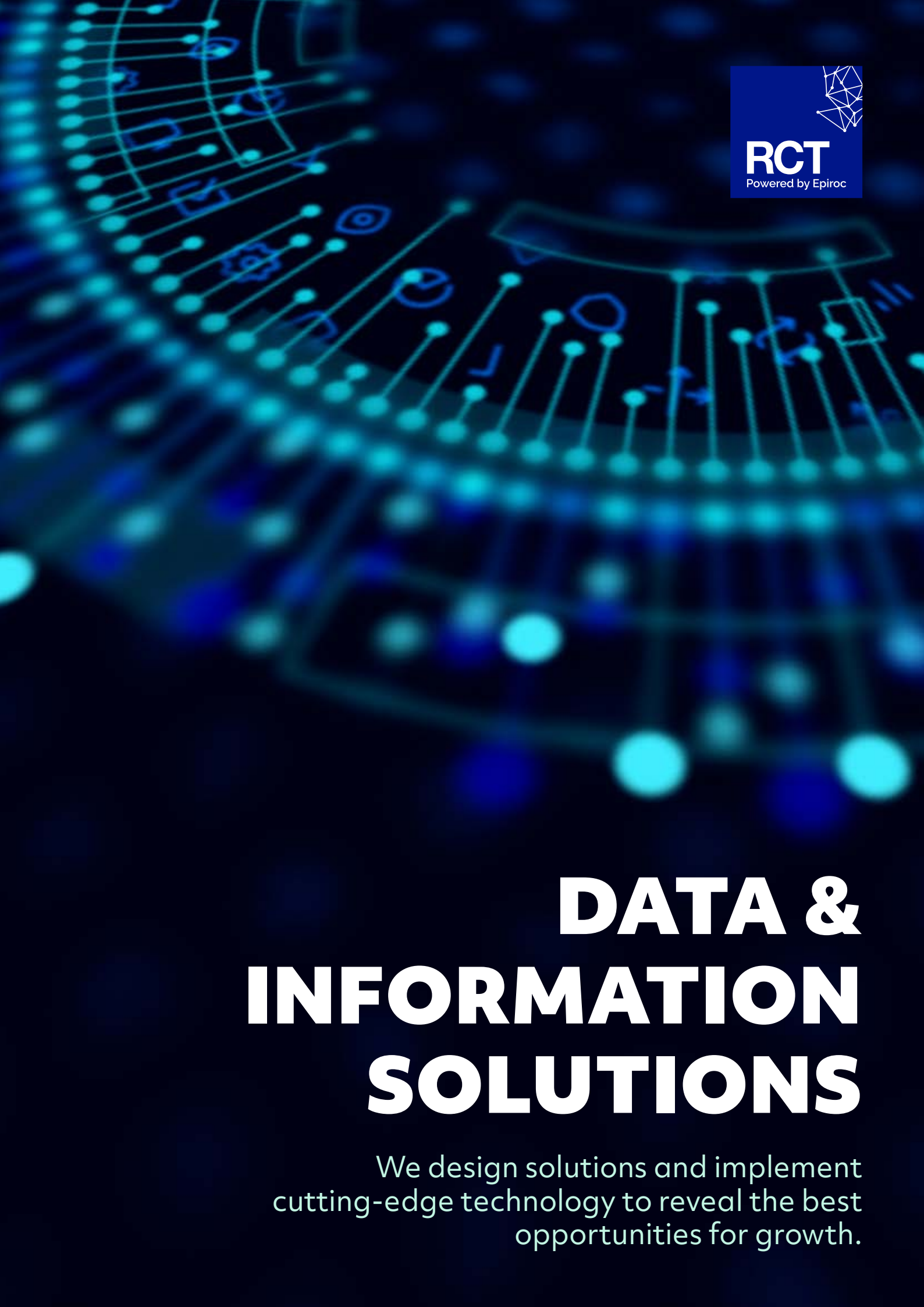
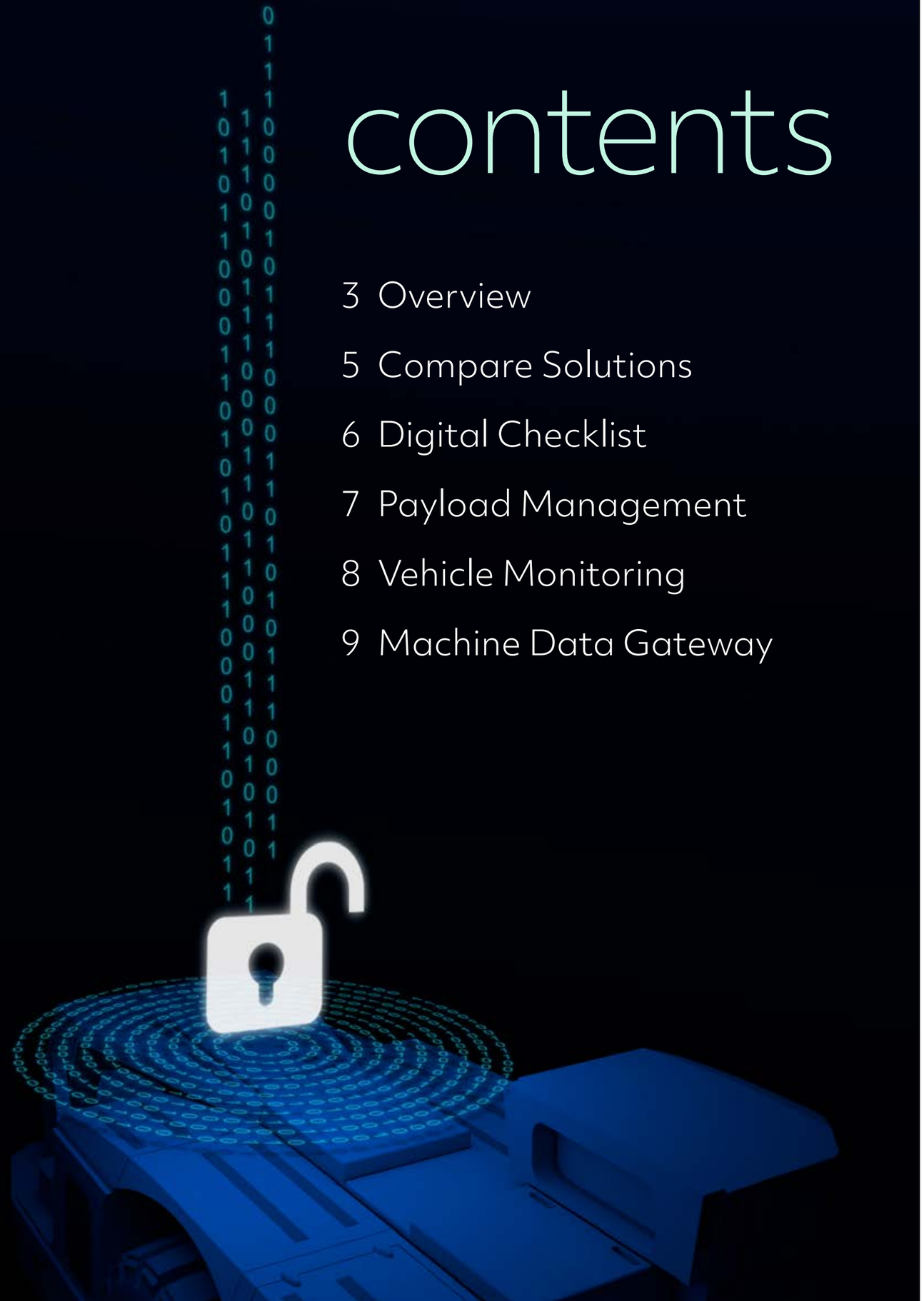


