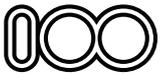
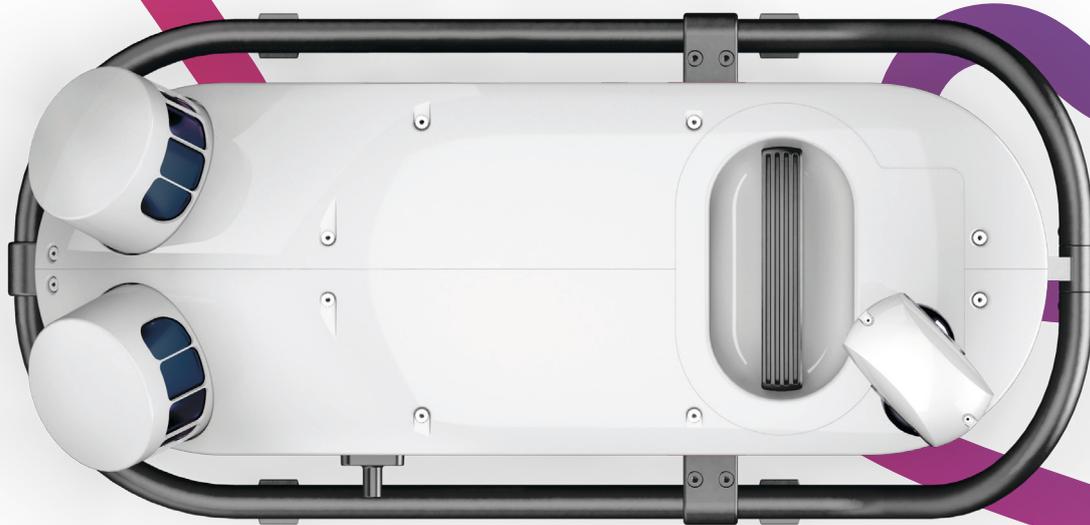


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# Leica Pegasus TRK100 Data Sheet

**Autonomous. Intelligent. Simplified.**

## Positioning Performance

<b>Absolute accuracy<sup>1</sup> in [X,Y] / [Z]</b>	<b>No GNSS outage</b>	<b>60 second GNSS outage</b>
Post-processing	19 / 11mm	39 / 16mm
RTK	21 / 13mm	

## Scanner

<b>Effective measurement rate</b>	0.6MHz
<b>Scan speed</b>	20Hz per scanner
<b>Precision</b>	≤ 10mm*, with MatchPoint technology applied
<b>Maximum range</b>	100m
<b>Channels</b>	2x16 channels
<b>Field-of-view</b>	30° (+/- 15°)
<b>Number of returns</b>	1
<b>Minimum range</b>	0.4m
<b>Laser class</b>	Class 1, eye safe

## Camera

Type	360° Panorama	Butterfly Side	Pavement	Front
Resolution	24MP	2x24MP	24MP	24MP
Mounting	Fixed	Flexible; Hz & V	Fixed	Fixed
Focal length	3.3mm	12.45mm	12.45mm	12.45mm
Calibration	Permanent	Semi-automatic/ manual	Semi-automatic/ manual	Semi-automatic/ manual
Capture mode	By distance at maximum 8 frames per second			
Anonymisation	Natively AI-based, real-time anonymisation; fully compliant to GDPR			
Colour calibration	According to CIEDE2000			
Brightness control	Real-time, fully automatic			

## Positioning

<b>GNSS<sup>2</sup></b>	555 channels, multi-constellation, multi-frequency
<b>Antenna</b>	Fully integrated, with additional second antenna support
<b>DMI<sup>3</sup></b>	Supported - see “Accessories” section
<b>RTK<sup>4</sup></b>	HxGN SmartNet / NTRIP networks

\*Depending on various factors such as distance and density.

## Remote Services

<b>Theft deterrence<sup>5</sup></b>	Built-in LOC8 theft deterrence and location solution for remote tracking, localisation and locking by mobile phone or computer
<b>Support</b>	Remote in-field support access

## Power Supply

<b>Type</b>	Vehicle independent
	Hot-swappable, up to 3 x Li-Ion Pegasus battery units
<b>Interface</b>	Ruggedised, IP54, industrial grade, 2.4” colour LCD displaying real-time battery health monitoring
<b>Operating time<sup>6</sup></b>	7h / battery unit
<b>Transport</b>	Transportation mode for ground and aircraft shipping
	Fully compliant to dangerous goods UN 3480/3481

## Control Unit

<b>Type</b>	Ruggedised, IP54, industrial grade, multi-core PC with built-in machine learning chip
<b>Interface</b>	5.0” colour and touch LCD displaying live battery health monitoring
<b>Real-time capabilities</b>	Data pre-processing and AI-based tasks
<b>Data storage</b>	2x2TB or 2x3.8TB, real-time data stream to high performance, removable SSDs

## Environmental characteristics

<b>Maximum speed</b>	130km / h
<b>Temperature range operating</b>	-10°C to +50°C
<b>Temperature range storage</b>	-20°C to +50°C
<b>IP rating</b>	IP67 during operation, fully dust tight and withstands temporary immersion under water
<b>Shock and vibration</b>	Withstands 4g shocks, ISO9022, MIL-STD-810H

## Dimensions

<b>Dimensions [L/W/H]</b>	70 / 40 / 49cm
<b>Weight</b>	14kg

## Mounting

Rotational-fix mount, adjustable in horizontal position -30°, 0°, +30°, optional Rotational-tilt mount, tilting up to 45° improving accessibility and ergonomics by reducing 36cm the mounting height, optional Vibration Damping mount for railway applications

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## Accessories and Options

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### Distance Measurement Instruments

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#### Mechanical DMI

Mechanical wheel odometer for road applications

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#### Optical DMI

Optical odometer for road applications, adhering to international vehicle safety standards

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#### Rail DMI

Optical odometer, dedicated for rail applications

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### Cameras

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#### Front camera

24MP, horizontal mounting, semi-automatic/manual calibration

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#### Rear camera

24MP, horizontal mounting, semi-automatic/manual calibration

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#### Butterfly side cameras

2x24MP, horizontal or vertical mounting, semi-automatic/manual calibration

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### GNSS

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#### Second GNSS antenna

Leica AS11 GNSS antenna for more accurate heading

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#### Upgrade

Upgrade options available, contact your sales representative for more information

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#### Customer Care Packages

Various multi-year CCPs covering support, hardware and software maintenance, extended warranty, re-calibrations and loan units are offered

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## Software

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#### Pegasus FIELD

Multi-lingual browser-based interface, accessible by Wi-Fi or ethernet cable, mission planning, autonomous data acquisition, real-time anonymisation, in-field exports, remote support

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#### Pegasus OFFICE

Multi-lingual desktop application for post-processing, trajectory refinement, point cloud adjustment, GCP management, image anonymisation, point cloud classification, point cloud colourisation, data export

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Illustrations, descriptions and technical specifications are not binding and may change.

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- 1 One sigma with DMI on Leica Geosystems reference area.
- 2 Global Navigation Satellite System.
- 3 Distance Measurement Instrument.
- 4 Real-Time Kinematic.

- 5 Not available in all geographical regions.
- 6 Results based on a typical configuration. May vary according to configuration, environmental, and battery conditions.

For further details about scanners' specifications please refer to the technical datasheet available by the suppliers.



Integrate with LOC8 – Lock & Locate  
For more information visit: [leica-geosystems.com/LOC8](https://leica-geosystems.com/LOC8)

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- when it has to be **right**

