

Subsurface Mapping

# GS9000

Multichannel GPR







GS9000

# See Below Ground



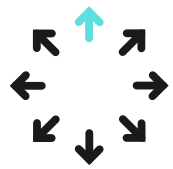




# GS9000

## 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

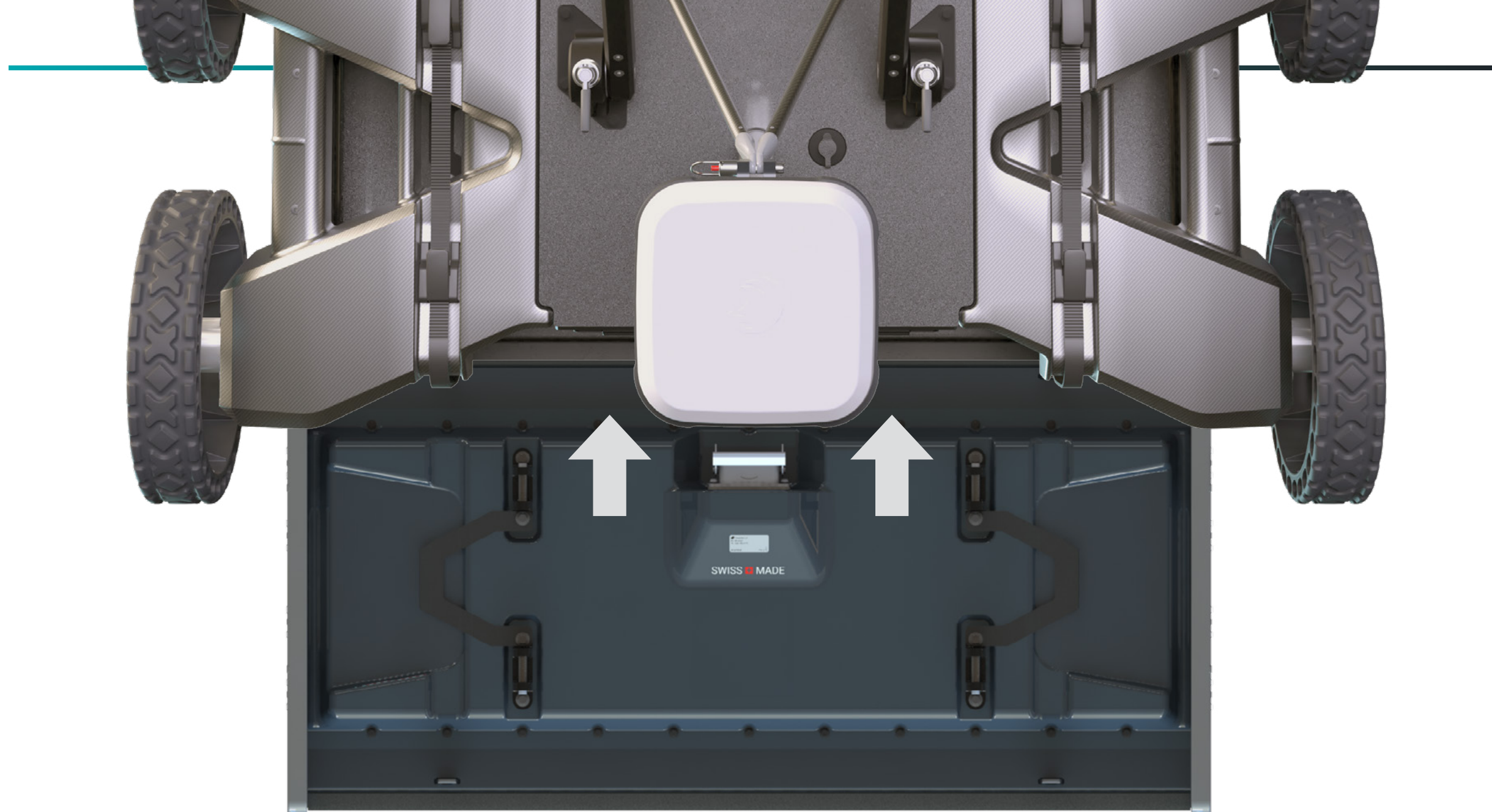
Powered by **simple** hot-swappable power banks

