CONQUEST™ 100

UNLOCK A WORLD OF SUBSURFACE INFORMATION WITH ONE QUICK SCAN

Conquest 100 is a light, portable device that provides a fast, non-invasive method to gain accurate insights of objects below the surface, even on a curved surface or column
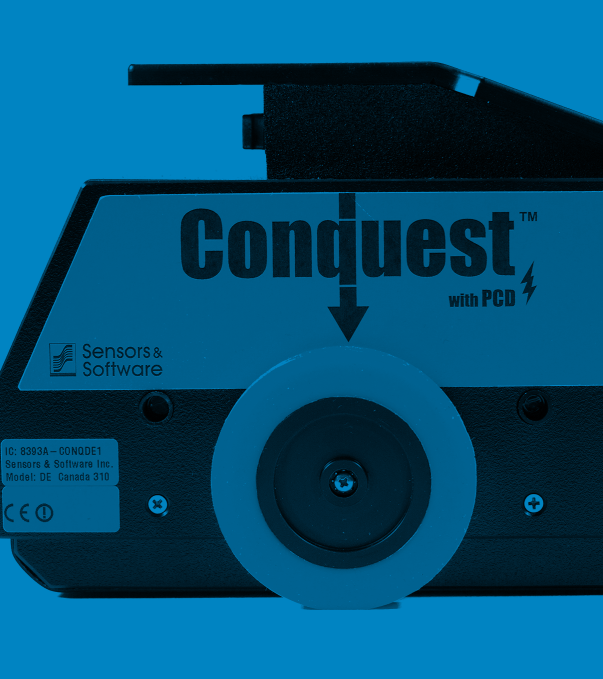
Conquest 100 reduces risk by detecting rebar, post-tension cables, metallic and non-metallic conduits as well as current-carrying wires embedded in concrete. Once your scan is complete, Conquest 100 connects to your mobile device, allowing you to email information directly from the field. Back in the office visualize your data and report your findings in a client-ready report in minutes with the optional EKKO_Project Software.

Applications

Locate rebar, post-tension cables, metallic and non-metallic conduits embedded in concrete.

Create detailed scans of concrete floors, decks, columns, walls and ceilings to detect embedded objects before cutting or coring. Detect voids beneath slab-on-grade.

Locate and map current carrying wires using Power Cable Detector (PCD) technology.

On-site Reports

Produce instant reports from your unit. Include screen captures and line/ grid/coring/depth information. Connect to your mobile and email detailed results directly from the field

CONQUEST™ 100

Get rapid, reliable results and reduce the need for destructive testing

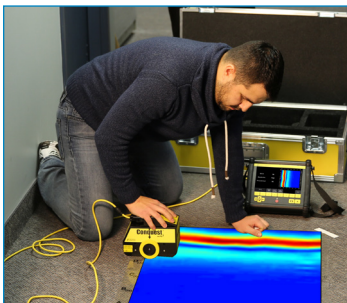### High resolution touchscreen

Allows you to see targets clearly.
Multi-language Menus

Swappable Li-Ion battery

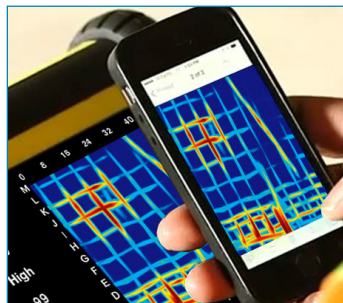Minimize downtime with long lasting swappable batteries

Power cable detector (PCD)

Ensures safety by locating current-carrying cables in the area

Screen capture function

Transfer reports wirelessly via smart phone

Lightweight sensor head

Enables easy scanning of walls and ceilings

Accessories

Long reach resizable handle: increase comfort by allowing operator to stand upright

Bluetooth remote trigger: Start and stop your GPR lines remotely with one handed operation with a trigger that mounts on the collapsible handle

Carrying harness: comfortably support the Display Unit, while keeping hands free for other tasks

