

TECH
mahindra
ALTAVEC

ENERGY NETWORKS

Altavec Solutions

2023/2024

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ABOUT ALTAVEC

Altavec specialises in cutting-edge mobile and spatial technology solutions for utilities, transport, telecom, and infrastructure. With an unwavering commitment to excellence and decades of expertise in asset and data management, we've established strong global partnerships that fuel our mission to empower businesses with actionable intelligence.

Our solutions are designed to revolutionise the way you capture, manage, and analyse asset data for actionable intelligence. Through our pioneering AIMS platform, Advancing Intelligent Mapping Solutions, we empower businesses to make informed, data-driven decisions by providing innovative digital solutions.

At Altavec, we are guided by a clear vision: to enable our customers to enhance end-to-end productivity, safety, compliance, collaboration, and performance in asset management. Our comprehensive suite of services includes mobile workforce management, asset capture, spatial intelligence, and analytics. We place a premium on research and development to stay at the forefront of industry best practices. We actively collaborate with industry leaders, ensuring that our intelligent digital solutions are always evolving. Altavec continues to be a reliable partner for businesses seeking enhanced asset intelligence solutions.

Discover the future of asset intelligence with Altavec

AIMS PLATFORM

The AIMS Platform is a cutting-edge software solution designed to revolutionise the management and operations of critical industries, including utilities (transmission and distribution), rail, telecommunications, and government sectors. This innovative platform fuses spatial datasets to optimise a diverse range of use cases, including vegetation management, asset management, network design, digital modelling, and lone worker safety.

With its versatile architecture, the AIMS Platform offers a comprehensive suite of tools to enhance efficiency, safety, and decision-making. Whether your organisation requires a single module or a comprehensive solution, AIMS Platform can be tailored to unlock the power of your data.

AIMS: Advancing Intelligent Mapping Solutions



AIMS CAPTURE

AIMS Capture specialises in the precise aerial and ground capture of LiDAR and imagery data, enabling industries to maintain accurate spatial information for improved decision-making.

AIMS CLEARANCE

Harnessing the power of machine learning, AIMS Clearance automates the detection of assets and defects, streamlining inspection processes and enhancing accuracy.

AIMS 3D

AIMS 3D offers immersive 3D visualisation capabilities for LiDAR and imagery data, allowing for better planning, design, and simulation activities.

AIMS VAA

AIMS VAA serves as an optimised virtual assessment tool, providing data-driven insights into asset conditions, ultimately leading to more efficient maintenance practices.

AIMS ZERO

AIMS Zero functions as a proactive safety companion for field workers, utilising technology to identify and alert workers to potential hazards, ensuring their safety while on the job.

AIMS CAPTURE

Altavec sets a new standard in asset information capture by seamlessly combining high-resolution image capture, panoramic image capture, and LiDAR data. This capability allows for a holistic and comprehensive approach to data collection, providing an unparalleled level of detail and accuracy. With our advanced technology, Altavec enables the digitisation and transformation of your network. Our integrated system seamlessly combines ultra-high-resolution imagery with precision spatial data, offering the digital visualisation of physical assets from the safety and convenience of your office.



GROUND



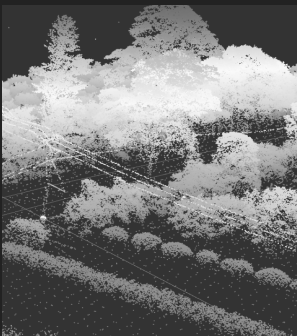
DRONE



HELICOPTER



FIXED-WING



**LIDAR
POINT CLOUD**

- Large Scale Highly Accurate 3D Point Cloud Data
- Classified LiDAR Data
- Elevation & Topography Data Sets
- Vegetation Management Data



**HI-RESOLUTION
IMAGERY**

- Perfect for Asset Assessment
- Create Machine Learning Models
- Generate 3D Asset Mesh Models



**PANORAMA 360°
IMAGERY**

- Map your Network Assets
- Create Points of Interest
- Scope the Asset Environment
- Assess Traffic Management Requirements
- Measure Lines, Area, Radius



**ORTHORECTIFIED
IMAGERY**

- Georeferenced geospatial aerial Imagery
- Measure Lines, Area, Radius
- Explore Highly Detailed Aerial Maps

DIGITAL MODEL

Our digital model serves as the comprehensive tool that encompasses all pertinent elements for ensuring the dependable, streamlined, and secure planning, construction, operation, and maintenance of field based assets.

