

Subsurface Mapping

GS9000

Multichannel GPR





GS9000

See Below Ground

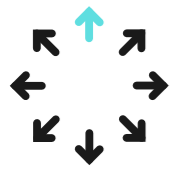




GS9000

Multichannel GPR pushcart

Modular sensors. Highest data quality.
Powerful 3D software. 100% real time.



Versatile

Two swappable array modules to cover one vast array of subsurface mapping applications.



Efficient

Simple to set up and operate, with on-the-fly data visualization to avoid interpretation errors on site



Accurate

Seamless GPR + GNSS technology integration for accurately georeferenced high-density data.



Overview



Wirelessly controlled from an iPad Pro with **gestures**

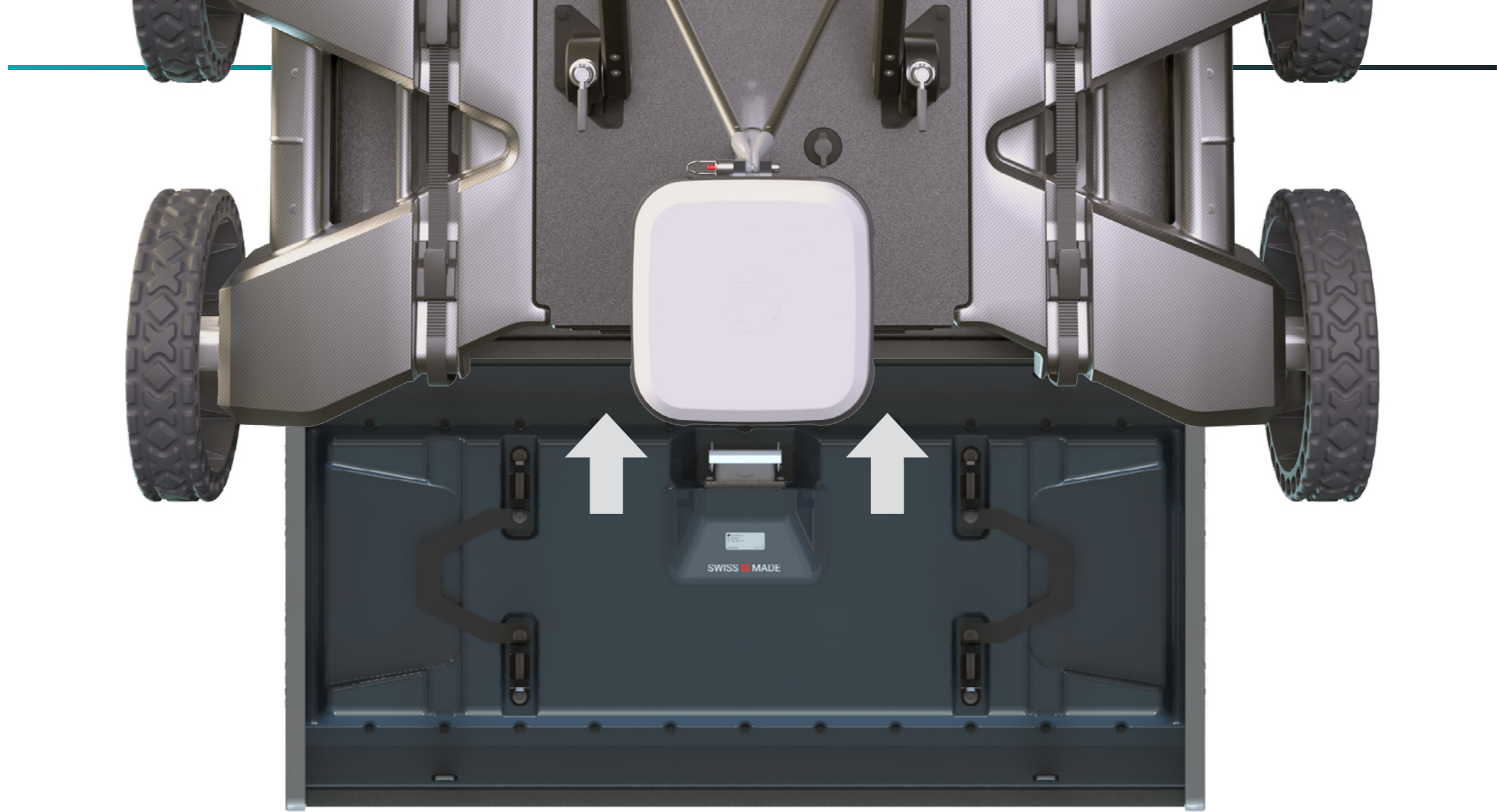
Excellent **ergonomics** designed for the best manoeuvrability

