HOSKIN
SCIENTIFIC

PROCEQ GROUND PENETRATING RADARS

CONCRETE INSPECTION AND STRUCTURAL IMAGING

SCREENING EAGLE | proceq

hoskin.ca

Supplying Testing & Monitoring Instruments Since 1946

ABOUT HOSKIN

For over seventy years, Hoskin Scientific has been a supplier of testing and monitoring instrumentation to the Canadian market. With offices in Vancouver, Edmonton, Oakville and Montréal our customers are able to receive local sales and technical support in our three major departments.

Our Environmental Department provides solutions for monitoring and sampling biological and chemical parameters in the environment. Our team of environmental sales representatives and diverse product range guarantee that you will find the right products for your application. Specific areas include: water quality, water quantity, soil moisture, plant science, weather stations, indoor air quality, aquatic sampling, and oceanography.

Our Materials Testing Department offers testing equipment for soil, asphalt, petroleum, concrete and cement. Our qualified sales associates focus on providing a sophisticated range of testing equipment complying with the various test methods, ensuring that accurate and consistent test results are always obtained.

Our Instrumentation Department focuses on a wide range of products including optical camera systems, transducers and transmitters, data acquisitions and loggers, signal conditioners and indicators, automation sensors and measurement systems. We have technical sales associates that are trained in various areas and willing to help you with your instrumentation requirements.

RENTALS

We offer high quality, proven equipment that will provide the user with valuable data as well as numerous ways of retrieving, filtering and viewing that data. We carry a wide range of instrumentation, including: water quality, portable gas monitors, soil sampling instruments and more.

Rental Equipment:

- Single and multi-parameter instruments that can be setup for spot checks or extended deployment/data logging
- Water sampling instruments
- Water velocity and stream profiling instruments
- Soil sampling instruments
- Soil vapour sampling instruments
- Portable gas monitoring instruments

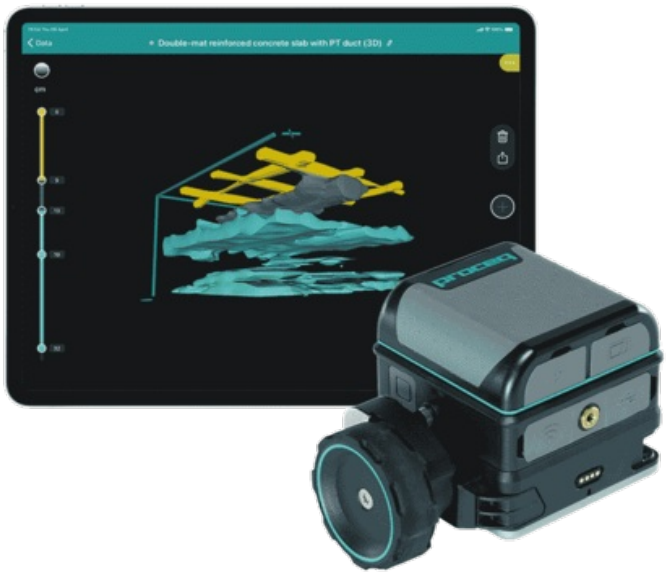
Customer satisfaction is our goal and we make an effort to ensure that all our customers are satisfied with their rental. All rental instruments are cleaned and calibrated before being sent to the user (please note that we also require equipment to be returned clean). If a rental instrument requires recalibration, please return the instrument to us and we will recalibrate at no charge. Any instrument not functioning properly can be exchanged at no cost.

Hoskin Scientific offers technical support over the phone and can also provide hands on demonstrations.

We are constantly expanding and looking for new equipment to add to the rental inventory and welcome all suggestions.

Check our website www.hoskin.ca for current offerings.

Daily, weekly and monthly rental rates available – please call for a quote.



Proceq Ground Penetrating Radars

GP8800

Concrete inspections and structural imaging with SFCW ground penetrating radar technology now fits at the palm of your hand

Performance

Superior depth and clarity of data thanks to the unique Swiss Made radar technology with all the frequencies you'll ever need. Immediate insights with 3D and Augmented Reality.

