



THE
FUT
URE
IS *TRK*

This is the Future of Mobile Mapping

Autonomous. Intelligent. Simplified.
Leica Pegasus TRK Evo

leica-geosystems.com/pegasustrk

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SYSTEM OVERVIEW

The Leica Pegasus TRK Evo is a high-accuracy mobile mapping system built for engineering-grade precision across complex environments. With the highest point cloud density in the TRK portfolio, it captures up to 4.4 million points per second, making it ideal for detailed infrastructure surveys, rail networks, and structural analysis. Adjustable scan rates let users fine-tune performance for maximum precision or faster data capture. Available as Pegasus TRK500 Evo or TRK700 Evo, it offers single or dual-scanner configurations to suit the needs of high-accuracy applications.

CAPTURE

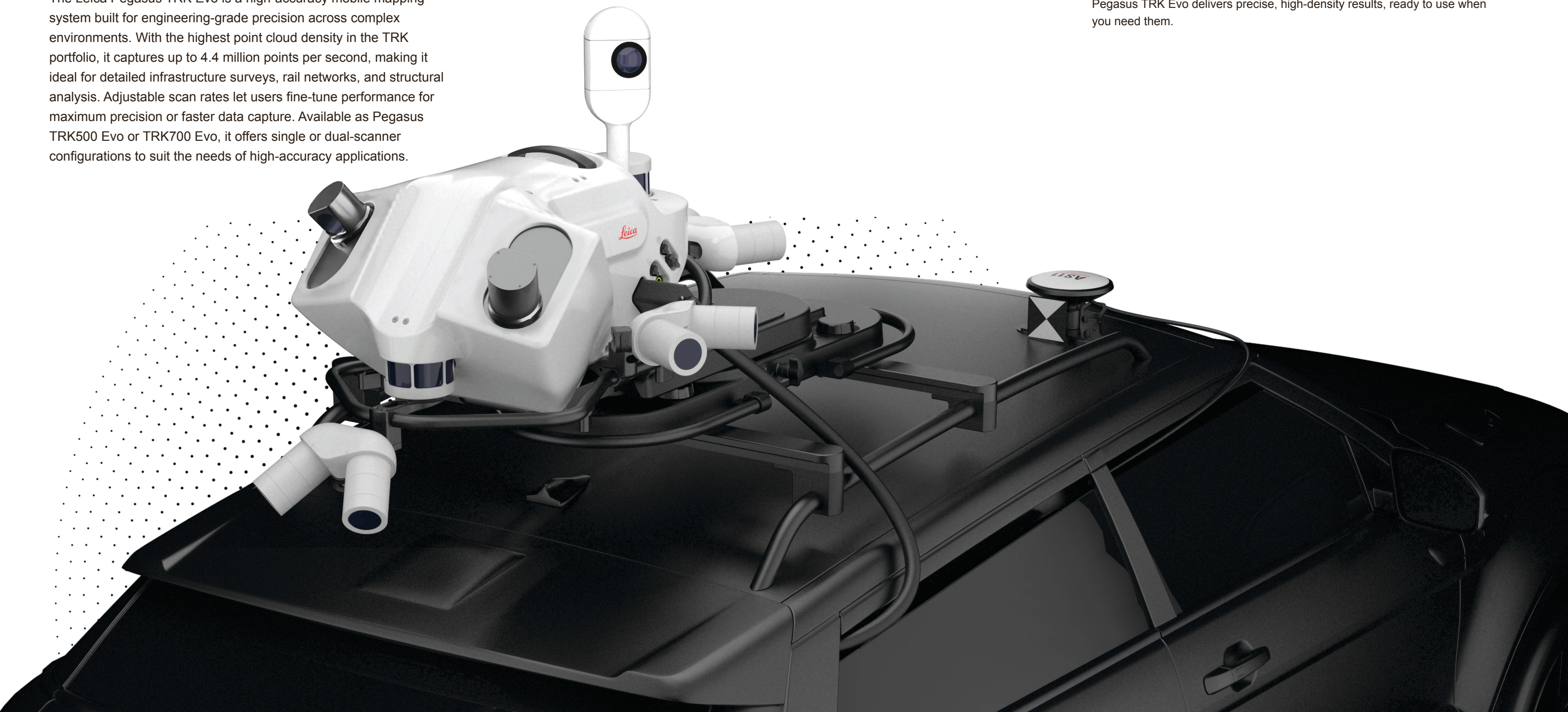
With quick deployment, the Pegasus TRK Evo ensures efficient, high-accuracy performance across a range of environments. Its advanced sensing and positioning technologies provide high-resolution data capture in real time, delivering the detail you need with minimal effort.