Extra battery pack: work long hours without interruption

Desktop charger: convenient option for charging batteries

Additional sensor head cable: various lengths available to suit your application

Specifications - Hardware

| Category	Display Unit	Sensor Head	Transport case
Size	24 x 24 x 14 cm (9.5 x 9.5 x 5.5 in)	149 x 131 x 191 mm (5.85 x 5.15 x 7.50 in)	83 x 44 x 26 cm (33 x 17 x 10 in)
Weight	Display: 2.88 kg (6.35 lbs) Battery: 0.49 kg (1.08 lbs)	1.10 kg (2.43 lbs)	21 kg (46 lb)
Power Cable Detector	Locates current at 50 Hz & 60 Hz		
GPR Trigger	2-wheel drive optical encoder, ≤0.5 mm resolution		
Power	Li-Ion battery pack (user swappable), battery life: 4-6 hrs, battery capacity: 9 Ah, AC mains adapter (100-240 V) to power system		

Specifications - Embedded Software

Criteria	Conquest 100	Conquest 100 Enhanced
Data Export Format	Screenshots (.JPG)	Screenshots (.JPG), and Project (.GPZ) files
File organization	Lines and Grids	Projects containing Lines, Grids & Screenshots
Data Storage	1 Project with: 20 grids, 200 lines, 1000 screenshots	20 Projects each with: 20 grids, 200 lines, 1000 screenshots
View Depth	User Defined: 30 – 91 cm (12 – 36 in)	
Maximum Line Length	50 m (150 ft)	
Grid sizes	US Standard Metric 24 x 24 in 600 x 600 mm 48 x 48 in 1200 x 1200 mm 48 x 24 in 1200 x 600 mm	US Standard Metric 24 x 24 in 600 x 600 mm 48 x 48 in 1200 x 1200 mm 48 x 24 in 1200 x 600 mm 96 x 24 in 2400 x 600 mm 96 x 96 in 2400 x 2400 mm
Data Quality Enhancement	DynaQ® – Dynamic Quality Auto Stacking Spatial Filtering	
PC-based data display	Any .JPG viewing software	GPR data post processing using optional EKKO_Project

Regulatory Standards: Meets FCC 15.509, Industry Canada RSS-220, ETSI EN-302066

Line Scan:
Line Scan reconnaissance surveys provide a real-time assessment of targets embedded in concrete. Pinpoint targets with the backup arrow.
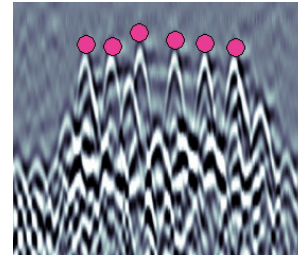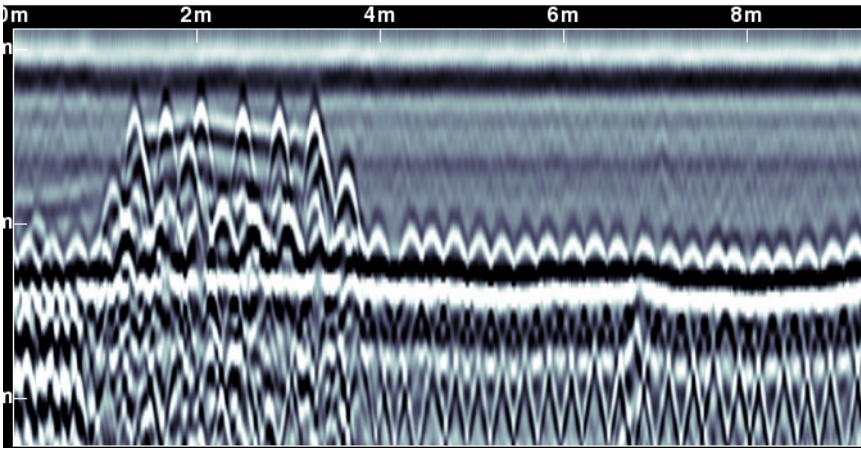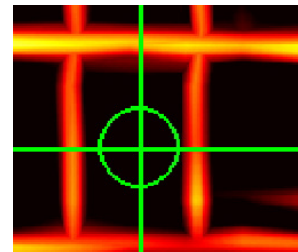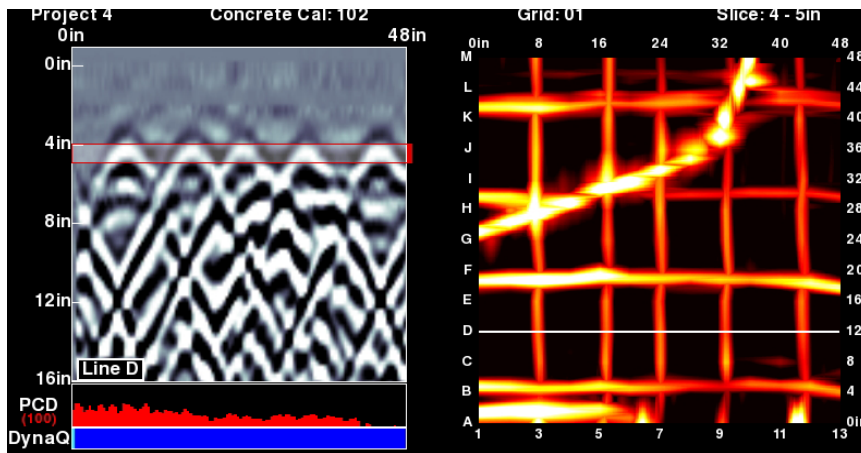