Built in carbon fiber to provide **durability and lightness**

Its smart **modular** concept allows to quickly attach the right GPR array antenna for the job at hand

Powered by **simple** hot-swappable power banks

Fully **foldable** for easy transport



Technology

Multichannel Stepped Frequency Radar



Outstanding data quality

Live signal modulation across a wide bandwidth and multiple channels, resulting in perfectly balanced radar imaging.

SWISS  MADE

Compatible GPR array modules

GX1

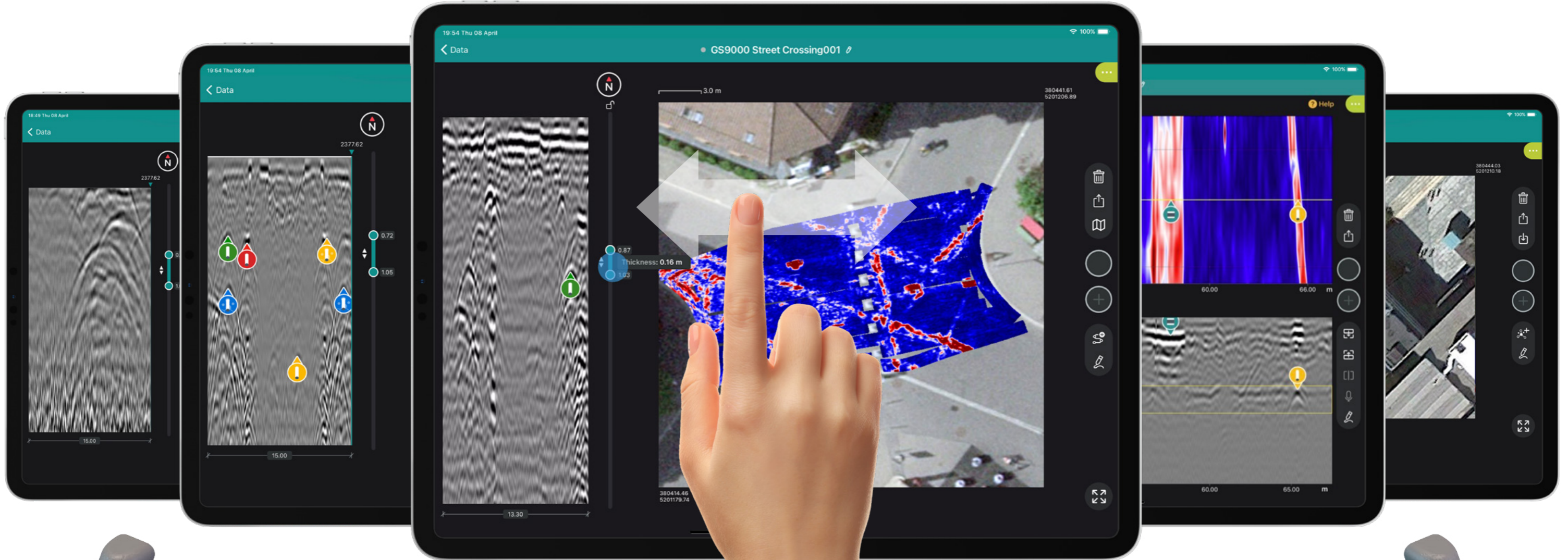
High frequency range

- For structural applications
- Ultra-high resolution in first meter
- Frequency range: 500-3,000 MHz
- 35 + 15 channels, dual polarization
- 2.5cm (1 in) channel spacing

GX2

Low frequency range

- For utilities and geophysics
- Optimal detection in first 2-3 m
- Frequency range: 30-750 MHz
- 83 cm wide swath - 11 channels
- 7.5cm (3 in) channel spacing



Software

FIELD APP

Live georeferenced data visualization



Live tomography

See buried objects forming on a map as you walk over them. No waiting time, all georeferenced.



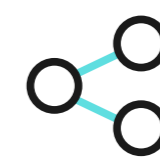
Intuitive data

Complex data presented in an understandable way. All needed tools to interpret and digitize the reality on site.