PROCESS

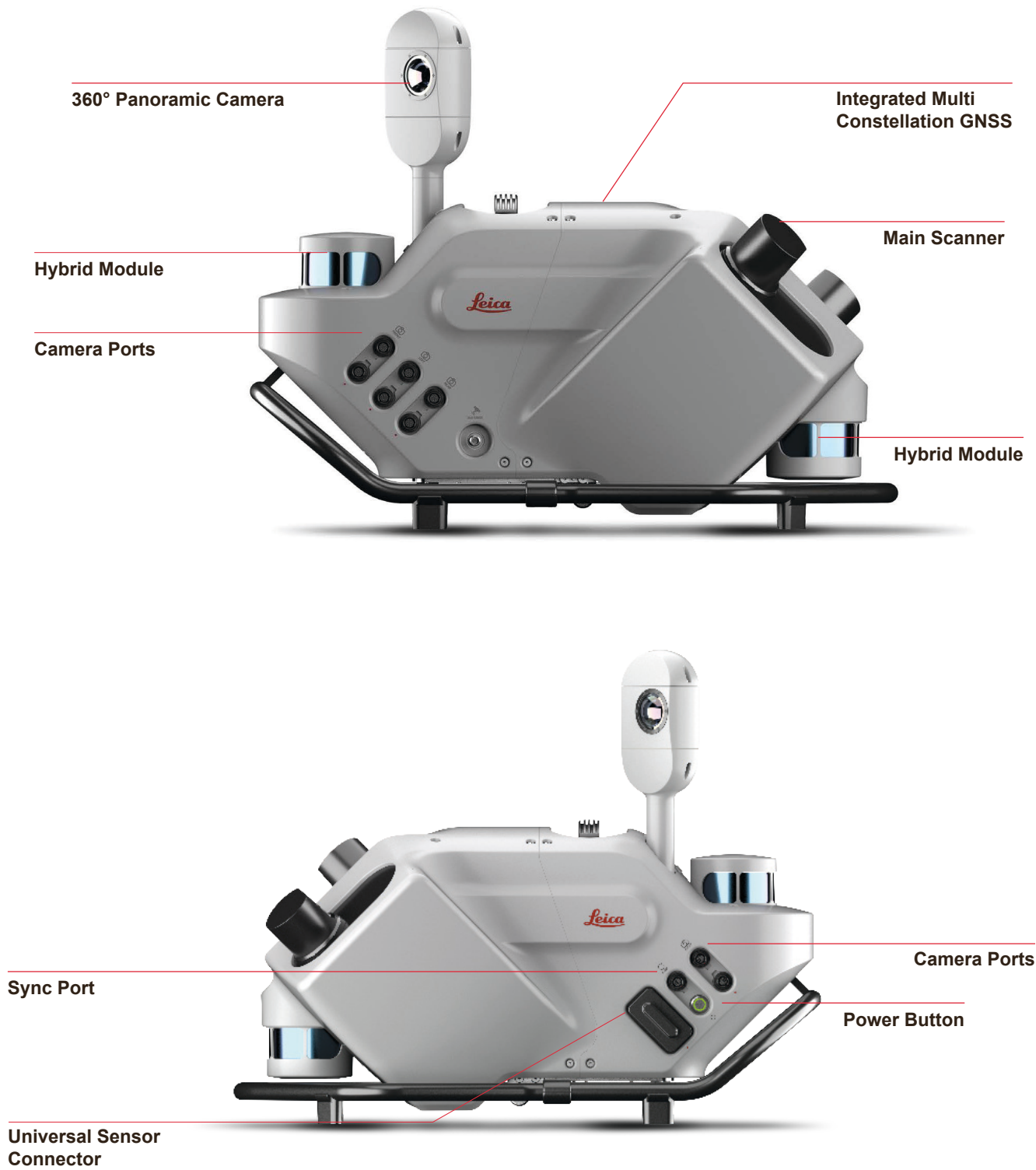
Seamless integration with Leica Pegasus FIELD and OFFICE simplifies workflows from data collection to final deliverables. RTK-enabled in-field processing and direct data export help reduce turnaround time and improve efficiency, while post-processing options in Pegasus OFFICE provide additional refinement.

