Subsurface Mapping

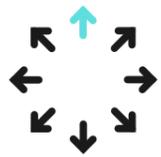# GS9000

Multichannel GPR

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.

Over view

SWISS + MADE

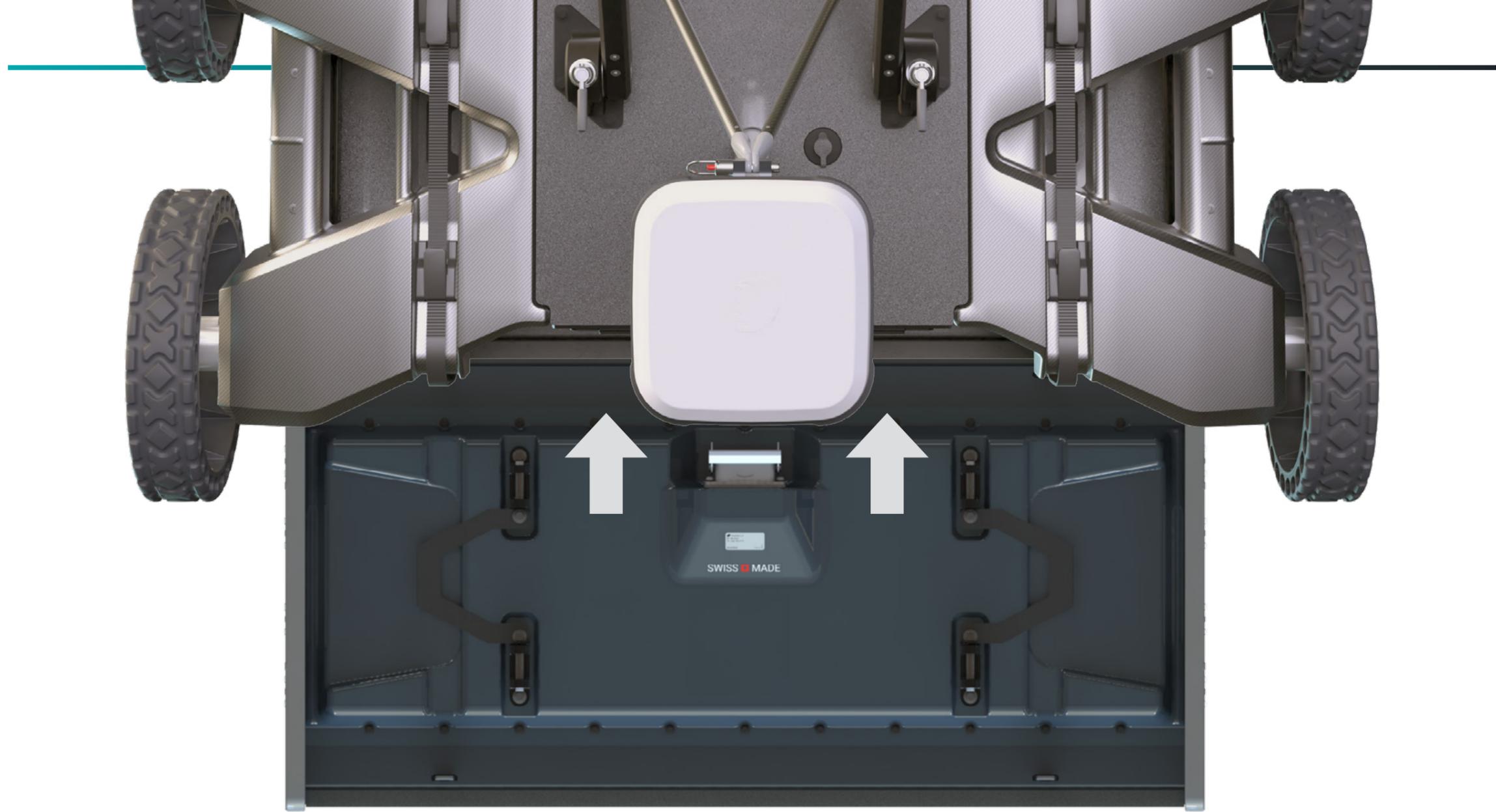Wirelessly controlled from an iPad Pro with **gestures**

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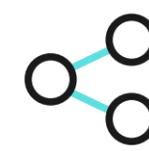
Intuitive data
Complex data presented in an understandable way. All needed tools to interpret and digitize the reality on site.

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.