Simple gestures

Interact with the user interface with simple, familiar gestures. Full control at your fingertips.



Instant sharing

Get your field projects, reports and drawings to your colleagues and clients in just one click.



Software

POST-PROCESS



Manage large projects
Merge multiple field jobs into one same project and see the big picture on a map.



Increase accuracy
Easily apply advanced filters to raw data, and correct topographically for the highest accuracy.



Get more insights
Organize how to see the data with advanced 2D and 3D visualization modes to not miss any detail.



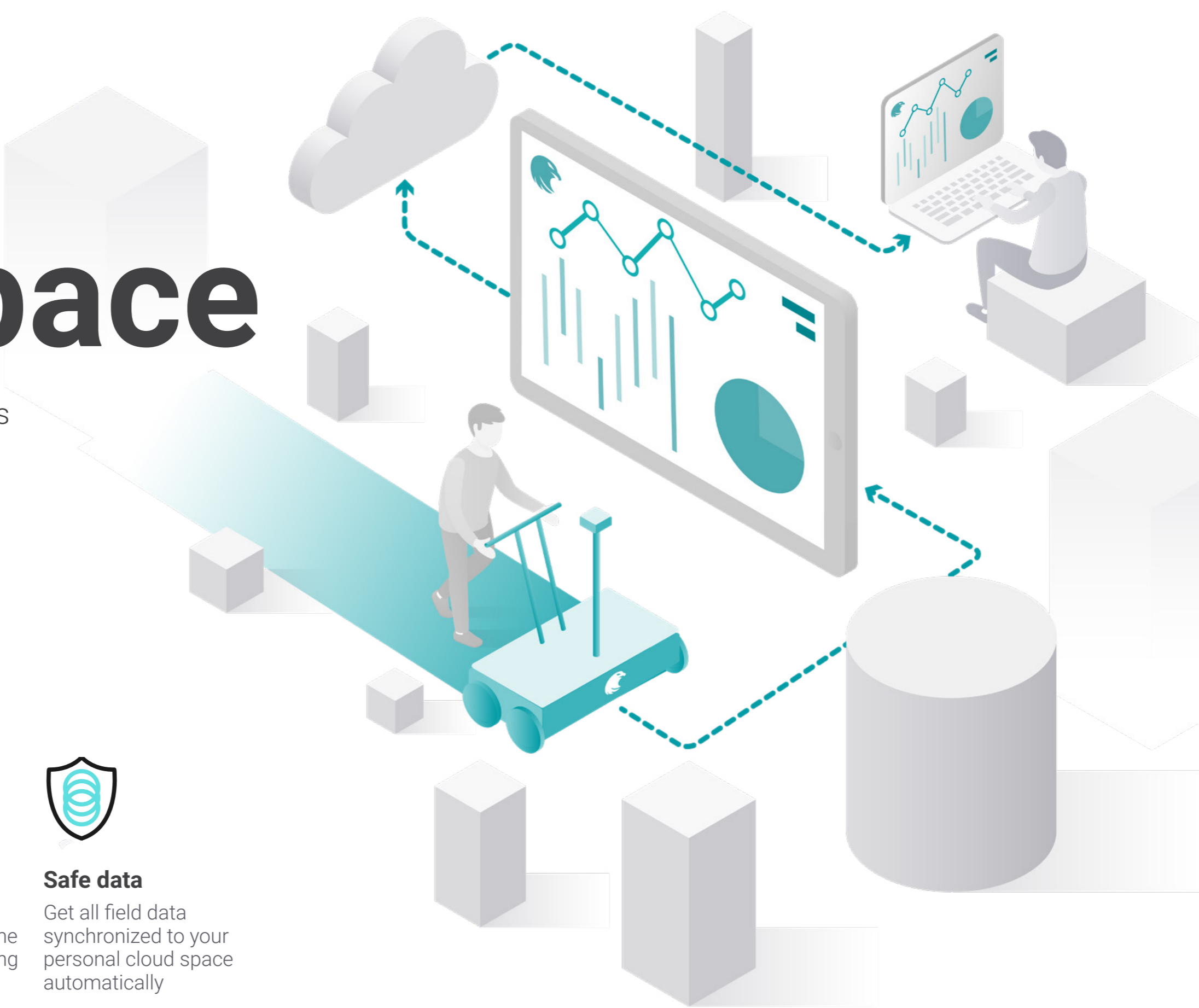
Automated mapping
Ultra-fast algorithms to analyse raw data and create application-specific diagnostic maps



