



BlackBerry radar

ADVANCED EQUIPMENT MONITORING WITH RADAR-L:
Manage Your Diverse Fleet with Facts

The Real World Needs Real-Time Information

Facts about your fleet are critical to making business decisions that will improve efficiency. There is a spectrum of solutions for equipment monitoring - at one end, there are GPS tracking devices that send a few updates per day. This is insufficient for managing the operations of diverse transportation fleets, rail yards, construction projects or urban delivery fleets that require near real-time information. At the other end of the spectrum, advanced tools provide information for precision agriculture, smart mining, and autonomous control. These tools require substantial investments in new machinery, are often tied to propriety OEM platforms and have considerable recurring service fees. Most equipment fleets are a diverse collection of brands that have been acquired, leased, and maintained over the lifetime of a corporation.

Equipment owners and fleet managers need an innovative, flexible, and reliable solution that can provide near real-time information to realize the following advantages:

- **Maximize equipment and capacity utilization** – to increase return on investments
- **Rapidly and accurately locate equipment** – to keep operations running smoothly
- **Measure and control usage** – to improve safety, billing, and asset distribution
- **Perform preventative maintenance** – to reduce operating costs and downtime
- **Prevent theft and increase recovery** – for alerting stakeholders and law enforcement



Radar-L Advanced Equipment Monitoring: Valuable Data for Better Return on Investment (ROI)

In 2016, BlackBerry released Radar-M, an innovative full featured solution dedicated to improving the efficiency of trailer fleets and cargo logistics. Driven by demand, Radar-L now extends the Radar solution family. Based on the same core platform and stringent environmental specifications as Radar-M, the Radar-L solution was designed as a price-optimized product targeted at improving the accuracy and usability of equipment monitoring.

The Radar family of products are all-encompassing services that include devices, cellular connectivity, and secure web-based applications for use anywhere

and anytime. The BlackBerry Radar-L device is specifically designed for rapid installation on flatbeds, chassis, containers, heavy machinery, and other valuable transportation or equipment assets.

Radar-L collects up to 100x more data than conventional GPS-based track and trace solutions. This rich data supports in-depth analytics, applications, and instant alerts that provide equipment managers with the tools necessary to supervise and optimize daily operations more effectively.

Innovative Device	
Ten-Minute Install	The self-powered device can be surface mounted to almost any location on equipment in under 10 minutes using 4 bolts.
Multiple Integrated Sensors	Integrated sensors detect location, motion, miles driven, door state (open/closed), and more.
Multi-Year Battery	Easily replaceable battery with configurable multi-year lifespan. Minimal maintenance (no charging, no wiring, weatherproof, and shockproof).
Future-Proof	The device automatically receives software updates and feature improvements.
More Data	
Five-Minute Sensor Readings	With multi-sensor measurements taken every five minutes, Radar-L collects up to 100x more data than basic GPS trackers.
Configurable Updates	Devices can upload sensor readings every 30/60 minutes based on remotely managed device configuration options and customer requirements.
Cloud Based Intelligence	Further transforms sensor data into vital and valuable operational data, such as mileage and asset utilization.
Instant Alerts & Alarms	Manage day-to-day operations more effectively with event-driven notifications such as location-based alerts for controlling fleet use and door opening/closing events for theft alerts.
Intuitive Map Views	Provides fleet managers with a visual representation of operations so they can react quickly and intelligently.
Integrated Data Analytics	Perform time-based analysis and visualize trends across different asset types, fleets, routes, and yards. Optimize your business operations and manage your customers more effectively.
Simple Operation	
Fully Hosted Secure Cloud Solution	No computer expertise required. No IT installation. Automatically receive updates, improvements, and new features.
Web-Based Console	Access the system anywhere in the world using a web browser.
99.9% Uptime	Ready for business-critical use with support and product maintenance included.
Cellular Data Plan and Maps Included	No extra fees or contracts. No surprises.