Soft ware

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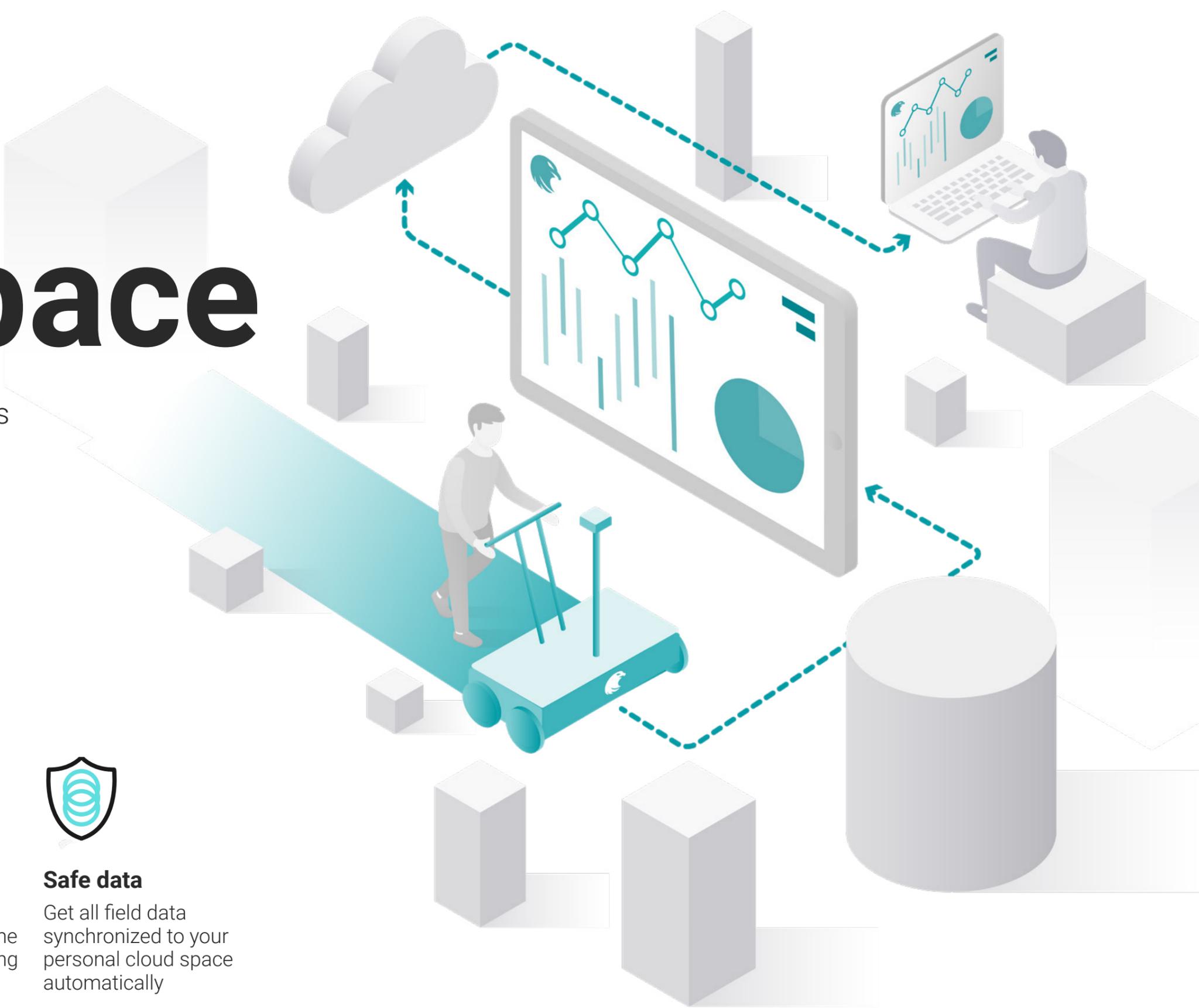
Automated mapping
Ultra-fast algorithms to analyse raw data and create application-specific diagnostic maps