All powered by Workspace

Cloud-connected workflow & services

Collect
Sync
Share



Streamlined workflow

Field data management, post-processing software and sharing options integrated in the same platform



Integrated services

Data conversion tools and services like real-time GNSS corrections running online for maximal convenience



Safe data

Get all field data synchronized to your personal cloud space automatically



Applications

GS9000

SUE & Utility mapping

Detection of buried pipes, ducts and cables for safe digging or utility mapping purposes



Road & Bridge inspection

Structural diagnostics and monitoring of bridges, concrete structures and roadways



Geophysical surveys

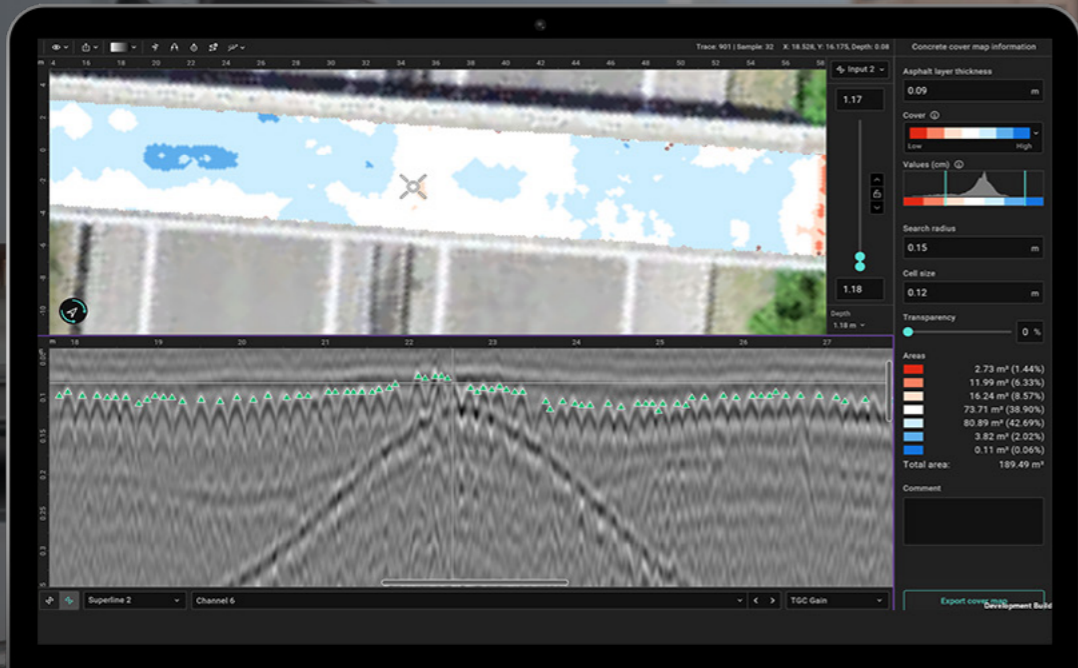
Geotechnical projects and detection of geological anomalies and hazards



Archaeology & Forensic explorations

Prospection of archaeological sites, detection of unexploded elements





GS9000

Combined with GX1

- Bridge condition & deterioration
- Concrete cover & moisture mapping
- Asphalt layer thickness analysis
- Fiber cable detection and mapping

GS9000

Combined with GX2

Subsurface utility mapping

Underground cavity detection

Archaeological site prospections

Unexploded ordnance surveys





HW Specs

GS9000



GX1 array module

500-3000
MHz

35 + 15 channels
2.5 cm spacing

GX2 array module

30-750
MHz

11 channels
7.5 cm spacing



Dimensions

45Kg

72 x 118 x 44 cms

Up to

27,500
scans/m

5,000
points / linear m

Powered by



45W Power bank

Real-time 3D accuracy



SSR included
NTRIP compatible

1-5 cm

Total station compatible

Wireless



optional USB-C



SW Specs



Field software

Field methodology

- Free Path
- Superline

Field calibration options

- Odometer calibration
- Velocity by hyperbola fitting
- Velocity for multiple layers

Live Image Processing

- Time Slice View (geo-referenced)
- Hilbert migration
- Depth range adjustment
- Dynamic Gain / Manual Gain
- Sensitivity filter
- Background removal filter
- Noise cancellation filter
- Frequency filter

