







### Proceq GPR Subsurface

### **GS8000**

The one solution for locating objects and mapping the underground world using SFCW ground penetrating radar technology.



#### **Resolution & depth**

Superior clarity of data at different depths thanks to the unique Swiss Made ultra-wideband radar technology, optimized for small, closely-spaced and deep targets alike.



#### Versatility

Scan on flat or rough terrains, get real-time accurate 3D positioning and adjust display settings in real-time for an optimal interpretation of data. All included in the solution.



#### **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, Grid Scan
View modes	A-scan, Line Scan non-migrated, Line Scan migrated, Time Slice View, 3D, Augmented Reality
On-site annotations	Tags, marks, photos, notes, voice notes
Adjustable display settings	Color palette, linear gain, time gain compensation, background removal, multi-layer dielectric constant, deep focus filter, time window, frequency filter
Data options	Cloud storage, SEG-Y export, HTML export, KML export
Display unit	Any iPad® or iPad Pro® <sup>1</sup> Recommended: iPad Pro WiFi + Cellular 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 area size	Up to 80 x 80 m   260 x 260 ft

iPad is a trademark of Apple Inc.; iOS is a registered trademark of Cisco in the US and is used by Apple under license





## Processing Unit / Sensor

Radar technology	Stepped-frequency Continuous-Wave GPR
Modulated frequency range	40 - 3440 MHz <sup>2</sup>
Effective bandwidth	3200 MHz <sup>3</sup>
Min. detectable target size	1 cm   0.4 in <sup>4</sup>
Max. depth penetration	10 m   33 ft <sup>5</sup>
Scan rate	500 Hz
Spatial interval	Up to 100 scans/m
Acquisition speed	Up to 80 Km/h   50 mph <sup>6</sup>
GNSS receiver	Multiband GPS + Glonass + Galileo + Beidou SSR augmentation <sup>7</sup> / 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 <sup>8</sup>
GNSS initialization time	Typ. 5 - 30 s
GNSS initialization time Wheel encoders	Typ. 5 - 30 s
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Wheel encoders	2
Wheel encoders Configuration	2 Wireless integrated push & pull cart
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Wheel encoders Configuration Weight Dimensions Antenna positions Ingress protection (IP) /	Wireless integrated push & pull cart  24 Kg °  61 x 57 x 38 cm  Ground-coupled with dual-axis floating Air-coupled with 25 mm clearance
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Wheel encoders Configuration Weight Dimensions Antenna positions Ingress protection (IP) / sealing Power consumption Autonomy	Wireless integrated push & pull cart  24 Kg <sup>9</sup> 61 x 57 x 38 cm  Ground-coupled with dual-axis floating Air-coupled with 25 mm clearance  IP65  11 W  Full working day, removable flight-safe battery pack & off-the-shelf power bank <sup>10</sup>

<sup>1</sup> Running an up-to-date iOS version; recommended models: iPad Pro® WiFi + Cellular 11" or 12.9"

12V/>=1.25A or 15V/>=1A



<sup>2</sup> For USA & Canada: 200 - 3440 MHz

<sup>3</sup> For USA & Canada: 3000 MHz

<sup>4</sup> Metallic object buried at 0.3 m / 1 ft, in average soil conditions

<sup>5</sup> Depending on soil conditions, typ. 6 m / 20 ft in average soil conditions. For USA & Canada: 12 ft in average soil conditions

<sup>6</sup> At 50 mm scan interval. For USA & Canada: Up to 35 km/h / 22 mph

<sup>7</sup> Service available in Europe & USA; needs an active Internet connection on the iPad  $\,$ 

<sup>8</sup> Via NTRIP RTK or SSR corrections; the achieved accuracy is subject to atmospheric conditions, satellite geometry, observation time, etc.

<sup>9</sup> Batteries and tablet not included

<sup>10</sup> Contains 8x rechargeable NiMH C-batteries; recommended power bank: USB-PD compatible