Manage Your Fleet with Facts

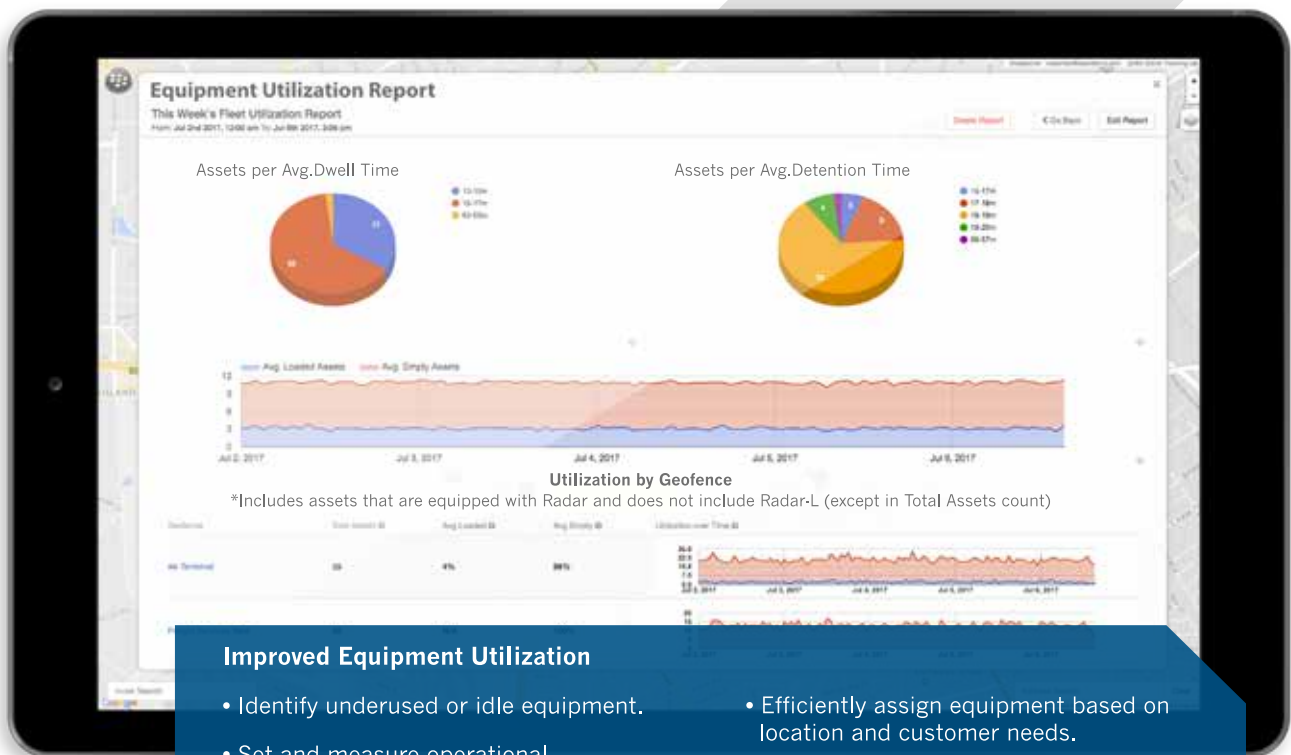
To meet the goals of equipment fleet operators, Radar-L is designed to be a flexible and easy-to-use solution that is optimized to deliver the fundamentals of fleet tracking – accurate, reliable, and frequent location information. The Radar-L platform uses this data to build simple-to-understand and powerful interactive reports designed specifically for managing

equipment fleets. These reports are instantly accessible from a web browser anywhere in the world 24/7/365. Moreover, both the Radar-L and Radar-M devices work on the same cloud platform and applications, so both devices can be installed in one fleet to monitor all your assets on one screen seamlessly.

Increase Profit with Better Decisions

Ultimately, the measure of a good equipment-monitoring solution is return on investment. By focusing on the unique challenges faced by equipment fleet owners, the BlackBerry Radar-L solution can deliver the following value:

Equipment Utilization Report



- Improved Equipment Utilization**
- Identify underused or idle equipment.
 - Set and measure operational performance.
 - Optimize operations in real time and analyze trends.
 - Interactive utilization reports to help guide business decisions.
 - Efficiently assign equipment based on location and customer needs.
 - Confirm asset deployments on customer sites (yard check).
 - Verify your asset was on site, for how long, and when it left.

