THE FUTURE IS TRK



Leica Pegasus TRK300
Data Sheet

Autonomous. Intelligent. Simplified.

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Positioning Performance

Absolute accuracy[1] in [X,Y] / [Z]	No GNSS outage	60 second GNSS outage
Post-processing	11 / 11mm	14 / 16mm
RTK	12 / 12mm	

Scanner

Effective measurement rate	3.84MHz*
Scan speed	20Hz per scanner
Precision	≤ 10mm**, with MatchPoint technology applied
Maximum range	300m
Channels	2x32 channels
Field-of-view	40.3° (-20.8° to +19.5°)
Number of returns	Up to 3
Minimum range	0.5m
Laser class	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 8fps			
Anonymisation	Natively AI-based, real-time blurring; fully compliant to GDPR			
Colour calibration	According to CIEDE2000			
Brightness control	Real-time, fully automatic			

Positioning

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

*multi-return enabled

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

Remote Services

Theft deterrence[5]	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

Battery Power Supply

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

Vehicle Connected Power Supply

Type	Vehicle connected power box (Pegasus TRK External Power Box (PPB))
	12-32V DC input voltage, IP54, Ruggedised, Power converter unit
Buffer unit	1 x PBU

Control Unit

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

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

Dimensions

Dimensions [L/W/H]	70 / 40 / 49cm
Weight	14.2kg

Mounting

Rotational-Tilt Mount, tilting up to 45° improving accessibility and ergonomics by reducing the mounting height by 36cm, optional Vibration Damping mount for railway applications

Accessories and Options

Distance Measurement Instruments	
Mechanical DMI	Mechanical wheel odometer for road applications
Optical DMI	Optical odometer for road applications, adhering to international vehicle safety standards
Rail DMI	Optical odometer, dedicated for rail applications
Cameras	
Front camera	24MP, horizontal mounting, semi-automatic/manual calibration
Rear camera	24MP, horizontal mounting, semi-automatic/manual calibration
Butterfly side cameras	2x24MP, horizontal or vertical mounting, semi-automatic/manual calibration
GNSS	
Second GNSS antenna	Leica AS11 GNSS antenna for more accurate heading
Upgrade	Upgrade options available, contact your sales representative for more information
Customer Care Packages	Various multi-year CCPs covering support, hardware and software maintenance, extended warranty, re-calibrations and loan units are offered

Software

Pegasus FIELD	Multi-lingual browser-based interface, accessible via Wi-Fi or ethernet cable, mission planning, autonomous data acquisition, real-time anonymisation, in-field exports, remote support
Pegasus OFFICE	Multi-lingual browser-based interface for post-processing, trajectory refinement, point cloud adjustment, GCP management, image anonymisation, point cloud classification, point cloud colourisation, data export

Swiss Technology by Leica Geosystems

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1 Root mean square 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 countries.
6 Results based on a typical configuration. May vary according to configuration, environmental, and battery conditions.

The Leica Pegasus TRK300 is not available for ordering in all countries. For further details, please contact your local Leica Geosystems sales representative.

Integrate with LOC8 – Lock & Locate
For more information visit: leica-geosystems.com/LOC8

Leica Geosystems AG
Heinrich-Wild-Strasse
9435 Heerbrugg, Switzerland
+41 71 727 31 31

- when it has to be right

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