RADIODETECTION®

RD1100™ & RD1500™ Ground Penetrating Radar

Complete range of utility-locating radars

Radiodetection's
RD1100 & RD1500
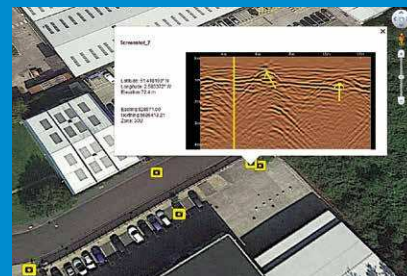## Ground Penetrating Radar

Innovative tools for finding buried utilities

Geo-referenced data
Display the position of your surveys in Google Earth™ and other geo-referencing programs.

Screen captures
Add markers via the touch screen display to highlight features of interest.

Depth Slices (RD1500)
View horizontal slices at different depths to display cables, pipes and other utilities in unprecedented clarity.

On-site Map View (RD1500)
View your identified features in plan map view using the optional external GPS.

RD1100 provides locate professionals, surveyors and other users with the tool they need to trace and mark the position of all types of cable and pipe, including plastic and ceramic. Built in as standard is the ability to take Screenshots which are saved to internal memory for immediate emailing via Wi-Fi or later export to USB memory stick. GPS positioning is captured for integration into Google Earth™.
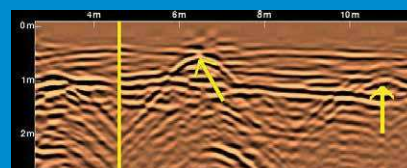
RD1500 takes utility locating to the next level, offering users easily interpreted Depth Slices as well as traditional Line Views.

Use proprietary **FrequenSee**™ technology to highlight small/shallow, medium or large/deep buried utilities. Enhance the RD1500 with software to export GPR data and perform detailed analysis, and with external GPS for higher positional accuracy.
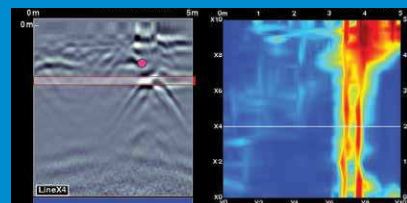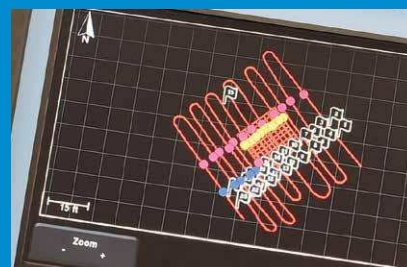
Advanced Reporting with RD1500 data analysis PC software

RD1500's Enhancement Package includes the comprehensive EKKO_Project PC software solution for GPR data analysis and management, allowing you to:

- **Slice** through the depth data on your computer
- **Generate** PDF reports that include data images, screenshots and photos alongside your text and company logo
- **Export** data to other formats like CSV, SEG-Y etc.

3 additional modules to add to the Enhancement Package, for even greater levels of analysis, are available in Utility Suite:

- **LineView** modifies and displays GPR lines
- **SliceView** processes and displays grid data, and can output data for 3D visualization and geo-referencing software programs
- **Interpretation** for adding point, polyline, box and annotation interpretations to GPR lines in post-processing
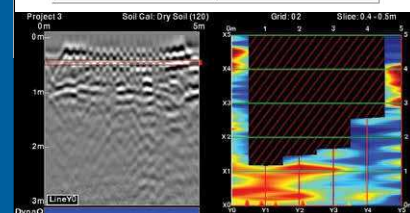
Instant email

Generate and deliver mini reports from your survey site by connecting to a Wi-Fi network or by using your phone as a hotspot.
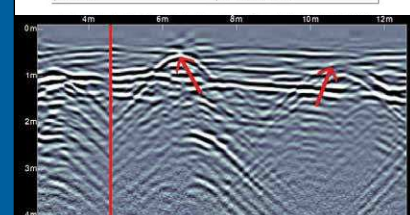
Instant information, higher productivity.

Table of specifications

	RD1100 & RD1500	Options & comments
Sensor frequency	250MHz Ultra Wide Band	**RD1500:** Includes Frequen*See*
Signal Enhancement	DynaQ (optimizes data quality with cart speed). Spatial filtering.	
Data Analysis	In field analysis	**RD1500:** Post-processing analysis with EKKO_Project and Utility Suite (option)
Touch Screen Display	Size: 21cm (8") diagonal	**Enhanced:** Upgraded Display Unit package
Power	Consumption: 1.25A at 12V Battery: 12V, 9Ah Lead Acid	Battery life typically 4-6hrs
Spatial interval	5 cm (2")	
Depth range	Up to 8m (27') maximum	Ground conditions dependent
Display depth scale	1m-8m (3'-30')	
Languages supported	Non-lingual icons, English, Spanish, French, German	
Dimensions (H x W x D)	100 x 70 x 115cm (39.4 x 27.6 x 45.3")	
Weight	22 kg (48lb)	
Operating temperature range	Display: -10° to +50°C (14°F to +122°F) Sensor: -40°C to +50°C (-40°F to 122°F)	
Environmental protection	IP65	
Compliance	CE, FCC, ETSI, Industry Canada	
Standard warranty	1 year	

RD**1500** Mini Report

Project	3
Screen Capture Number	14
Date Collected	April 7 2016 10:51 AM
Mode	Slice View
Grid	Grid02
Grid Size	5 x 5 m
Grid Resolution	Low (1.0 m)
Soil Cal	Dry Soil (120)
Slice Depth	0.4-0.5 m
Slice Color Palette (Contrast)	2 (Medium)
Grid Line Visibility	Partial
Selected Line	LineY0
Depth	3.0 m
Line Color Palette	7
Filter	ON
Gain Level	3
DynaT	All

RD**1100** Mini Report

Screen Capture Number	5
Date Collected	April 5 2016 10:14 AM
Mode	Line Scan
Depth	4.0 m
Line Color Palette	1
Filter	ON
Gain Level	3
Soil Cal	Dry Soil (110)

GPR system accessories

A comprehensive range of accessories complement the RD1100 and RD1500, broadening their application range, and to provide extra protection during transport.