Asset details including distance travelled

Optimize Maintenance

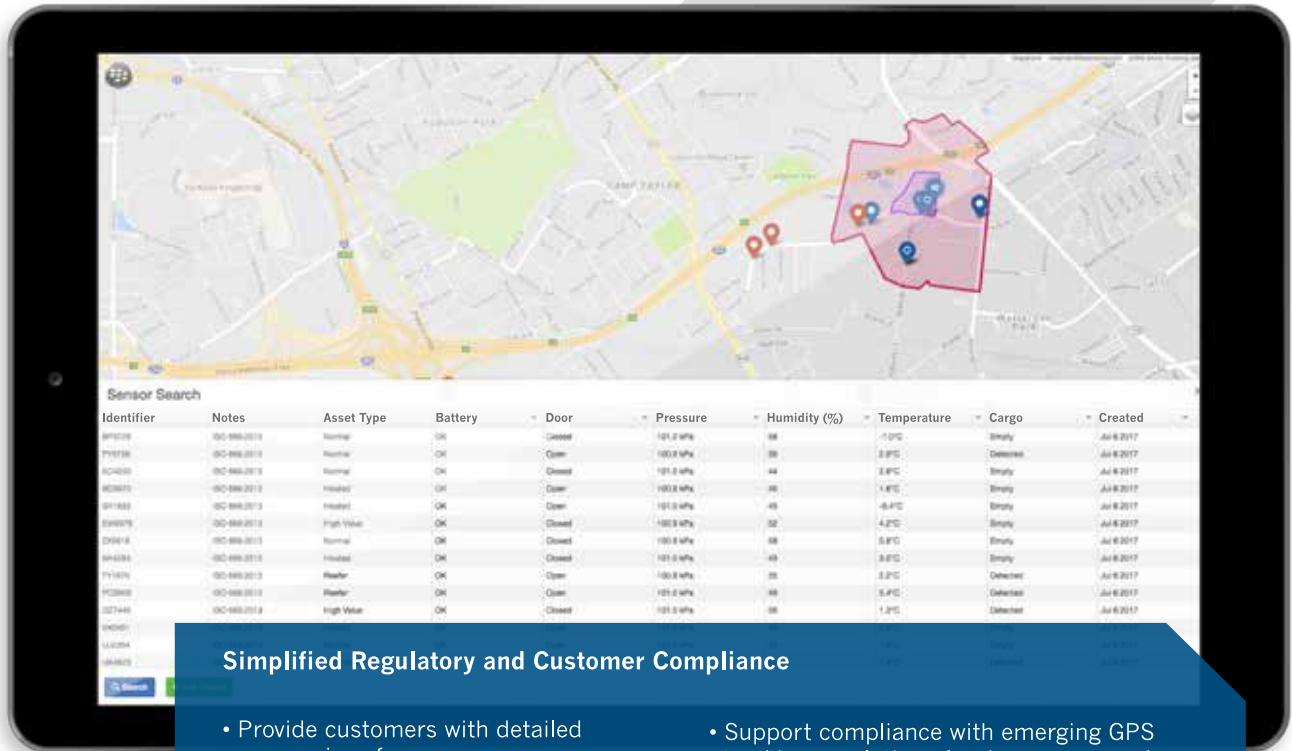
- Accurately track miles and hours driven.
- Easily locate equipment for maintenance.
- Perform maintenance when needed.
- Effectively manage equipment allocation and rotation.

Example of geofence in high risk area

Responsive and Proactive Operations

- Intuitive user interface.
- Create alarms and alerts based on geofences.
- Locate missing or misused equipment immediately.
- Reduce theft and/or insurance costs.

Quick report of assets and status



Simplified Regulatory and Customer Compliance

- Provide customers with detailed summaries of usage.
- Accurate motion detection and mileage to support government initiatives, such as travel taxes, road user charges, as well as environmental regulations on carbon and emissions.
- Support compliance with emerging GPS tracking regulations for dangerous goods, such as hazardous waste and chemicals.
- Reduce increasing reporting costs with easy-to-use data export tools and a centralized database for all trailer condition and location information.

Smarter Equipment Today

Fleet managers and equipment owners can use BlackBerry Radar-L to surpass their competition by replacing subjective judgements with objective data-driven decisions. The Radar-L solution enables existing equipment such as chassis, containers, heavy machinery, and other mobile assets to become smarter, and is part of the BlackBerry vision and investment in connected and autonomous transportation systems.

Radars Product Selection Guide

	Radars-M	Radars-L
Target Market		
Dry Trailers	✓	-
Refrigerated/Heated Trailers	✓	-
Containers and Intermodal	✓	✓
Chassis and Flatbed	-	✓
Heavy Equipment	-	✓
Agriculture Equipment	-	✓
Construction Equipment	-	✓
Cargo Van (GVW 1-2)	-	✓
Box Truck (GVW 3-4)	-	✓
Municipal and Public Equipment	-	✓
Device Features		
Replaceable Battery	✓	✓
Battery Lifespan	3-5 Years	2-4 Years
Size	290 X 96 X 81mm 11.42" X 3.78" X 2.1"	173 X 117.5 X 52mm 6.81" X 4.61" X 2.05"
Weight	1.3kg / 2.9lbs	710g/ 1.57lbs
Data Collection Rate	5 Minutes	5 Minutes
Data Upload Rate	15/30/60 Minutes	30/60 Minutes
Mission Critical Operating System	✓	✓
X.509 Public Key Certificate	✓	✓
Sensor Functions		
Location	✓	✓
Motion	✓	✓
Door (Open/Closed)	✓	✓
Cargo (% Capacity)	✓	-
Temperature	✓	-
Pressure	✓	-
Humidity	✓	-
Platform Features		
Distance (Maintenance)	✓	✓
Map Based UI and Geofencing	✓	✓
Yard Check	✓	✓
Mobile App (Locate Asset)	✓	✓
Asset Utilization	✓	✓
Dwell and Detention	✓	✓
2-Year Data Storage	✓	✓
Timeline View	✓	✓
Instant Alerts	✓	✓
Cellular Data Plan	✓	✓
Fully Hosted 24/7/365	✓	✓
TLS 1.2 Device & User Authentication	✓	✓
AES256 Channel Encryption	✓	✓



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BlackBerry IoT provides innovative end-to-end solutions for connected transportation and embedded systems that are designed to help our customers improve efficiency and differentiate their products.

Contact Us Today for More Information:

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