Cloud services

- Live data synchronization to Workspace¹
- Permanent data storage
- Raw data export to SEG-Y
- Instant CAD / SHP / KML drawing generation
- Instant report generation
- Share via url

Live Display Options

- Satellite imagery
- GNSS trajectory
- CAD object layers
- Spectral / seismic color palettes

Coordinate Systems

- EPSG global database
- Local grid models
- Geoid models

On-site annotations

- Tags
- Points of interest
- Photos
- Voice markers
- Markups
- Linework

Languages

- English, Spanish, French, German, Italian, Chinese, Japanese, Korean

Display unit

- Any iPad Pro[®] with M2 chip²
- Screen resolution: up to 2732 x 2048 pixels
- Storage capacity: up to 2 TB

Post-processing software

Web version

- Running on Workspace personal cloud space

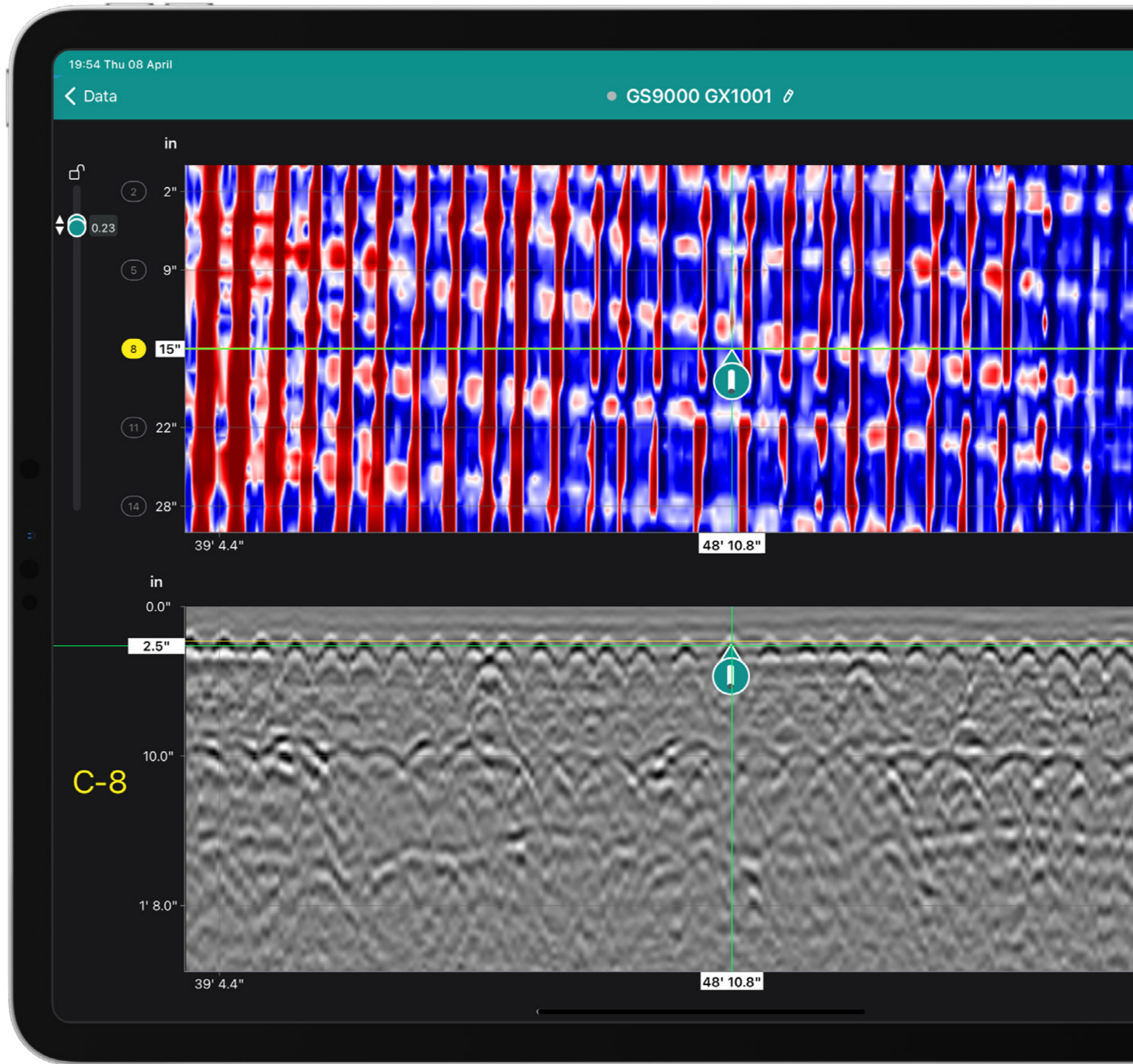
Local version

- PC running Windows 10 or superior³

Special modules

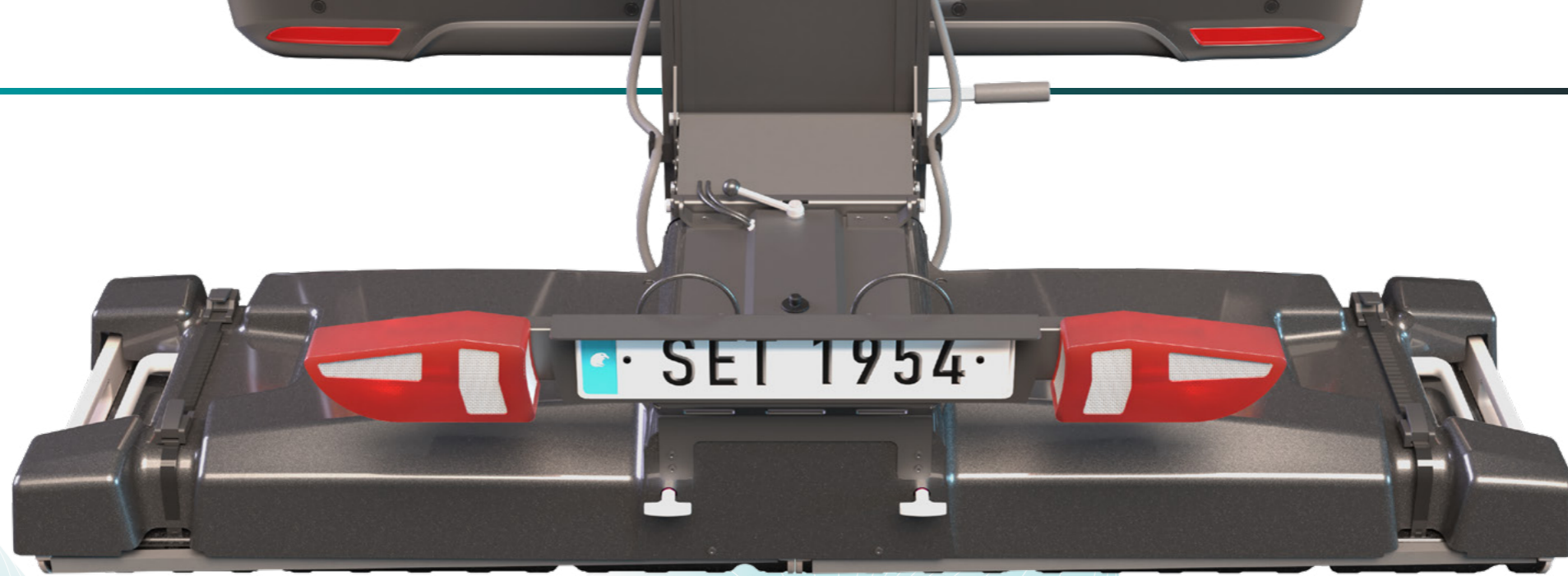
- 3D multichannel
- Utility Mapping
- Bridge inspection

1. Up to 1 TB of personal space per user ID
 2. Running an up-to-date iOS version; recommended models: iPad Pro[®] WiFi + Cellular (2022 model or superior)
 3. Recommended: x64 architecture, 1 TB hard drive, 32 GB of RAM memory, Full HD monitor





GM8000
Multichannel
mobile GPR



All dimensions of subsurface mapping

GS9000
Multichannel
GPR cart



GS8000
Single-channel
GPR cart





Company

Screening Eagle Technologies is a connected ecosystem of software and sensors for intelligent inspection of the built environment.

Our mission is to protect the built world and enable a society that is safe for all, is of high quality, operates reliably and is truly sustainable. We aim to democratize Built World Data, empower service professionals with easy-to-operate technology, and allow asset owners to make data-driven investment decisions. Together, we contribute to a society that gives back more to nature than it consumes, creating a built world for future generations to enjoy and thrive within.

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