DELIVER

Turn data into decisions with high-quality, georeferenced outputs. Whether mapping infrastructure networks, rail corridors, or detailed digital twins, the Pegasus TRK Evo delivers precise, high-density results, ready to use when you need them.



Main Unit



*Pegasus TRK700 Evo displayed above

Pegasus TRK500 Evo

Pegasus TRK500 Evo - the data-efficient single scanner option, capturing up to 2.2 million points per second.

Pegasus TRK700 Evo

Pegasus TRK700 Evo - with dual scanners for when greater point cloud density is required, capturing up to 4.4 million points per second.

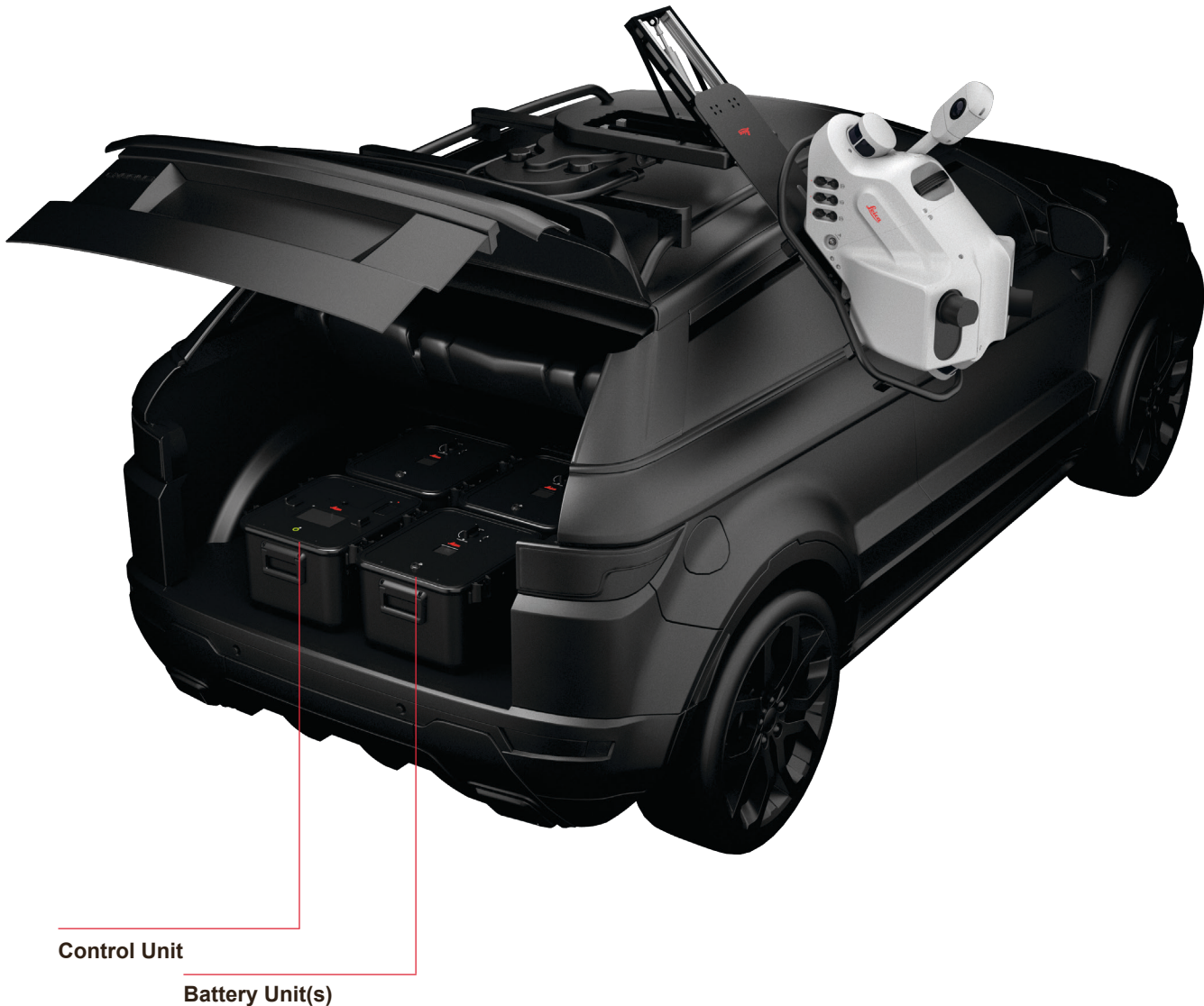
Simplicity in design Simple in use

Control Unit
Works while you rest.

