



The Challenge

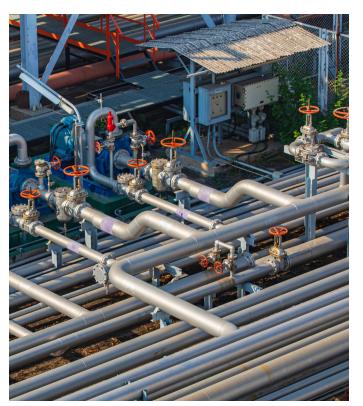
HSC Pipeline operates a diverse fleet of vehicles and heavy machinery across multiple project sites in Singapore. However, the company faced persistent challenges in tracking asset utilisation, preventing unauthorised equipment use, and monitoring machinery performance across remote areas. Without real-time visibility, inefficiencies such as idle time, misallocation, and delayed maintenance directly affected productivity and cost control. To maintain its commitment to operational excellence, HSC Pipeline needed a scalable digital solution capable of delivering **asset visibility, location intelligence, and performance optimisation** across all field operations.

The Solution

Overdrive deployed an IoT-based Asset Monitoring System utilising a combination of M3 Mini Asset Tracking Tags and M2 Asset Tracking Beacons with Wirepas Mesh to cover HSC Pipeline's fleet and machinery assets.

The M3 Mini is a compact, industrial–grade BLE tag with a robust IP67 waterproof design, 8-year battery life, and magnetic mounting for easy installation on metal surfaces. Ideal for construction environments, it delivers long–range tracking (up to 150m), withstands harsh outdoor conditions, and features anti–theft alerts with geofencing support.

Complementing this, the M2 Beacon offers motion, temperature, and humidity sensing, along with real-time BLE and Wirepas Mesh connectivity for precise indoor and outdoor monitoring. Its 3-axis









M2 Asset Tracking Beacons with Wirepas Mesh

accelerometer supports motion-based event tracking, while its replaceable long-life battery and 150m broadcast range make it ideal for tracking both moving and stationary assets.

All data from both devices is transmitted seamlessly to the **Overdrive IoT Platform**, where fleet and site managers can visualise live asset locations, monitor performance, and automate alerts for anomalies or maintenance.

This comprehensive setup provides complete asset visibility, utilisation analytics, and operational intelligence helping HSC Pipeline optimise workflow, reduce idle equipment, and enhance productivity across projects.

Number of Assets: 1,100 vehicles and heavy machinery

How does it work?

Each vehicle and piece of equipment is equipped with either an M3 Mini Tag or M2 Beacon, depending on the asset type and operating environment. These devices transmit data on movement, status, and location via Bluetooth Low Energy (BLE). The information is collected by nearby gateways and relayed to the Overdrive cloud-based platform.

Managers can view all assets in real-time, track usage patterns, and generate performance reports. The system automatically flags inactivity, detects unauthorised movements, and provides alerts for preventive maintenance ensuring continuous uptime and operational efficiency.

Key Features



Real-Time Tracking

Live BLE-based asset visibility across all project sites.



Geo-Fencing & Security

Location-based alerts to prevent unauthorized use or theft.



Utilisation Analytics

Insights on idle time, usage, and performance efficiency.



Environmental Sensing

Temperature, humidity, and motion detection for critical assets.



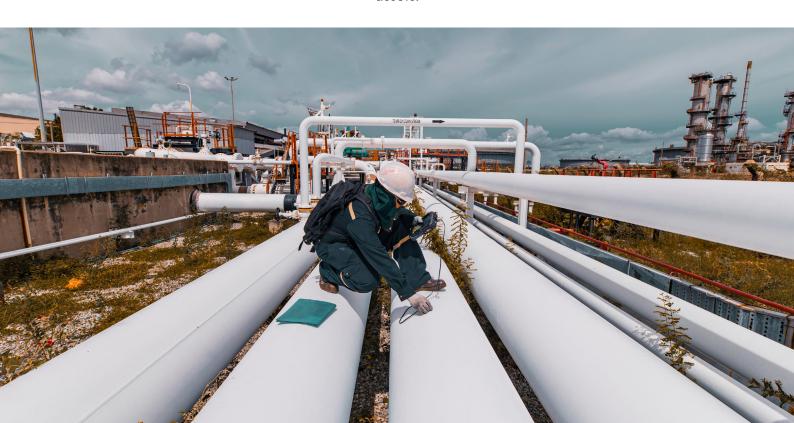
Maintenance Alerts

Automated notifications for service schedules and anomalies.



Scalable Architecture

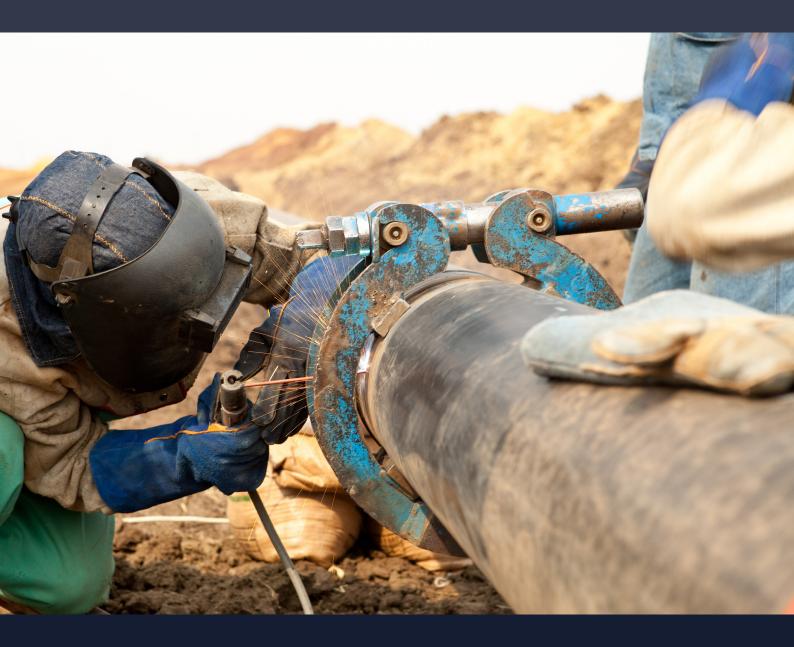
Supports easy expansion with new devices or sites.



The Results

With Overdrive's IoT Asset Monitoring Solution, HSC Pipeline has gained real-time operational visibility, allowing teams to monitor, analyse, and manage all heavy equipment and vehicles from a single platform. Downtime has been reduced through proactive maintenance, and equipment

utilisation has significantly improved. By combining advanced BLE hardware with Overdrive's powerful platform, HSC Pipeline has transformed its asset management process achieving a more connected, efficient, and costeffective operation across all projects.



Who Are We

Overdrive is the leading real-time asset monitoring IOT company in Asia that provides end-to-end IoT solutions and automates data sensing of various types of assets within a business ecosystem, from vehicles and machinery to facilities and people – all under one roof.

What We Do

Specialises in

- Vehicles Monitoring
- Airport Management
- Vessel Tracking
- Heavy Machinery Monitoring
- Smart Hygiene
- Environmental Monitoring
- Sustainability Solution

Hello, We Are Overdrive.

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