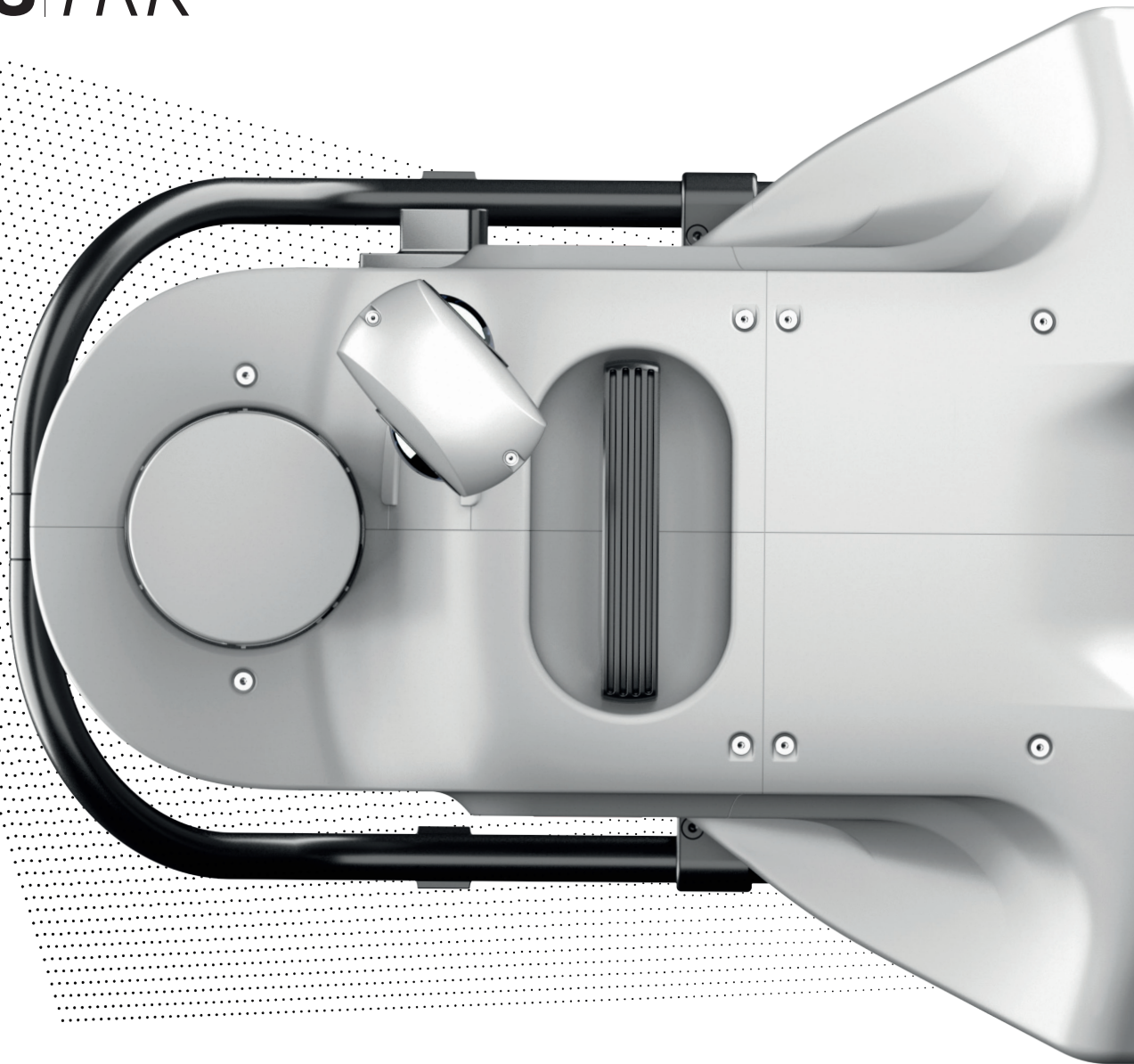


THE
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Leica Pegasus TRK Neo & Evo

Data Sheet

Autonomous. Intelligent. Simplified.