Created to transform the workflow for reality capture professionals, the control unit allows you to go straight from data capture to processing on-the-fly, right when you need it. No more time-consuming transcoding, storage overhead or errors during data transfer.

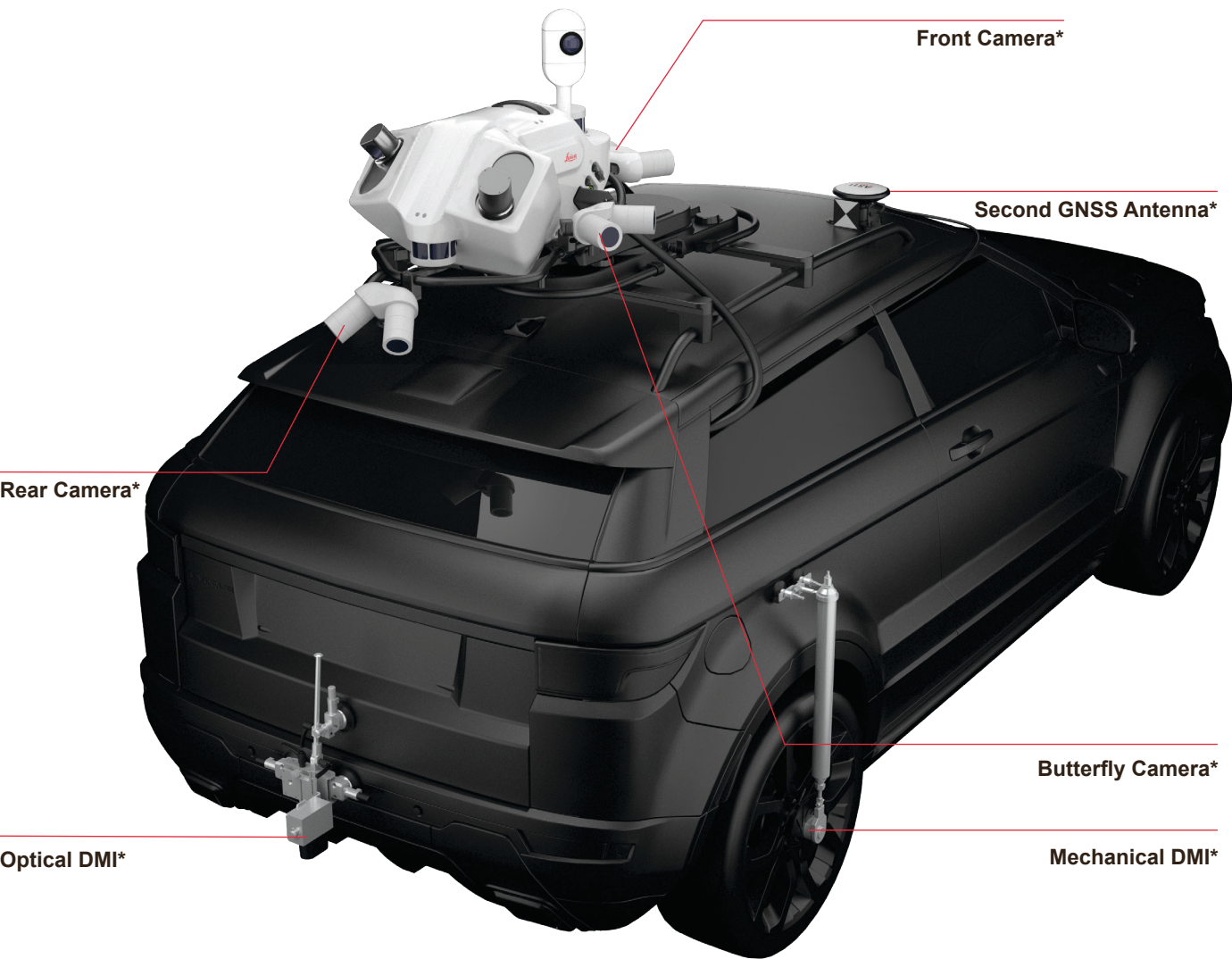
Battery Unit
Expand when you need.

With its secure transport mode, the Li-ion batteries can be shipped safely so you can travel the world with ease. Expandable with up to three batteries for up to one full workday or hot-swap for continuous power, the Pegasus TRK power system keeps you moving.