Classify targets in real time with color-coded field interpretations by simply touching the screen
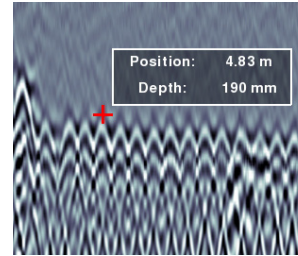
Display position and depth of targets with the touch of a finger

Grid Scan Mode:
Grid Scan detailed mapping generates on-site 3D images to better visualize embedded objects. Multiple grid sizes available.
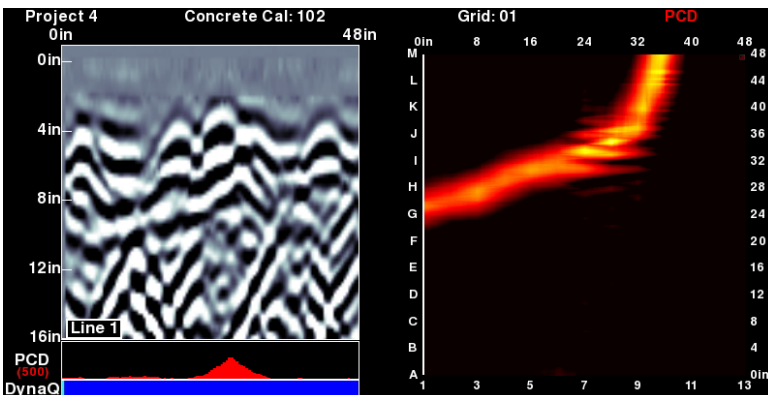

Decide exactly where to drill in the grid with the drill locator with variable drill bit diameters
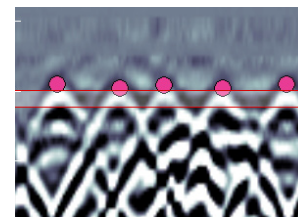
Classify targets with field interpretations

## Power Cable Detector (PCD)

Power cables embedded in concrete pose an immediate risk when construction work needs to be done.

PCD augments GPR imaging with the ability to detect current-carrying utility lines.

Locate and differentiate these hazardous utilities from other structural elements.

