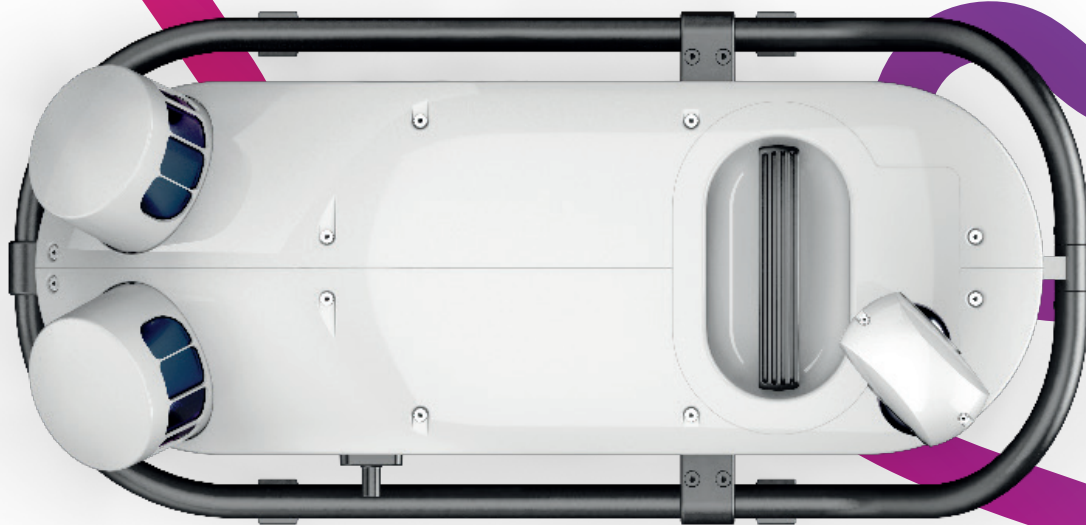


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# Leica Pegasus TRK100 Data Sheet

**Autonomous. Intelligent. Simplified.**

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## System Performance

Absolute accuracy<sup>1</sup> in [X,Y], [Z]

Post-processing 19 / 11mm

RTK 21 / 13mm

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## Scanner

Effective measurement rate 600kHz

Scan speed 20Hz per scanner

Precision ≤ 10mm\*, with MatchPoint technology applied

Maximum range 100m

Channels 32 channels

Field of view 30° (+/- 15°)

Number of returns Up to 2

Minimum range 0.4m

Field-of-view 360° full circle

Laser class Class 1, eye safe

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## Camera

Maximum system resolution 120MP powered by SmartFusion technology

Type	360° Panorama	Butterfly Side	Pavement	Front
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Resolution	24MP	48MP	24MP	24MP
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Mounting	Fixed	Flexible; Hz & V	Fixed	Fixed
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Focal length	3.3mm	12.45mm	12.45mm	12.45mm
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Calibration	Permanent	Self-calibrating	Self-calibrating	Self-calibrating
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Capture mode By distance at maximum 8 fps

Anonymisation Natively AI based, real-time blurring; fully compliant to GDPR

Colour calibration According to CIEDE2000

Brightness control Real-time, fully automatic

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## Positioning

GNSS 555 channel, multi-constellation, multi-frequency

Antenna Fully integrated, with additional second antenna support

DMI Supported - see "Accessories" section

RTK HxGN SmartNet / NTRIP networks

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\*depending on various factors such as distance and density

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## Remote Services

Theft deterrence <sup>2</sup>	Built-in LOC8 theft deterrence and location solution for remote tracking, localisation and locking by mobile phone or computer
Support	Remote in-field support access

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## Power Supply

Type	Vehicle independent Hot-swappable, up to 3 x Li-Ion Pegasus battery units
Interface	Ruggedised, IP54, industrial grade, 2.4 inch colour LCD displaying real-time battery health monitoring
Operating time	8h / battery unit
Transport	Transportation mode for ground and aircraft shipping Fully compliant to dangerous goods UN 3480/3481

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## Control Unit

Type	Ruggedised, IP54, industrial grade, multi-core PC with built-in machine learning chip
Interface	5.0 inch colour and touch LCD displaying live battery health monitoring
Real-time capabilities	Data pre-processing and AI based tasks
Data storage	2 x 2TB or 2 x 3.8TB, real-time data stream to high performance, removable SSD's

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## Environmental characteristics

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

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## Dimensions

Dimensions [L/W/H]	70 / 33 / 49cm
Weight	14 kg

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## 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

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## Accessories and Options DMI

(Distance Measurement Instrument)

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### Mechanical DMI

Mechanical wheel odometer for road applications

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### Optical DMI

Optical odometer, for road applications compliant to various "Motor Vehicle Safety Regulations"

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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, self-calibrating

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### Rear camera

24MP, horizontal mounting, self-calibrating

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### Butterfly side cameras

48MP, horizontal or vertical mounting, self-calibrating

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## GNSS

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### Second GNSS antenna

Leica AS11 GNSS antenna for faster initialisation by more accurate heading

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### Upgrade

Upgrade from TRK100 to TRK500 and TRK700 available

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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 cable, mission planning, project management, autonomous data acquisition with routed navigation, real-time anonymisation, pre-processing and remote support

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### Cyclone Pegasus OFFICE

Post-processing software, project management, trajectory refinement, point cloud classification and anonymisation, feature extraction and data export

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### Cyclone MMS DELIVER

Information extraction and feature extraction for rail and road applications

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1. One sigma with DMI on Leica Geosystems reference area.
2. Not available in all geographical regions.

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

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