Fully **foldable** for easy transport





GS9000



# 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

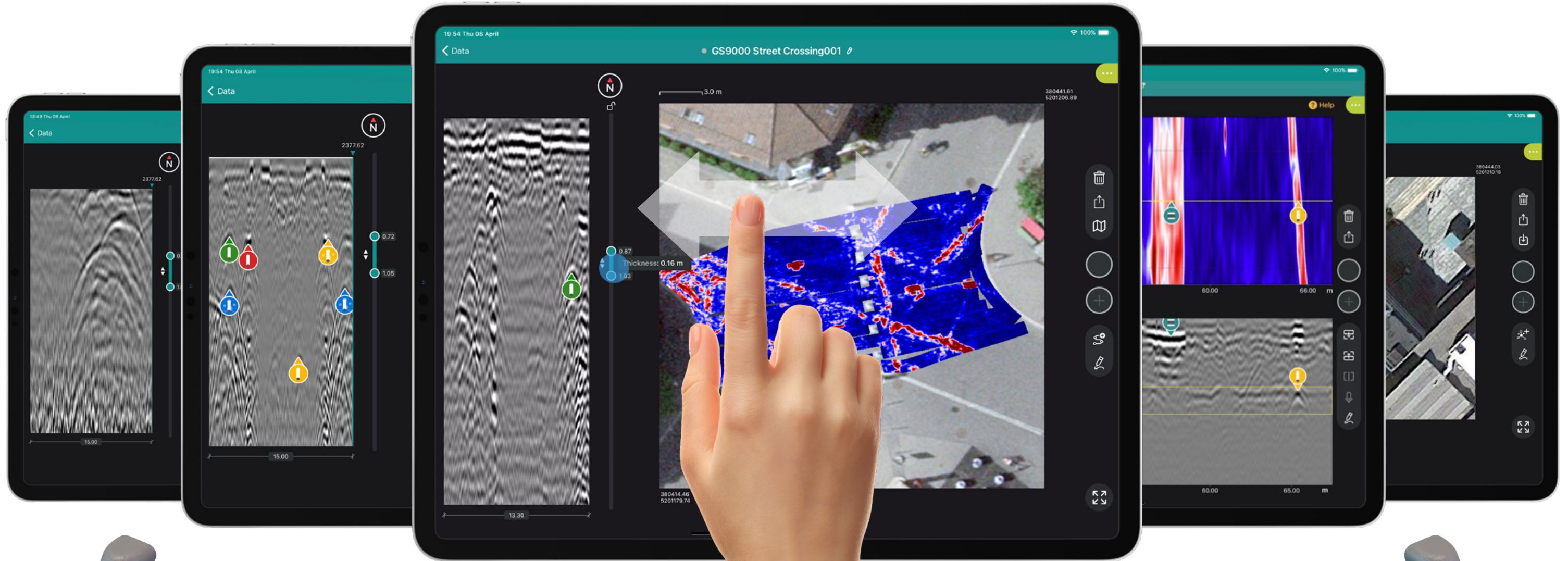
- For structural applications
- Ultra-high resolution in first meter
- Frequency range: 500-3,000 MHz
- 35 + 15 channels, dual polarization
- 2.5cm (1 in) channel spacing