DATA & INFORMATION SOLUTIONS

We design solutions and implement cutting-edge technology to reveal the best opportunities for growth.

contents



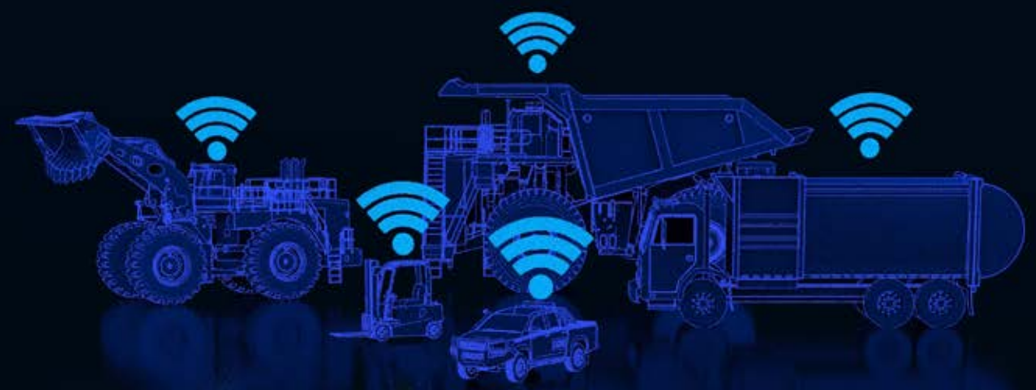
Data & Information

How you can benefit from it

The amount of operational and workforce data generated by mining businesses grows by the day, but few companies know how to harness it to improve operations and profit from the information.

