

# Leica Pegasus:Stream

## Mobile reality capture



# Leica Pegasus:Stream – Above & below ground mass digitisation

What is below ground affects what is going on above ground. You need to understand both. The Leica Pegasus:Stream not only makes buried objects visible but uncovers potential dangers, such as unintentionally damaging utility assets when digging. Increase safety and minimise unnecessary costs by avoiding utility outages.

With combined laser scanning and imagery above and ground penetrating radar below, you capture the complete view of a targeted area at the highest accuracy available. This mass digitisation of infrastructure assets, such as street signs above and pipes below, are captured in less time without needing to stop traffic, increasing the safety of the crew. The Pegasus:Stream has the potential to collect up to 100 km per day at 15 km/hr, providing digital documentation for GIS and CAD modelling. The Pegasus:Stream gives you the complete picture for accurate and current data collection, documentation and management.



## MASS DIGITISATION

Leica Pegasus:Stream is the only vehicle towed reality capturing platform for an extensive 3D mapping offering unique advantages.

- Cost and time reduction with no need to block traffic or perform surveys during night
- Increased safety for operators by moving them from the field to inside the vehicle
- Massive array of 40 antennas in two polarisations for simultaneous detection of main and junction pipes in one path
- GIS and CAD based outputs for an efficient map production



## Manage your assets

The Pegasus:Stream gives you the complete picture for accurate and current data collection, documentation and management. With combined laser scanning and imaging above and ground penetrating radar below, you capture the complete view of a targeted area at the highest available accuracy. This mass digitisation of infrastructure assets are captured in less time increasing the safety of the crew.



## Find buried objects

The Pegasus:Stream not only makes buried objects visible but uncovers potential dangers, such as unintentionally damaging utility assets when digging to minimise unnecessary costs by avoiding utility outages. Unlike sole cable locators, it can detect any material, metal or otherwise, up to 10 m underground whilst continuously flowing with traffic to capture complete views and without blocking the road.

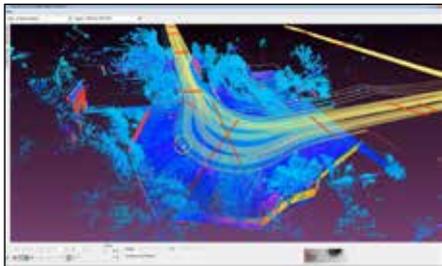
## Easy to use - Integrated hardware & software for fast setup & data delivery



### INTEGRATED ACQUISITION WORKFLOW

Own complete control over the mission and system health with a comprehensive cockpit.

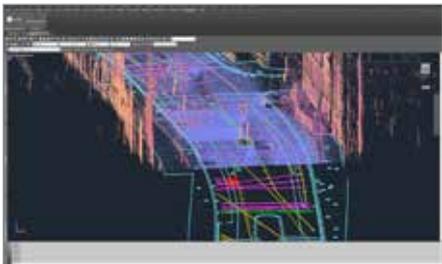
- GPR C-Scan and B-Scan for longitudinal and vertical pipes
- Real time tomography (time slices)
- Acquire up to 256 Mpx panoramic per second
- Create 3D point clouds with 1 million measurements per second



### GIS & CAD INTEGRATION

Pegasus:Stream offers a dual workflow for GIS and CAD assuring fast and intuitive data handling.

- Identified targets can be automatically transferred to CAD or GIS for professional SUE / utility mapping
- Leverages automatic feature extraction of Pegasus:MapFactory software suite for above ground feature extraction



### SURVEY GRADE GEOLOCATION

Data collection takes count of geological characteristics

- Pitch, roll and yaw are measured with an high-end inertial measurement unit (IMU)
- Accurate to as little as 5 percent of the pipe depth, Pegasus:Stream detects assets precisely up to 10 m depth



### Uncover network leakages

Increase efficiency of water networks and reduce revenue loss by measuring density changes underground to uncover leakages. With laser scanning above and ground penetrating radar below, you can potentially collect up to 100 km per day at 15 km/hr to periodically inspect your complete network in a single pass providing accurate digital documentation for GIS and CAD modelling.



### Detect cavities & foundation loss

Reduce efforts and detect cavities before they turn into sinkholes, avoiding time consuming and expensive repairs. Pegasus:Stream detects loss of foundation and lateral extents beneath paved roadways, providing GPR data below ground and images and 3D point cloud above ground to precisely detect and correlate underground and surface behavior.

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 Mobile reality capture



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- when it has to be **right**