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.
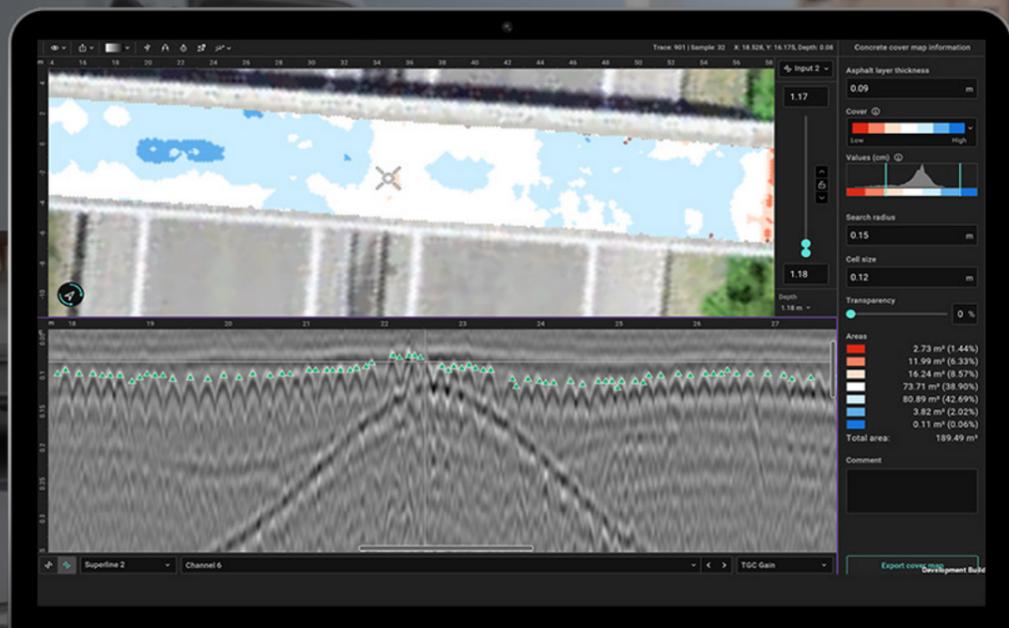
Geophysical surveys

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

FCC CE UKCA

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

Powered by

45W Power bank

Real-time 3D accuracy

SSR included
NTRIP compatible

1-5 cm

Dimensions

45Kg

72 x 118 x 44 cms

Up to

27,500 scans/m

5,000 points / linear m

Wireless

optional USB-C

SW Specs

19:54 Thu 08 April

‹ Data ● GS9000 GX1001 ✎

Field software

Field methodology
Free Path
Superline

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

Live Display Options
Satellite imagery
GNSS trajectory
CAD object layers
Spectral / seismic color palettes

On-site annotations
Tags
Points of interest
Photos
Voice markers
Markups
Linework

Field calibration options
Odometer calibration
Velocity by hyperbola fitting
Velocity for multiple layers

Cloud services
Live data synchronization to Workspace[1]
Permanent data storage
Raw data export to SEG-Y
Instant CAD / SHP / KML drawing generation
Instant report generation
Share via url

Coordinate Systems
EPSG global database
Local grid models
Geoid models

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

Display unit
Any iPad Pro® with M2 chip[2]
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

Special modules
3D multichannel
Utility Mapping
Bridge inspection

Local version
PC running Windows 10 or superior[3]