### 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.



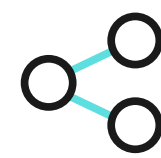
### Intuitive data

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



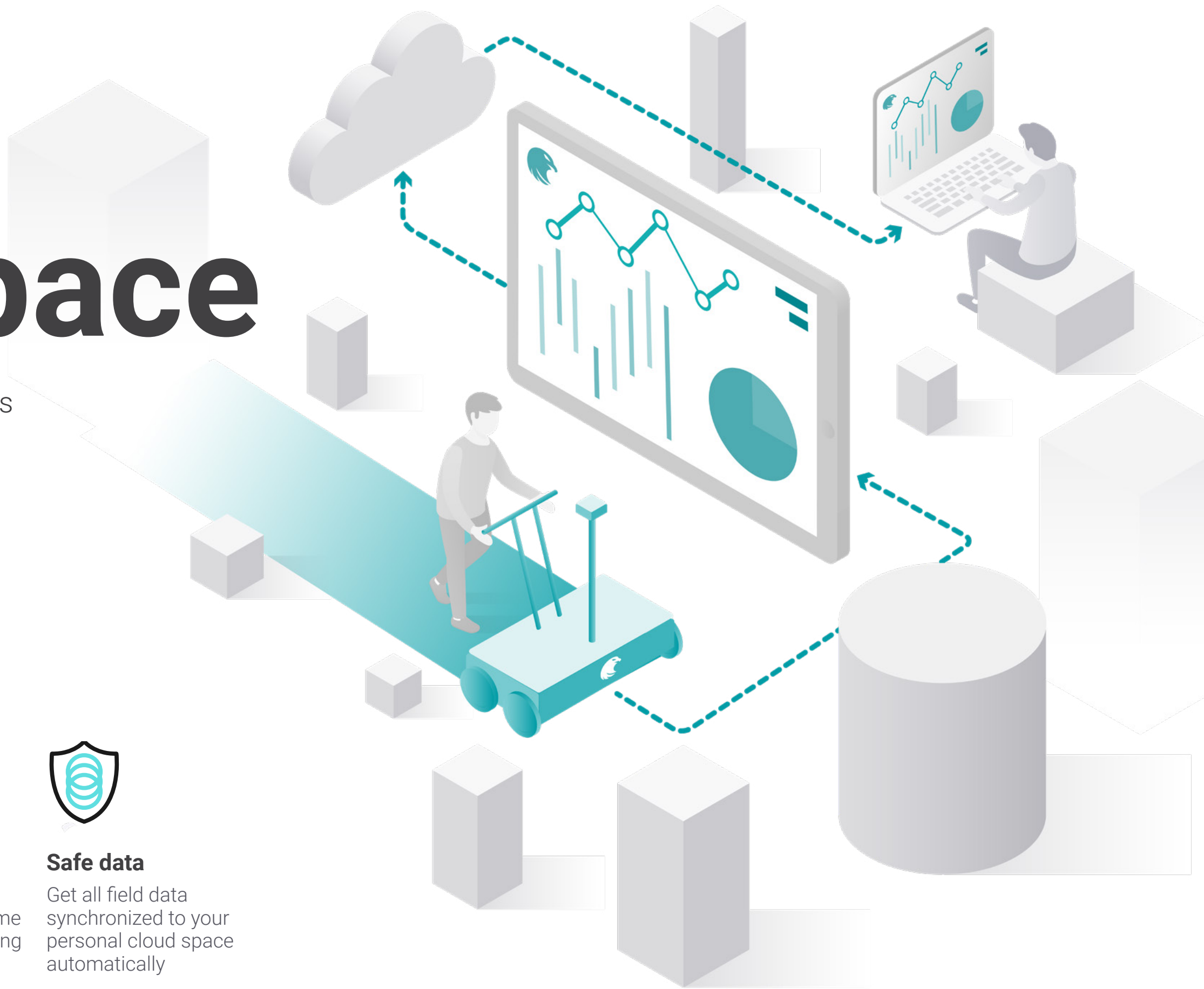
## Integrated services

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







GS9000

# 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

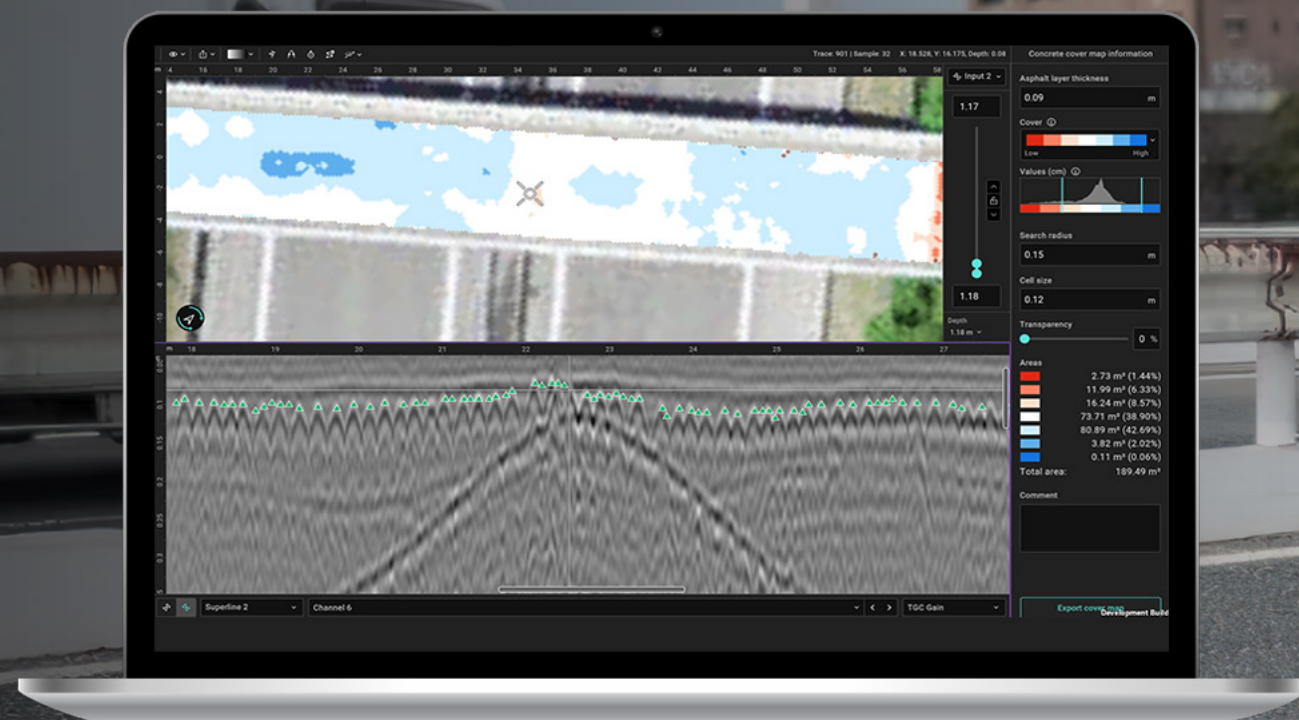


### Archaeology & Forensic explorations

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







GS9000

FC CE UK CA

# 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

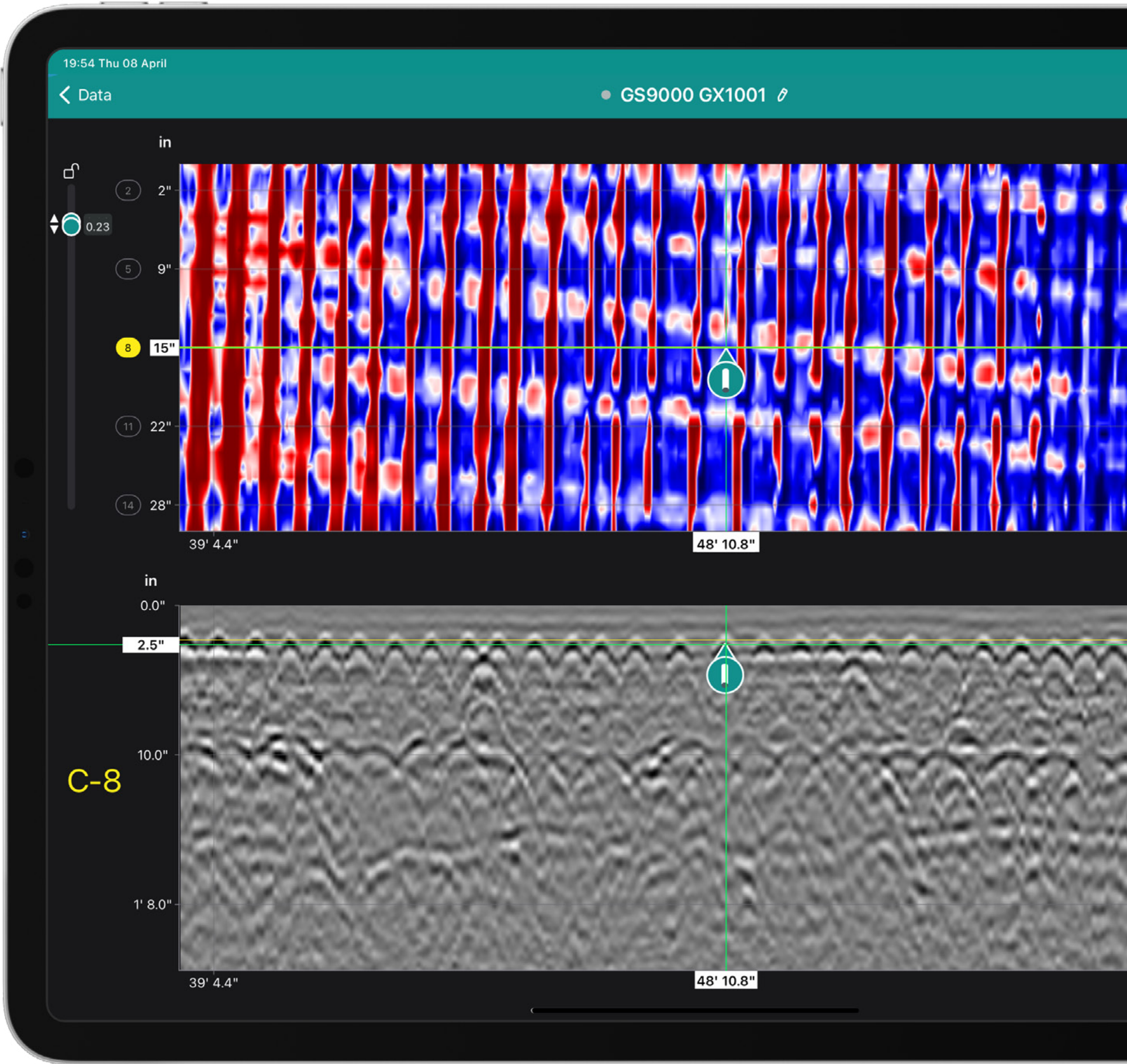


## Field software

|                                   |  |
|-----------------------------------|--|
| <b>Field methodology</b>          | <b>Field calibration options</b>                                     |
