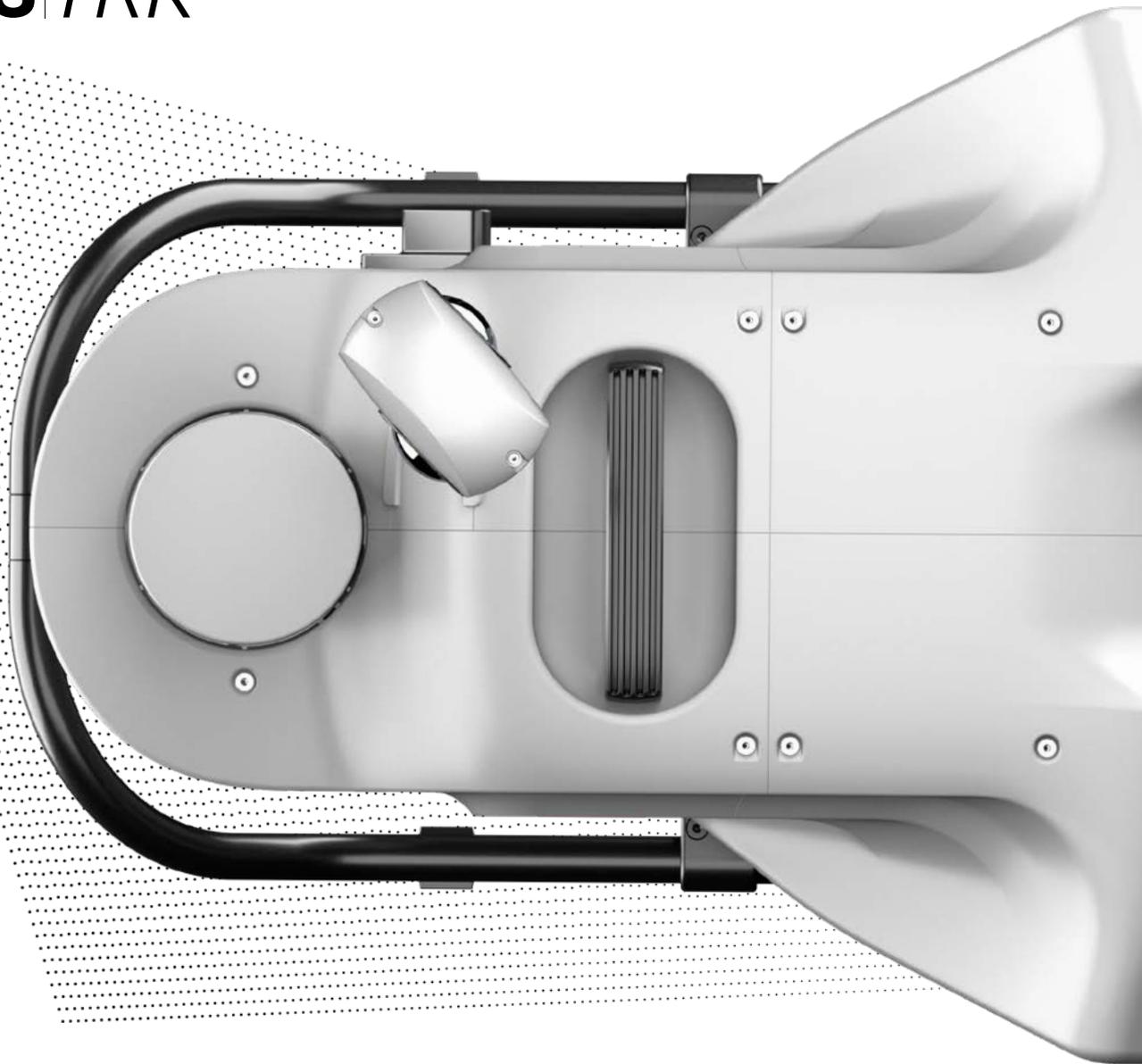


**THE
FUT
URE
IS|TRK**



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 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

| 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 | | | | | | | | |
| | <table><thead><tr><th>TRK500 Neo</th><th>TRK700 Neo</th><th>TRK 500 Evo</th><th>TRK700 Evo</th></tr></thead><tbody><tr><td>7h / battery unit</td><td>6h / battery unit</td><td>3.5h / battery unit</td><td>2.5h / battery unit</td></tr></tbody></table> | TRK500 Neo | TRK700 Neo | TRK 500 Evo | TRK700 Evo | 7h / battery unit | 6h / battery unit | 3.5h / battery unit | 2.5h / battery unit |
| TRK500 Neo | TRK700 Neo | TRK 500 Evo | TRK700 Evo | | | | | | |
| 7h / battery unit | 6h / battery unit | 3.5h / battery unit | 2.5h / battery unit | | | | | | |
| Operating time (typical) | | | | | | | | | |
| 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 SSDs |

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 | 18kg | 23kg | 21kg | 29kg |

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" and occasional rail use.

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, 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



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. Not available in all geographical regions.



Integrate with LOC8 - Lock & Locate

For more information visit: leica-geosystems.com/LOC8

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