

Leica Pegasus TRK Neo Data Sheet

Autonomous. Intelligent. Simplified.





System Performance				
Absolute accuracy ¹ in [X,Y], [Z]	No GNSS outage	60 sec GNSS outage	-	
Post-processing	11mm, 11mm	14mm, 16mm	-	
RTK	12mm, 12mm			
Scanner	TRK500 Neo	TRK700 Neo	_	
Effective measurement rate	500kHz	1000kHz	-	
Scan speed	Up to 250Hz	Up to 500Hz		
Maximum range 50% reflectivity at 200kHz / 500kHz	490m / 250m		_	
Maximum range 10% reflectivity at 200kHz / 500kHz	205m / 130m			
Number of returns	Up to 4	Up to 4		
Minimum range	1.5m		_	
Field-of-view	360° full circle			
Laser class	Class 1, eye safe			
Camera				
Maximum system resolution	120MP powered by SmartFuse technology			
Туре	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 "Ac	cessories" section		

Remote Services				
Theft deterrence ²	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				
Туре	Vehicle independent			
	Hot-swappable, up to 3 x Li-lon Pegasus battery units			
Interface	Ruggedised, IP54, health monitoring	Ruggedised, IP54, industrial grade, 2.4 inch colour LCD displaying real-time battery health monitoring		
	TRK500 Neo	TRK700 Neo		
Operating time	7h / battery unit	6h / battery unit		
Transport	Transportation mod	Transportation mode for ground and aircraft shipping		
	Fully compliant to dangerous goods UN 3480/3481			
Control Unit				
Туре	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 3.81	2 x 2TB or 2 x 3.8TB, real-time data stream to high performance, removable SSD`s		
Environmental characteristics				
Maximum speed	130km / h	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	TRK500 Neo	TRK700 Neo		
Dimensions [L/W/H]	70 / 33 / 56cm	72 / 46 / 56cm		
Weight	18 kg	23 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 odometer, for road applications compliant to various "Motor Vehicle Safety Regulations" Optical odometer, dedicated for rail applications		
Optical DMI			
Rail DMI			
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 availabe		
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

Cyclone MMS DELIVER

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

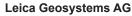
All rights reserved. Printed in Switzerland - Copyright Leica Geosystems AG, Heerbrugg, Switzerland 2022. 966256en - 05.22 1. One sigma with DMI on Leica Geosystems reference area.

Post-processing software, project management, trajectory refinement, point cloud

classification and anonymisation, feature extraction and data export

Information extraction and feature extraction for rail and road applications

2. Not available in all geographical regions.



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