| Free Path                         | Odometer calibration   |
| Superline                         | Velocity by hyperbola fitting  |
| <b>Live Image Processing</b>      | Velocity for multiple layers   |
| Time Slice View (geo-referenced)  | <b>Cloud services</b>  |
| Hilbert migration                 | Live data synchronization to Workspace <sup>1</sup>                  |
| Depth range adjustment            | Permanent data storage   |
| Dynamic Gain / Manual Gain        | Raw data export to SEG-Y   |
| Sensitivity filter                | Instant CAD / SHP / KML drawing generation                           |
| Background removal filter         | Instant report generation  |
| Noise cancellation filter         | Share via url  |
| Frequency filter                  |  |
| <b>Live Display Options</b>       | <b>Coordinate Systems</b>  |
| Satellite imagery                 | EPSG global database   |
| GNSS trajectory                   | Local grid models  |
| CAD object layers                 | Geoid models   |
| Spectral / seismic color palettes | <b>Languages</b>   |
| <b>On-site annotations</b>        | English, Spanish, French, German, Italian, Chinese, Japanese, Korean |
| Tags                              | <b>Display unit</b>  |
| Points of interest                | Any iPad Pro® with M2 chip <sup>2</sup>                              |
| Photos                            | Screen resolution: up to 2732 x 2048 pixels                          |
| Voice markers                     | Storage capacity: up to 2 TB   |
| Markups                           |  |
| Linework                          |  |