Versatility

Inspect with ease of use, from the tightest spots to the tallest walls to the longest streets. Superior ergonomics to tackle any challenge with comfort, without cables.

Productivity

A mobile app that lets you annotate measurements with voice, photos and comments. Generate reports and share them instantly. Access your data from anywhere, anytime.

Software / Workspace App

Measurement modes	Superline Scan (1000m / 3281 ft) Area Scan (with Flexible Grid up to 100m2 / 1076 ft2)
Review modes	Superline scan[1] A-scan (incl. envelope) Migrated view Non-migrated view Split view[1] Time-Slice view[2] Basic 3D view AR
Advanced visualization	Time-Slice view Pro 3D view Augmented Reality (AR)
Reporting	Workspace integration Automatic Logbook SEG-Y export Instant report generation Share via URL
Export formats	JPG PNG CSV SEGY HTML
Display Unit Specs*:	Latest Apple® iPad recommended (iPad with iOS 11.0 and higher) Screen size: From 7.9" to 12.9" Resolution: Up to 2732-by-2048 Memory: Up to 2TB Weight: Down to 301 g / 10.6 oz Camera: Up to 12MP Wide and 10MP Ultra Wide Optional: USB-C, 5G, Face ID
Display Unit Sensors*:	LiDAR Scanner (optional) Three-axis gyro Accelerometer Ambient light sensor Barometer Built-in GPS/GNSS

1. GP8100 only; 2. GP8000 & GP8100 only

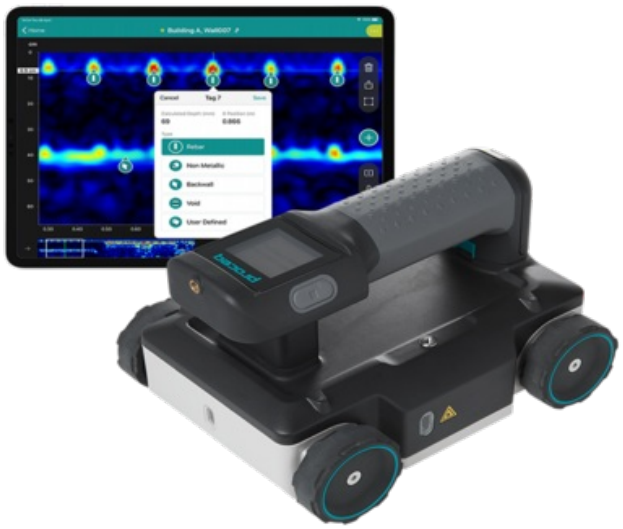
* Depending on iPad model

Processing Unit / Sensor

Radar technology	Stepped-frequency continuous-wave (SFCW) GPR
Modulated frequency range	400 – 6000 MHz
Penetration depth	65 cm / 25.6 in
Battery	Flight-safe, removable pack, 4x AA (NiMH)
Dimensions	8.9 x 8.9 x 7.6 cm 3.5 x 3.5 x 3 in
Weight	487 g / 17.2 oz (excl. battery pack)
Ground clearance	0 cm
Antennas	1
Antenna distance to edge	4.5 cm / 1.77 in
Special features	Wireless wheel, reconfigurable at any time without tools. Cross-polarization (trailing and side-car configurations) USB-C tethering to battery pack/power bank
Connections	WiFi (802.11n) and USBC to display unit
Autonomy	2.5 h (up to 8 hours with off-the-shelf 10'000 mAh power bank, not included)

Download on the App Store

SWISS MADE



Proceq Ground Penetrating Radars

GP8000

Faster, easier concrete inspections and structural imaging with SFCW ground penetrating radar technology

Resolution & depth

Superior depth and clarity of data thanks to the unique Swiss Made radar technology with all the frequencies you'll ever need. Immediate insights with 3D and Augmented Reality.

Powerful UI

Inspect with ease of use, from the tightest spots to the tallest walls to the longest streets. Superior ergonomics to tackle any challenge with comfort, without cables.

Great handling

Mobile app that lets you annotate measurements with voice, photos and comments. Generate reports and share them instantly. Access your data from anywhere, anytime.

