compliance—while providing the transparency that customers and regulators increasingly expect.

Access to live vehicle intelligence is becoming a defining factor in fleet competitiveness.



Predictive Maintenance Capabilities

CANbus telematics transforms maintenance from reactive to predictive by monitoring diagnostic trouble codes as they occur. Operators receive immediate notification of faults—whether engine, transmission or sensor-related—with detailed error descriptions that enable remote diagnosis, allowing issues to be addressed before they result in roadside breakdowns.

The system also captures malfunction indicator lamp (MIL) alerts, ensuring that dashboard warning lights are relayed directly to fleet management even when vehicles are operating remotely or outside depot hours. No issue goes unnoticed.

Beyond fault codes, the system monitors warning indicators such as abnormal temperature readings, oil pressure fluctuations and irregular RPM patterns. This enables maintenance to be scheduled based on actual vehicle condition rather than fixed intervals, optimising service schedules while prolonging asset life and maximising return on investment.

Integration with maintenance management software streamlines repair scheduling, ensuring that identified faults are logged and actioned efficiently.

Unplanned downtime remains one of the most significant costs facing fleet operators.



Industry Outlook

Commercial operators using auxiliary equipment can track PTO activation in real time. This confirms when cranes, pumps or compressors are in use, providing verified records for billing and compliance purposes.

The functionality is particularly relevant for construction, utilities and waste management fleets where accurate work-time reporting is essential.