## Post-processing software

|   |  |
|---|--|
| <b>Web version</b>                        | <b>Local version</b>                           |
| Running on Workspace personal cloud space | PC running Windows 10 or superior <sup>3</sup> |
| <b>Special modules</b>                    |  |
| 3D multichannel                           |  |
| Utility Mapping                           |  |
| Bridge inspection                         |  |



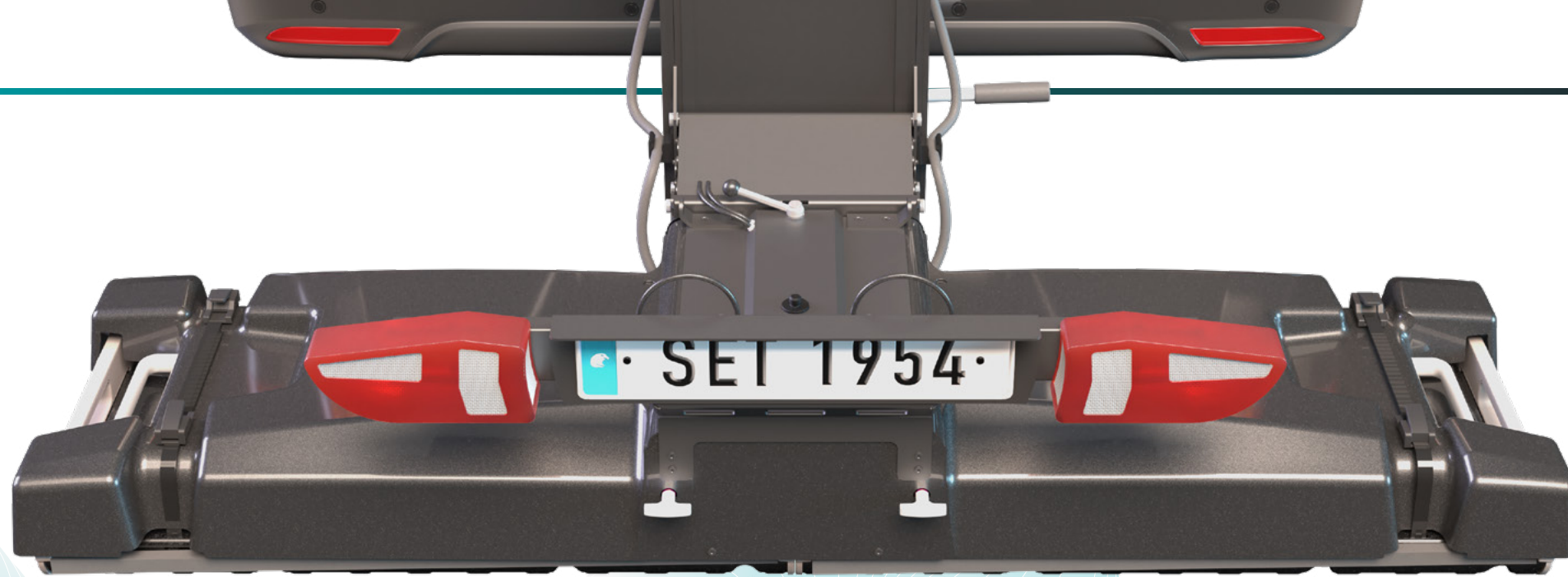
1. Up to 1 TB of personal space per user ID  
2. Running an up-to-date iOS version; recommended models: iPad Pro® WiFi + Cellular (2022 model or superior)  
3. Recommended: x64 architecture, 1 TB hard drive, 32 GB of RAM memory, Full HD monitor





## 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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