Software / Workspace App

Measurement modes	Superline Scan (1000m / 3281 ft) Area Scan (with Flexible Grid up to 100m2 / 1076 ft2)
Review modes	Superline scan[1] A-scan (incl. envelope) Migrated view Non-migrated view Split view[1] Time-Slice view[2] Basic 3D view AR
Advanced visualization	Time-Slice view Pro 3D view Augmented Reality (AR)
Reporting	Workspace integration Automatic Logbook SEG-Y export Instant report generation Share via URL
Export formats	JPG PNG CSV SEGY HTML
Display Unit Specs*:	Latest Apple® iPad recommended (iPad with iOS 11.0 and higher) Screen size: From 7.9" to 12.9" Resolution: Up to 2732-by-2048 Memory: Up to 2TB Weight: Down to 301 g / 10.6 oz Camera: Up to 12MP Wide and 10MP Ultra Wide Optional: USB-C, 5G, Face ID
Display Unit Sensors*:	LiDAR Scanner (optional) Three-axis gyro Accelerometer Ambient light sensor Barometer Built-in GPS/GNSS

1. GP8100 only; 2. GP8000 & GP8100 only

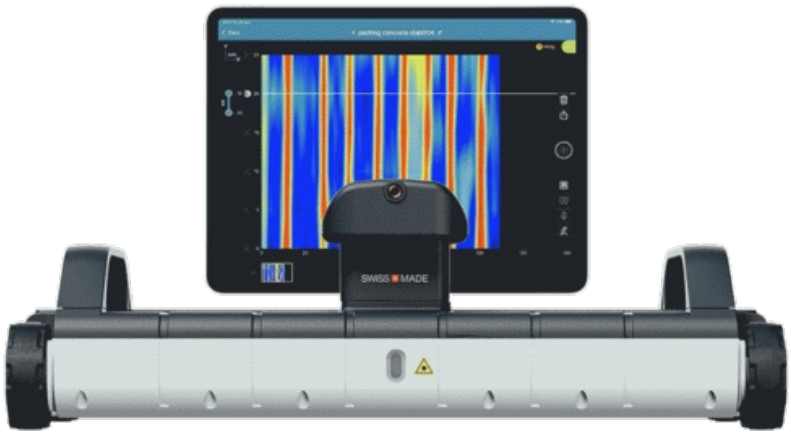
* Depending on iPad model

Processing Unit / Sensor

Radar technology	Stepped-frequency continuous-wave (SFCW) GPR
Modulated frequency range	200 – 4000 MHz
Penetration depth	80 cm / 31.5 in
Battery	Flight-safe, removable pack, 8x AA (NiMH)
Dimensions	22.1 x 18 x 14 cm 8.7 x 7.1 x 5.5 in
Weight	1.5 kg / 3.3 lbs (excl. battery pack)
Ground clearance	0.8 cm / 0.32 in
Antennas	1
Antenna distance to edge	8.3 cm / 3.27 in
Special features	All-wheel drive with high-traction wheels Laser light guidance
Connections	Wi-Fi (802.11n) to display unit
Autonomy	3 h

Download on the App Store

SWISS MADE



Proceq Ground Penetrating Radars

GP8100

Highly productive portable concrete GPR array, enabling quick object detection and superior data collection

Productivity

Boost scanning efficiency with 25cm effective scan width and 80cm penetration depth, one scan is equivalent to 6 classical line scans

Visualization

Detecting objects of all sizes and marking on concrete surfaces has never been so easy and fast with the superline scan view

Density

The high scan rate of 1'200 scans/s enables a very dense GPR data collection in only one superline scan, which can be visualized in 6 classical line scans

Software / Workspace App

Measurement modes	Superline Scan (1000m / 3281 ft) Area Scan (with Flexible Grid up to 100m2 / 1076 ft2)
Review modes	Superline scan[1] A-scan (incl. envelope) Migrated view Non-migrated view Split view[1] Time-Slice view[2] Basic 3D view AR
Advanced visualization	Time-Slice view Pro 3D view Augmented Reality (AR)
Reporting	Workspace integration Automatic Logbook SEG-Y export Instant report generation Share via URL
Export formats	JPG PNG CSV SEGY HTML
Display Unit Specs*:	Latest Apple® iPad recommended (iPad with iOS 11.0 and higher) Screen size: From 7.9" to 12.9" Resolution: Up to 2732-by-2048 Memory: Up to 2TB Weight: Down to 301 g / 10.6 oz Camera: Up to 12MP Wide and 10MP Ultra Wide Optional: USB-C, 5G, Face ID
Display Unit Sensors*:	LiDAR Scanner (optional) Three-axis gyro Accelerometer Ambient light sensor Barometer Built-in GPS/GNSS