System Performance	TRK Neo		TRK Evo	
Absolute accuracy ¹ in [X,Y], [Z]	No GNSS outage	60 sec GNSS outage	No GNSS outage	60 sec GNSS outage
Post-processing	11mm, 11mm	14mm, 16mm	11mm, 11mm	14mm, 16mm
RTK	12mm, 12mm		12mm, 12mm	
Scanner	TRK500 Neo	TRK700 Neo	TRK500 Evo	TRK700 Evo
Effective measurement rate	500kHz	1000kHz	1000kHz	2000kHz
Scan speed	Up to 250Hz	Up to 500Hz	Up to 267Hz	Up to 534Hz
Precision	TRK Neo 3mm		TRK Evo 1mm	
Maximum range 50% reflectivity at 200kHz / 500kHz	490m / 250m			
Maximum range 10% reflectivity at 200kHz / 500kHz	205m / 130m		182m	
Number of returns	Up to 4		1	
Minimum range	1.5m		0.3m	
Field-of-view	360° full circle		360° full circle	
Laser class	Class 1, eye safe		Class 1, eye safe	
Camera				
Maximum system resolution	120MP powered by SmartFuse technology			
Type	360° Panorama	Butterfly Side	Pavement	Front
Resolution	24MP	48MP	24MP	24MP
Mounting	Fixed	Flexible; Hz & V	Fixed	Fixed
Focal length	3.3mm	12.45mm	12.45mm	12.45mm
Calibration	Permanent	Self-calibrating	Self-calibrating	Self-calibrating
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			
Positioning				
GNSS	555 channel, multi-constellation, multi-frequency			
Antenna	Fully integrated, with additional second antenna support			
SLAM	Dual SLAM scanner integration for optimised position in challenging conditions			
DMI	Supported - see "Accessories" section			
RTK	HxGN SmartNet / NTRIP networks			

Remote Services

Theft deterrence² 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

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

TRK500 Neo	TRK700 Neo	TRK 500 Evo	TRK700 Evo
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Operating time	7h / battery unit	6h / battery unit	3.5h / battery unit	2.5h / battery unit
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Transport Transportation mode for ground and aircraft shipping

Fully compliant to dangerous goods UN 3480/3481

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

Environmental characteristics

	TRK500/700 Neo	TRK500/700 Evo
Maximum speed	130km / h	130km / h
Temperature range operating	-10°C to +50°C	-10°C to +50°C
Temperature range storage	-20°C to +50°C	-20°C to +50°C
IP rating	IP67 during operation, fully dust tight and withstands temporary immersion under water	IP65 IP66 with protection cap
Shock and vibration	Withstands 4g shocks, ISO9022, MIL-STD-810H	

Dimensions

	TRK500 Neo	TRK700 Neo	TRK500 Evo	TRK700 Evo
Dimensions [L/W/H]	70 / 33 / 56cm	72 / 46 / 56cm	70 / 33 / 56cm	72 / 46 / 56cm
Weight	18 kg	23 kg	21 kg	29 kg

Mounting

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

Accessories and Options DMI

(Distance Measurement Instrument)

Mechanical DMI

Mechanical wheel odometer for road applications

Optical DMI

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

Rail DMI

Optical odometer, dedicated for rail applications

Cameras

Front camera

24MP, horizontal mounting, self-calibrating

Rear camera

24MP, horizontal mounting, self-calibrating

Butterfly side cameras

48MP, horizontal or vertical mounting, self-calibrating

GNSS

Second GNSS antenna

Leica AS11 GNSS antenna for faster initialisation by more accurate heading

Upgrade

Upgrade from TRK500 to TRK700 available

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

Cyclone Pegasus OFFICE

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

Cyclone MMS DELIVER

Information extraction and feature extraction for rail and road applications



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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