EKKO_Project

Visualize, Understand and Report your GPR results with optional EKKO_Project PC Software from data exported from the Conquest 100 Enhanced system. Quickly visualize your data, extract valuable insights and produce superior deliverables for your clients.
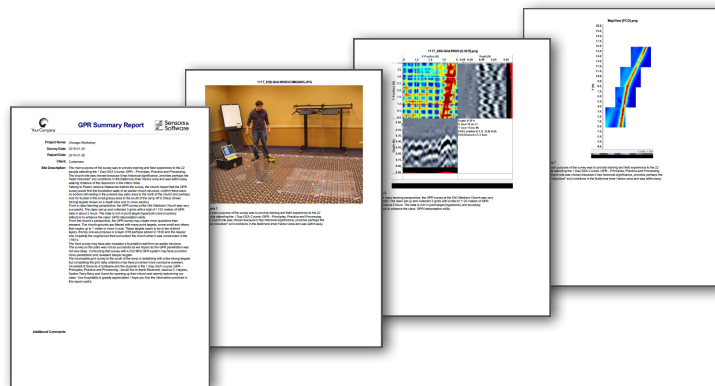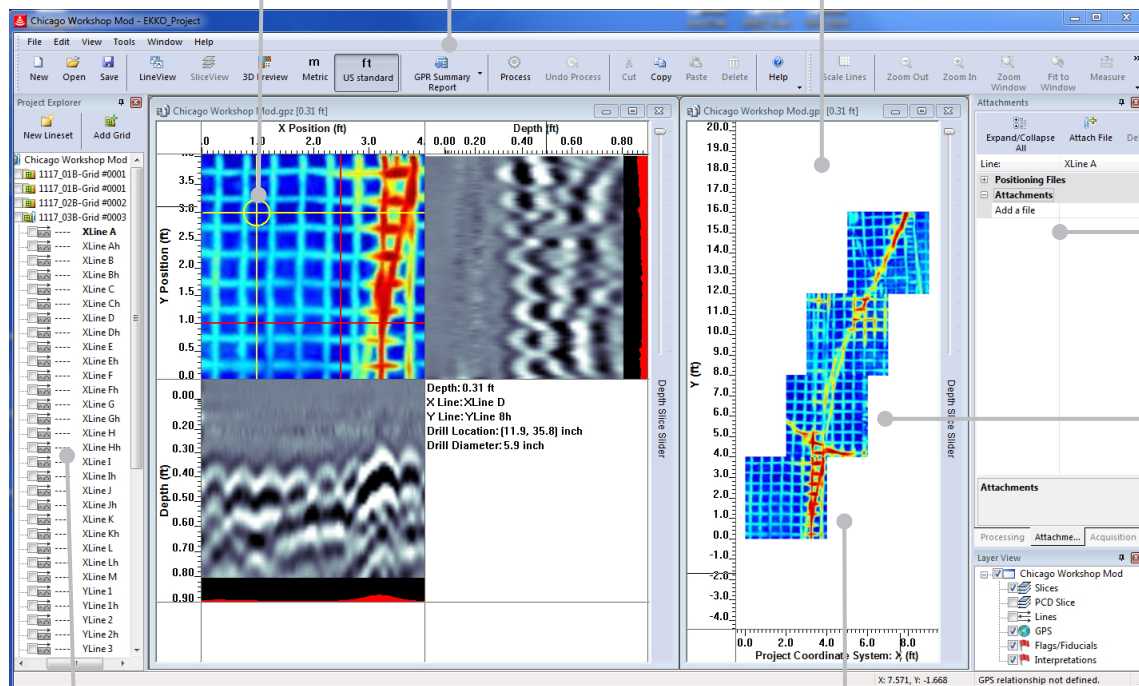

Locate
where to position cores

Generate
impressive reports containing data images, photos, and text

Display
GPR lines and grids and save them as graphic image files

Attach
photos and other files directly to the data

Slice
through multiple grids simultaneously to reveal targets

Organize
and rename your lines and grids easily

Connect
your grids together to see the big picture

Subsurface imaging solutions

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