1. GP8100 only; 2. GP8000 & GP8100 only

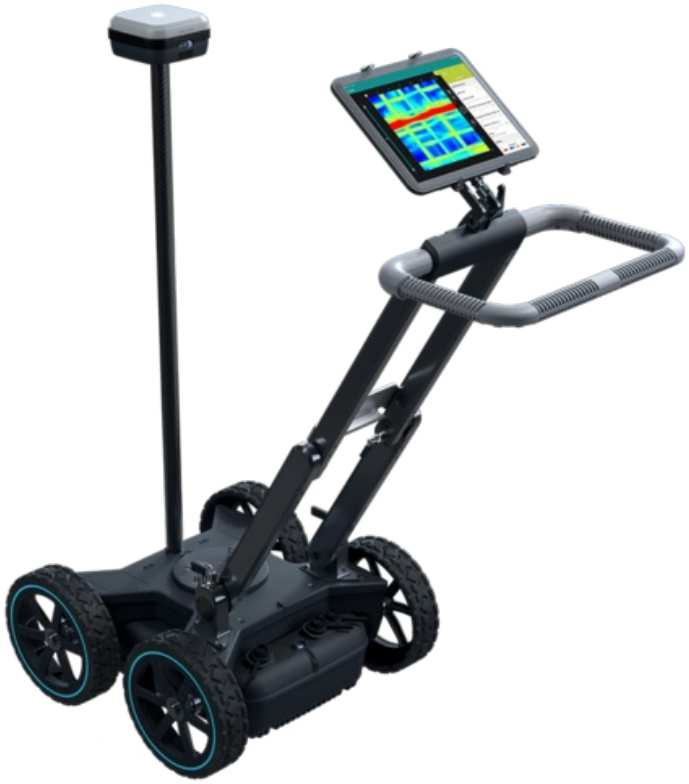
* Depending on iPad model

Processing Unit / Sensor

Radar technology	Stepped-frequency continuous-wave (SFCW) GPR
Modulated frequency range	400 – 4000 MHz
Penetration depth	80 cm / 31.5 in
Battery	Flight-safe, removable pack, 8x AA (NiMH)
Dimensions	41.5 x 22.5 x 13.2 cm 16.3 x 8.9 x 5.2 in
Weight	3.0 kg / 6.6 lbs (excl. battery pack)
Ground clearance	0.8 cm / 0.32 in
Antennas	6
Antenna distance to edge	8.3 cm / 3.27 in
Special features	All-wheel drive with high-traction wheels and laser light guidance USB-C tethering to power bank
Connections	Wi-Fi (802.11n) to display unit USB-C for Wi-Fi restricted areas
Autonomy	3h (Up to 8 hours with off-the-shelf 10'000 mAh power bank, not included)

Download on the App Store

SWISS MADE



Proceq GPR Subsurface

GS8000

The all-in-one solution for detecting objects and mapping the underground world using SFCW ground penetrating radar technology.

Versatility

No methodology constraints and real time 2D & 3D data visualization of the scanned subsurface, for an optimal interpretation on site, no matter the application.

Accuracy & Resolution

Superior clarity of data at different depths thanks to the unique Swiss Made ultra-wideband radar technology, with high-accuracy geolocation in local coordinates.

User Experience

End-to-end workflows, all the way from the most intuitive data acquisition to instantly shareable deliverables. Access your data from anywhere, anytime.