KEY FEATURES

- ➔ Visualise classified LiDAR Data, elevation, surface models and imagery in a single platform
- ➔ Simplify the combining of spatial and business critical data
- ➔ Perform CM accurate measurements from imagery and 3D Models
- ➔ Assess assets and the surrounding environment to identify traffic management and equipment requirements
- ➔ Create, Edit, Import data and manage data access
- ➔ Share data and actionable insights for informed decision making

BUSINESS BENEFITS

- ✓ Optimise the civil & structural engineering design process
- ✓ Maximise maintenance & inspection planning
- ✓ Enhance strategy development, performance management and investment planning
- ✓ Immersive visualisation democratising business critical data
- ✓ Simulate and model asset performance

ACHIEVED WITH

- ⌘ AIMS CAPTURE
- ⌘ AIMS CLEARANCE
- ⌘ AIMS 3D

ASSET MANAGEMENT

In the dynamic and ever-evolving landscape of utility asset management, Altavec offers a powerful solution that addresses the challenges posed by dispersed teams, multiple stakeholders, and the demand for seamless integration. Altavec's asset management solution provides asset owners with a comprehensive toolkit, combining the capabilities of LiDAR, imagery, and 3D models, enabling efficient asset management, risk identification, and proactive maintenance programs.

KEY FEATURES

- ➔ Actionable insights and reports of asset risks and defects
- ➔ Highly accurate fully classified LiDAR point cloud data
- ➔ Predictive asset insights to inform preventative maintenance programs
- ➔ Create, edit, import data and manage data access
- ➔ Automated job creation and reports for maintenance contractors
- ➔ Detailed & precise information of assets dimensions
- ➔ Model network performance
- ➔ Advanced machine learning classification

BUSINESS BENEFITS

- ✓ Enhanced visualisation and predictive analysis with 3D models
- ✓ OPEX and CAPEX savings through informed decision making
- ✓ Increased asset performance and reliability
- ✓ Optimised asset strategy
- ✓ Safety and accuracy

ACHIEVED WITH

- ⌘ AIMS CAPTURE
- ⌘ AIMS CLEARANCE
- ⌘ AIMS VAA

VEGETATION MANAGEMENT

Effective vegetation management is vital for preserving the health and sustainability of our ecosystems and urban spaces. At Altavec, we offer comprehensive end-to-end vegetation management solutions designed to control and maintain vegetation growth in diverse landscapes, including forests, parks, roadways, and utility corridors.

KEY FEATURES

- ➔ Highly Accurate fully classified Lidar Point Cloud Data
- ➔ Automated Job Creation and Reports for Cutting Contractors
- ➔ Identification and reports of vegetation encroaching on the network
- ➔ Identification of hazard trees that pose a fall-in risk to the network
- ➔ Strategic Enabler for automatic identification of tree responsibility & growth modelling
- ➔ Detailed Information on Vegetation Canopies and Heights
- ➔ Fusion of spatial datasets (LiDAR, Imagery, Satellite)

BUSINESS BENEFITS

- ✓ Automated vegetation and easement analysis utilising AI and Machine learning
- ✓ Complete suite of vegetation reports in a single platform
- ✓ Hazard tree identification and prioritisation
- ✓ Improved regulatory compliance
- ✓ Maximised ROI on discretionary budgets

ACHIEVED WITH

- ⌘ AIMS CAPTURE
- ⌘ AIMS CLEARANCE
- ⌘ AIMS 3D

LONE WORKER SAFETY

AIMS Zero, an award-winning safety solution that is transforming the way organisations manage and mitigate risks in their work environments. Designed to prioritise the safety and well-being of lone remote workers, AIMS Zero offers a comprehensive platform consisting of a web-based application and a wearable watch or mobile device. With its innovative features and user-friendly interface, AIMS Zero empowers your workforce with the tools they need to stay connected, informed, and safe.

KEY FEATURES

- ➔ Real-time hazard alerts
- ➔ Work site check-in check out
- ➔ Panic and duress alarms
- ➔ Hazard creation and verification
- ➔ Intuitive user interface

BUSINESS BENEFITS

- ✓ Enhanced lone workers safety
- ✓ Efficient emergency response
- ✓ Reduced reportable injury frequency rate
- ✓ Increased employee engagement
- ✓ Proactive safety culture

ACHIEVED WITH

- ⑤ AIMS ZERO



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