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
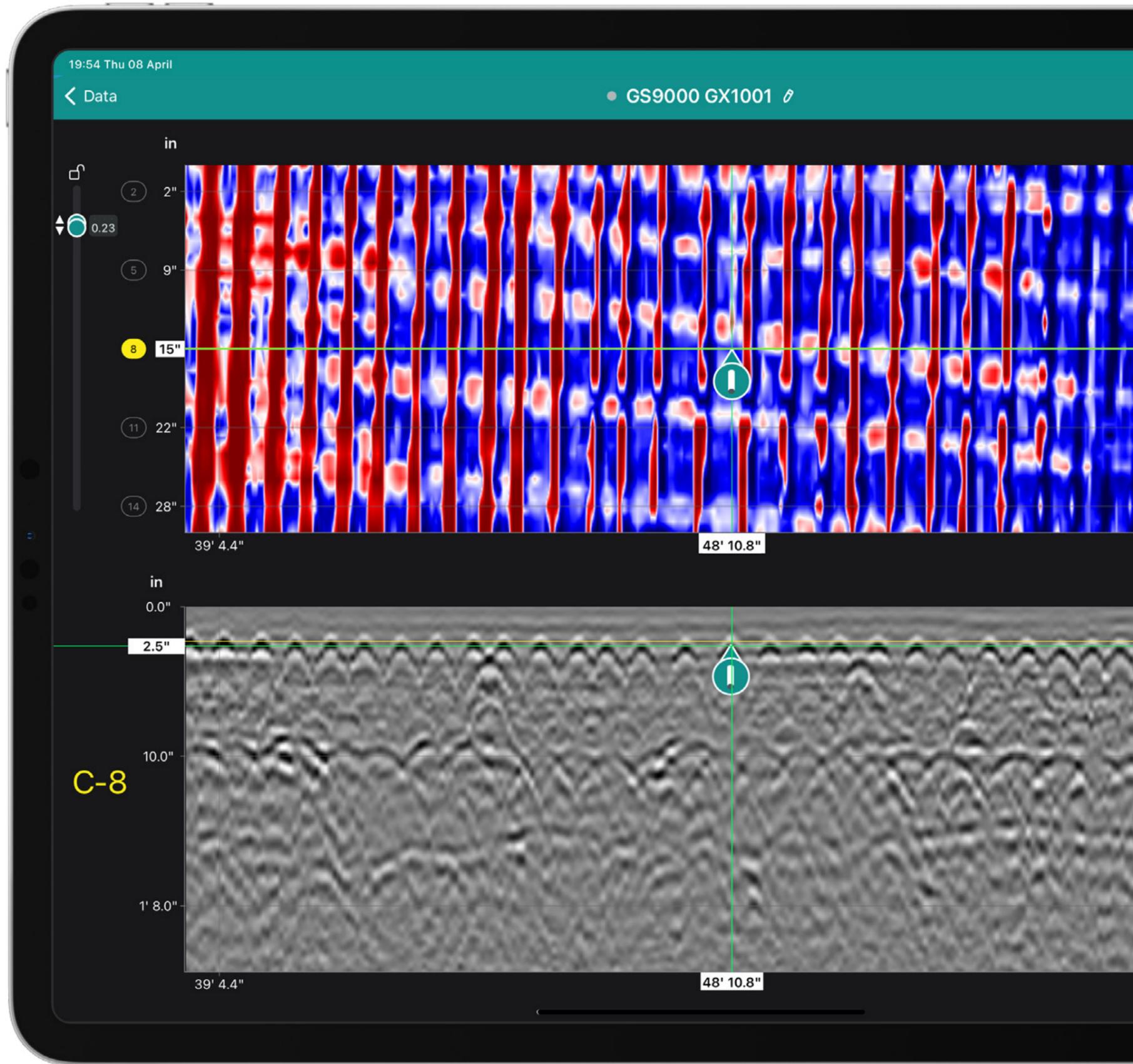
GM8000
Multichannel
mobile GPR
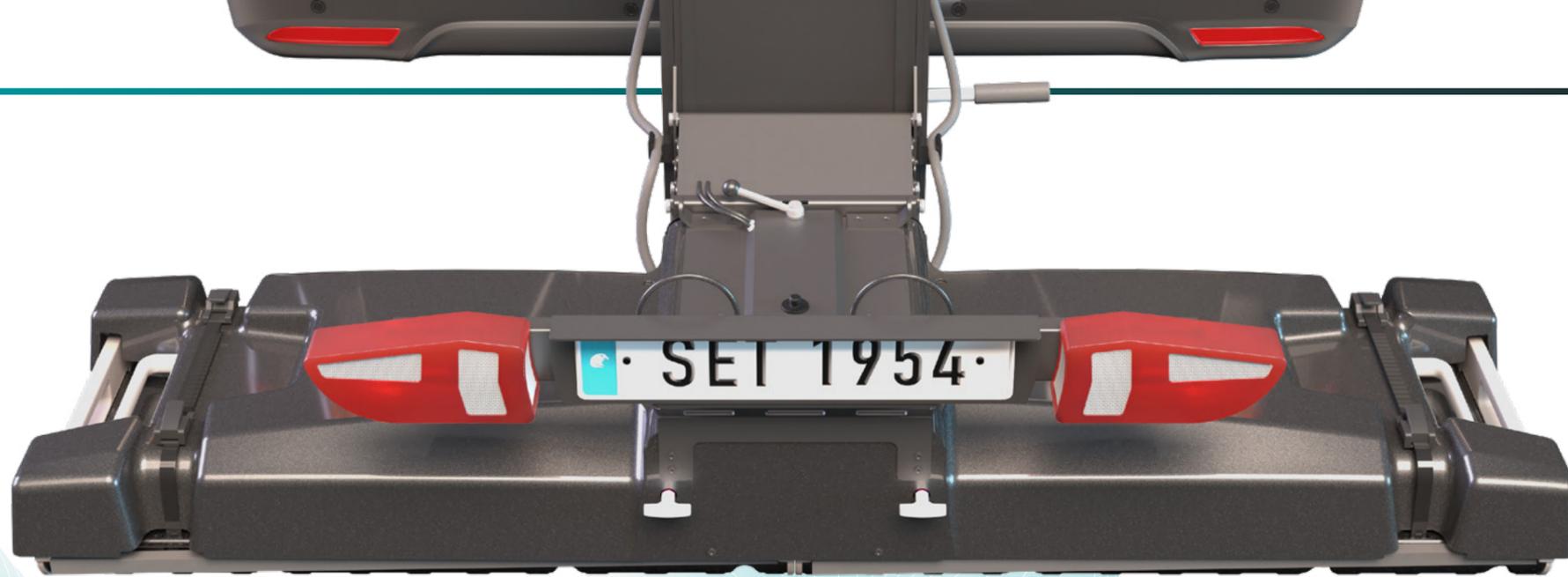
All dimensions of subsurface mapping

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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