Software / Workspace App

Acquisition modes	Line Scan, Area Scan, Free Path
View modes	A-scan, Line Scan non-migrated, Line Scan migrated, Time Slice View, Map View, 3D, Augmented Reality
On-site annotations	Tags, markers, points of interest, lines, photos, notes, voice notes, markups
Adjustable display settings	Color palette, linear gain, time gain compensation, background removal, multi-layer dielectric constant, time window, noise cancellation filter, frequency filter, low pass filter, slice depth, slice thickness
Data options	Cloud storage, SEG-Y export, HTML export, KML export, DXF export, SHP export
Display unit	Any iPad® or iPad Pro® [1] Recommended: iPad Pro WiFi+Cellular (M1) Screen resolution: up to 2732 x 2048 pixels Storage capacity: up to 1 TB
Max. scan length	Up to 15 Km | 9.3 mi
Max. scan grid size	Up to 80 x 80 m | 260 x 260 ft

Download on the App Store

Processing Unit / Sensor

Radar technology	Stepped-frequency Continuous-Wave GPR
Modulated frequency range	40 – 3440 MHz [2]
Effective bandwidth	3200 MHz [3]
Min. detectable target size	1 cm | 0.4 in [4]
Max. depth penetration	10 m | 33 ft [5]
Scan rate	500 Hz
Spatial interval	Up to 100 scans/m
Acquisition speed	Up to 80 Km/h | 50 mph [6]
GNSS receiver	Multiband GPS + Glonass + Galileo + Beidou SSR augmentation [7] / RTK-compatible Dimensions: 145 x 145 x 70 mm Weight: 0.7 Kg, 4x AA-batteries included
GNSS real-time 3D accuracy	Typ. 1 - 5 cm | 0.5 - 2 in [8]
GNSS initialization time	Typ. 5 - 30 s
Wheel encoders	2
Configuration	Wireless integrated push & pull cart
Weight	24 Kg [9]
Dimensions	61 x 57 x 38 cm
Antenna positions	Ground-coupled with dual-axis floating Air-coupled with 25 mm clearance
Ingress protection (IP) / sealing	IP65
Power supply	Removable flight-safe battery pack [10] | Off-the-shelf power bank [11]
Autonomy	3.5 hours | Full working day [12]
Operating temperature	-10° to 50°C | 14° to 122° F
Operating humidity	<95% RH, non-condensing
Connectivity	WiFi, Ethernet, USB-A, USB-B, USB-C, Lemo

1 Running an up-to-date iOS version; recommended models: iPad Pro® WiFi + Cellular 11" or 12.9"
2 For USA & Canada: 200 - 3440 MHz
3 For USA & Canada: 3000 MHz
4 Metallic object buried at 0.3 m / 1 ft, in average soil conditions
5 Depending on soil conditions, typ. 6 m / 20 ft in average soil conditions. For USA & Canada: 12 ft in average soil conditions
6 At 50 mm scan interval. For USA & Canada: Up to 35 km/h / 22 mph
7 Service available in Europe & USA; needs an active Internet connection on the iPad
8 Via NTRIP RTK or SSR corrections; the achieved accuracy is subject to atmospheric conditions, satellite geometry, observation time, etc.
9 Batteries and tablet not included
10 Contains 8x rechargeable C-Type NiMH batteries
11 USB-C PD power bank with max. dimensions: W 85mm x H 28mm "; recommended power: 12V/>=1.25A or 15V/>=1A
12 Recommended battery capacity: >4500 mAh | Recommended power bank capacity: >20000 mAh

SWISS MADE

Hoskin Scientific Limited has been supplying testing and monitoring instruments since 1946. Although our range is broad, we focus on three major markets including:

Geotechnical & Materials Testing
Environmental Monitoring
Test & Measurement Instrumentation

Hoskin Scientific operates out of four offices within Canada:

Western Canada
3735 Myrtle Street
Burnaby, BC V5C 4E7
(604) 872-7894
salesv@hoskin.ca

Ontario & Atlantic Canada
#5-3280 South Service Rd, W
Oakville, ON L6L 0B1
(905) 333-5510
salesb@hoskin.ca

Québec
300 Rue Stinson
Montréal, QC H4N 2E7
(514) 735-5267
salesm@hoskin.ca

Edmonton
11540 184 St NW
Edmonton, AB T5S 2W7
(780) 434-2645
salesv@hoskin.ca