Our sophisticated solutions open the door to a whole new world of possibilities, fuelling faster and better forecasting and planning, with the end result of smarter performance and better decision making.

- Better insights into your workforce and fleet
- Increased operational efficiency
- Business process automation
- Data-driven product innovation
- Improve profits from smart decision-making
- Improved safety intelligence



Improve your workforce and fleet understanding to reach new heights in **revenue growth, machine protection, and productivity.**

We create intelligent technology solutions for **better insights** and **informed decision making** to achieve your business goals.

FEATURES & FUNCTIONS	DIGITAL CHECKLIST	PAYLOAD MANAGEMENT	VEHICLE MONITORING	MACHINE DATA GATEWAY
Pre-start checklist (w/lockout) and in-cab display	✓	✓	✓	
Operator ID/access and service due	✓		✓	
GSM/LTE & Wi-Fi	✓		✓	✓
API - via SQL database, email reporting and data export (.csv)	✓	✓	✓	✓
Cloud based historian (ONLY)	✓		✓	
Cloud based, onsite historian (database) and customer owned server				✓
Payload too high/low, payload weight and payload placement		✓		✓
Utilisation, key on/off, excess idle, impact and seatbelt monitoring, engine and vehicle overspeed, geo-zoned speed threshold, engine oil pressure and temperature, coolant level, and travel distance			✓	✓
Cycle time, low/high idle and machine moving			✓	✓
Maintenance process[1]				✓
Production process[2]				✓

1 Including; gear selection, harsh braking low hydraulic oil level tray up/down bucket up/down water tank level low fuel low park brake on/off, remote, teleremote and automation on/off, travel time, site/production area, trip start time, trip end time, trip geolocation (if GPS is available), trip distance, maximum engine speed, average trip, engine speed alert (with timestamp), count of engine speed, alerts average trip, ground speed alert (with timestamp), and count of ground speed alerts

2 Including; check engine status (with timestamp), cycle start time, cycle-id, total cycle time, total cycle distance, dump point, ID draw point ID bucket weight (if sensor fitted) estimated bucket weight, CAN BUS J1939. CAN-BUS open and OEM i.e. CAT. Machine specific customisation and customer-specific customisation

Digital Checklist

Delivers machine and operator data from multiple sites; all under one platform, anytime, anywhere

Better address the complexities of operational risk management with a Digital Checklist for your fleet. This is a cloud-based system has been designed to be compliant across the globe, enabling organisations to source a common operator data under the one platform

The innovative solution provides relevant, customisable information to management at every level of the operation. The system can be applied on a diverse range of vehicles, regardless of the size, make or model.

Designed to target customers direct needs with customized reports sent daily. This is done through provisional data, enabling customers to drive sustainable operational change, lower costs and increase productivity.

Operator Access
Only licensed operators will be able to use the machine via card reader or keypad

Pre-start Checklist
Records number of loads per truck and loader, Eliminates paper checklists and data input requirements, reduces administration time

Schedule
Alerts around servicing which can be programmed around machine hours or a time-based schedule

Connectivity
Cellular/Mobile or Wi-Fi network communications

Reporting
Daily summary reporting provides an overview of all violations and events

Ignition Hours
Daily summary reporting provides an overview of all Ignition Hours

Payload Management

Maximise productivity by achieving optimum payloads

Increase efficiency and productivity of your earthmoving fleet by implementing a Payload Management system.

The data is transmitted between the truck and loader – allowing the loader operator to see the truck's weight so they can fill the optimal load. Strut pressures from the truck send both 'weight' and 'weight distribution' to the loader – resulting in even and accurate payload.

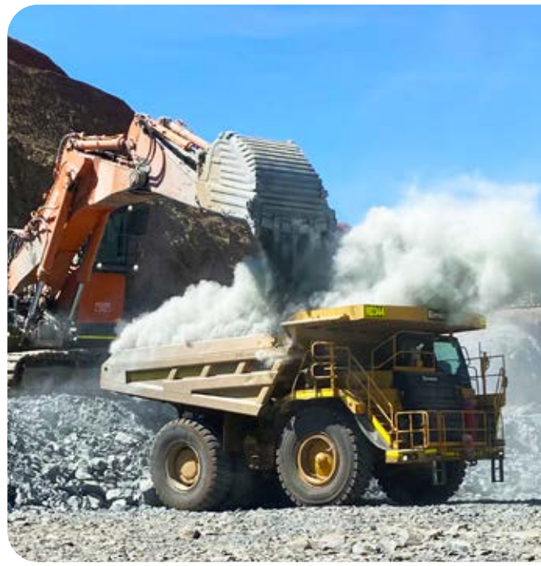
Display
All payload weights are displayed and stored and Optional single or dual external displays

