

PUMP HIRE FLEET TELEMETRY

Remote Pump Monitoring and Control with Pioneer Pump

1. The Challenge

For rental fleet operators, keeping pumps running is critical. Equipment is often deployed to remote construction, mining and flood mitigation projects where operators have limited visibility of its location, operating status or condition.

Without telemetry, service engineers often travel to site before knowing the cause of a fault, increasing downtime and operating costs. Fleet managers also need access to long-term operating data to understand asset utilisation, identify recurring issues and optimise maintenance across their fleet.



2. The Solution

Working with [Pioneer Pump](#), Senquip developed a remote monitoring and control solution that gives fleet operators complete visibility of every pump.

The Senquip ORB monitors pump location, operating status, engine or drive diagnostics, pressures and other key operating parameters, securely transmitting data to the Senquip Portal over 4G LTE. Operators can remotely start and stop pumps, adjust operating speed, receive instant fault notifications and diagnose many issues before travelling to site.

The platform stores up to two years of operational history, allowing fleet managers to review equipment performance, analyse trends and make informed maintenance decisions long after a pump has left the job site.

Using JavaScript edge processing and Modbus integration, the solution supports both diesel and electric pump sets through a common user interface, providing a consistent experience across the entire fleet.

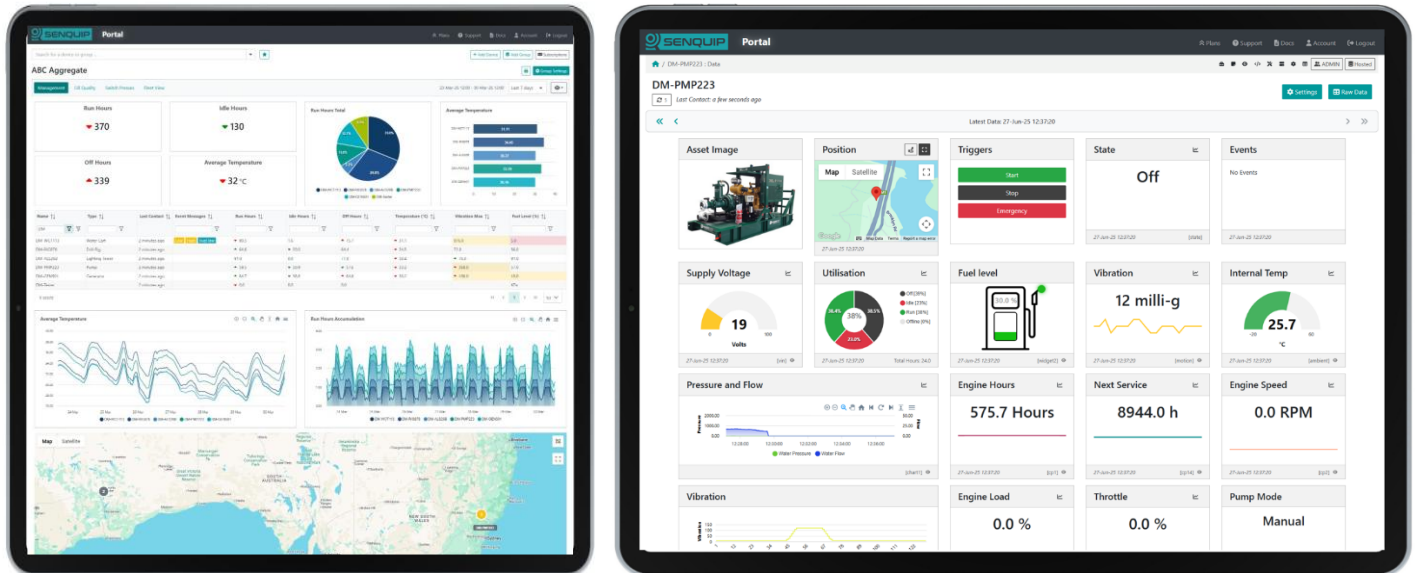


Figure 1 - Typical Fleet Dashboard and Device Data Page

3. The Results

The telemetry platform has transformed the management of remote pump fleets by delivering:

- Real-time visibility of pump location and operating status.
- Remote diagnosis of faults before dispatching service engineers.
- Up to two years of securely stored operating history for trend analysis and maintenance planning.
- Reduced unnecessary site visits and lower service costs.
- Faster response to equipment issues, improving fleet availability.
- A common monitoring and control platform across diesel and electric pump fleets.

By combining rugged hardware, secure cloud connectivity and long-term operational data, the solution enables rental companies to make better decisions, improve customer service and maximise the availability of their assets.

The solution also provides a migration path to Senquip's next-generation Direct-to-Cell ready hardware for customers deploying assets beyond terrestrial cellular coverage.