Expand for more possibilities

Pegasus TRK puts mobile mapping in the hands of more people than ever before. Simple to operate, the Pegasus TRK requires less training, reducing costs without compromising performance. With a unique rotating-tilt mounting platform and ergonomic design, Pegasus TRK Evo can be safely set up and operated by one person. Intuitive software guides you from project planning to project delivery.



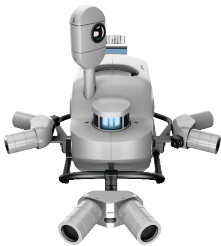
*Optional accessories

Accessories



Carrier platform

The platform rotates into three positions (30°/0°/+30°), allowing the TRK Evo to collect data in a diagonal and cross-point cloud pattern during multi-pass acquisitions, an effect typically only achievable with a dual scanner.



Modular camera system*

Seamlessly integrate up to four additional 24MP pairs of cameras - to capture front, sides, and pavement angles for texture analysis and intrinsic calibration for seamless panorama imagery.



Butterfly side cameras*

The butterfly side cameras have a dual position, vertical and horizontal, enabling the capture of vertical arches in high-resolution for texturing and damage analysis or horizontal features like traffic signs or civic numbers.



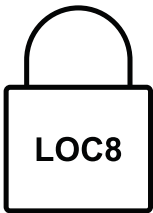
Optical DMI*

The Optical DMI measures travelled distance by optically tracking road surfaces. Designed as a rear-mounted device, it provides precise distance readings independent of wheel rotation. Its compact mounting ensures compliance with traffic safety regulations by remaining within the vehicle's silhouette.



Second GNSS antenna*

The second GNSS antenna improves the initialisation for rail and marine applications. The lever arm is automatically calculated.



LOC8 theft deterrence & location solution

Keep your Pegasus TRK safe with LOC8 - Leica Geosystems' theft deterrence feature and GPS tracker. Use LOC8 as a fleet management tool to keep track of your assets when they are out on the road to make sure your system is secure wherever and whenever you are mapping.

*Optional accessories

SOFTWARE

Leica Pegasus FIELD

The Leica Pegasus FIELD software empowers autonomous data collection in the field. Plan routes and set specific goals for each project directly on-site. With edge computing and real-time processing, data is collected and processed at the speed of traffic as you head back to the office. This powerful software guides you through project setup and adapts project plans based on accuracy requirements and environmental conditions, whether you are on city streets or railways. Use predefined profiles to achieve optimal results every time.



Leica Pegasus OFFICE

Leica Pegasus OFFICE enables a seamless data flow into post-processing and publishing workflows, allowing you to complete all processing requirements in one integrated solution. Refine data with precise geo-referencing, multi-pass trajectory adjustment, and the export of several file formats. Create colourised 3D point cloud data that is automatically privacy-compliant.



REAL-WORLD APPLICATIONS

The Pegasus TRK Evo is designed for high-accuracy mobile mapping across infrastructure, rail, and engineering applications. With adjustable scan rates and the highest point cloud density in the TRK portfolio, it captures up to 4.4 million points per second, enabling detailed data collection in complex and compact environments. Single or dual-scanner configurations offer flexibility for different project scopes, while real-time processing allows users to validate data on-site and choose between immediate export in Pegasus FIELD or post-processing in Pegasus OFFICE.

For engineering and structural analysis, the Pegasus TRK Evo delivers the precision needed to document tunnels, bridges, and built environments. Its high-density point cloud ensures accurate measurement for deformation tracking, structural modelling, and safety inspections.



In rail infrastructure, the Pegasus TRK Evo supports efficient network documentation and corridor mapping. With consistent point distribution and accurate georeferencing, it enables clearance validation, asset inventory, and planning for upgrades or maintenance.

For digital twin creation, the Pegasus TRK Evo's combination of scan density and imaging supports the development of high-fidelity 3D models. SmartFusion technology refines image selection, helping users focus on relevant features while reducing unnecessary data storage.

When accuracy matters most, from engineering-grade surveys to rail and infrastructure planning, the Pegasus TRK Evo delivers the performance required for reliable decision-making and long-term asset management.

Leica Geosystems – when it has to be right

With more than 200 years of history, Leica Geosystems, part of Hexagon, is the trusted supplier of premium sensors, software and services. Delivering value every day to professionals in surveying, construction, infrastructure, mining, mapping and other geospatial content-dependent industries, Leica Geosystems leads the industry with innovative solutions to empower our autonomous future.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 24,000 employees in 50 countries and net sales of approximately 5.2bn EUR. Learn more at hexagon.com and follow us @HexagonAB.



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