Data
Records number of loads per truck and loader, reports average loads per truck, Records average bucket weight per loader, shows total dirt moved by truck and loader

Easy install
Off-the-shelf kits allow fast set up, Universal components suit all truck make and models

Distribution
Empower the loader operators to achieve better load distribution whilst loading

Information
Logging of the entire truck fleet payload and .CSV data downloaded from loader/excavator



Vehicle Monitoring

Reduce unplanned maintenance costs and improve operator safety

RCT's vehicle fleet management systems are designed to optimize operations, reducing the unplanned maintenance costs and improving operator safety for mining companies.

The innovative solution provides relevant, customized information to management at every level of the operation. The system can be installed on a diverse range of vehicles, regardless of make or model.

It delivers machine and operator data from multiple light and heavy vehicles across a fleet. It empowers management with information about machine and operator activity, resulting in improving light vehicle operations.

Impact monitoring
Captures vehicle impact events across three configurable thresholds: low, medium, and high

Seat belt monitoring
Alerts and reports when the seat belt is not worn

Ground speed zoning
Used in conjunction with a Speed Limiter to limit the maximum speeds through Geofenced areas/zones

Service scheduler
Alerts around servicing which can be programmed around machine hours or a time-based schedule

Critical output
Voltage-free contacts available to interface with machine and accessories activated by critical events

Engine monitoring
Alerts the operators and captures engine-related events: oil pressure, temperature, coolant level and over-speed violation

Summary reporting
Empower the loader operators to achieve better load distribution whilst loading

Automated reports
Summary reports, with drill down for more detailed information around specific events

Connectivity
Cellular/Mobile or Wi-Fi network communications

Export data
Export data in various formats, including CSV, PDF, PNG or SVG web graphic

Battery Voltage
Reports on battery voltage and provides low battery warnings for operator

Operator access
Only licenced operators will be able to use the machine via card reader or keypad

Machine Data Gateway

Unique, state-of-the-art device that unlocks, gathers and collates data to a singular cloud-base

Machine Data Gateway is a tool to provide total freedom to access unlimited raw data. Any industry worldwide can significantly optimise their operations as the Machine Data Gateway (MDG) will unify access to all forms of raw data being produced by their fleet Once stored, operations can analyse data by uploading to its own business analytics software for actionable insights and explore opportunities across all aspects of the machine operation.

The MDG creates its own meshed network, meaning it is ideal for applications where network communications between machines and cloud services are fragmented, ensuring vital information is not missed. It is also equally suited to applications with more permanent network infrastructure to safeguard the retainment of important information for business analytic.

Machine OEM's can ultimately decide what data customers are provided, whereas the MDG unlocks and provides full unrestricted access to all data available. No matter what brand of machine fleet or third-party system your operation has, data is delivered in a consolidated format, facilitating a big picture view of how your operation is running to forecast and pinpoint bottlenecks.

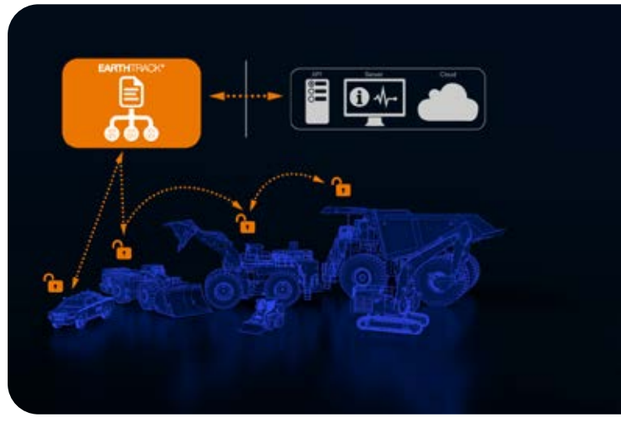
Cloud
Collate data from multiple sources to a single location

Network
Self-owned meshed network, means vital information is never missed

Insights
Leverage insights to explore opportunities across all aspects of the machine operations

Freedom
Unlock full unrestricted OEM data

Alerts
Alerts convey information related to the state of your machine



Agnostics
Works with any brand of machine fleet or third-party system

RCT create intelligent
technology solutions for
greater insights and
informed decision-making

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