The products' modular designs also allow for replacement of a number of the key component parts without requiring specialist tools.

Wheel sets

Large Wheel Set for GPR Carts
Part No: 10/GPRLGWHEELS

Set of 4 wheels for GPR
Part No: 10/GPRWHEELSET

1 x GPR wheel
Part No: 10/GPRWHEEL

Transport options

Hard case for GPR display
Part No: 10/GPRDISPLAYCASE

Soft case for GPR display unit
Part No: 10/GPRDISPBAG
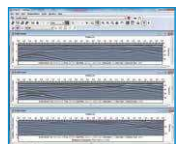
Flight case for GPR system
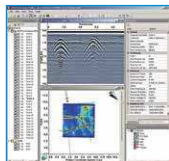Part No: 10/GPRFLIGHTCASE

Software

RD1500 Enhancement Upgrade
Part No: 10/RD1500EUPGRADE

RD1500 Utility Suite Analysis Software
Part No: 10/UTILITY_SUITE

Replacement parts

RD1100 sensor assembly
Part No: 10/RD1100SENSOR

RD1500 sensor assembly
Part No: 10/RD1500SENSOR

Replacement sensor skid pad
Part No: 10/GPRSKIDPAD

RD1100 display unit
Part No: 10/RD1100DISPLAY

RD1500 display unit
Part No: 10/RD1500DISPLAY

Display mount assembly
Part No: 10/GPRMOUNT

RD1100 GPR cart handle
Part No: 10/RD1100HANDLE

RD1500 GPR cart handle
Part No: 10/RD1500HANDLE

GPR lower cart assembly (no wheels)
Part No: 10/GPRCART

GPR replacement battery pack
Part No: 10/GPRBATTERY

Battery Charger – 100V-240V for global use
Part No: 10/GPRCHARGE

Mains leads for battery charger
Part numbers:
US / CAN type: 04/MC-1020
European type: 04/MC-3020
UK type: 04/MC-5020
Australia type: 17/GP3071-C13-25-BK-10A-I

GPR Battery cable
Part No: 10/GPRBATTCABLE

Display to sensor connection cable
Part No: 10/GPRDISPCABLE

GPR Odometer Assy and Cable
Part No: 10/GPRODOMETER

Battery Strap
Part No: 10/GPRBATTSTRAP

GPR 13" Sensor support strap
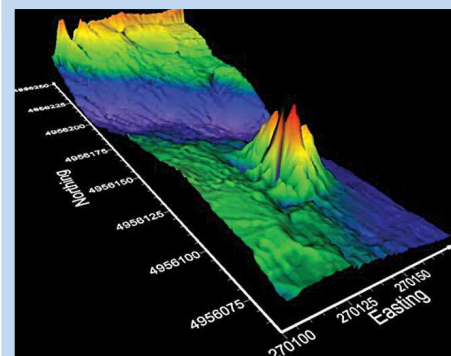Part No: 10/GPRSTRAP

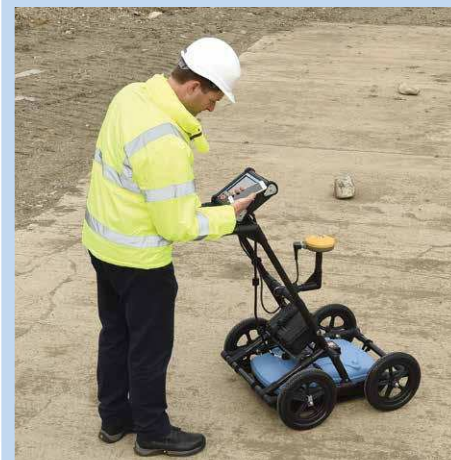GPR Handle Pin x 2
Part No: 10/GPRPIN
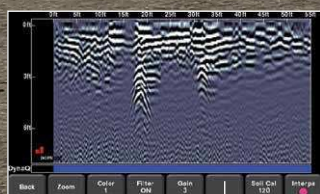
RD1500 GPS Package
Part No. 10/RD1500GPSPACKAGE

High Resolution,
touch screen display

Wi-Fi and USB for transfer
of data. Built-in GPS

External GPS option
for RD1500

Battery

Antenna system
optimised for
location of buried
utilities. RD1500
version includes
Frequen*See*™

Odometer

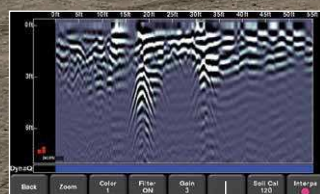3D data exported using Utility Suite

FrequenSee™

Allows the user to select the low, medium or high part of the frequency spectrum giving the benefits of multiple antennas while maintaining the quality of a single antenna system.
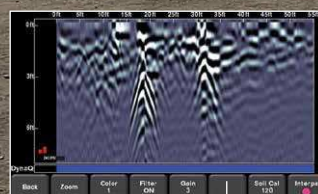
FrequenSee exploits the wide bandwidth of the RD1500 antenna, selectively enhancing shallow and small, medium depth and size, or deep and large targets. Or all at once!
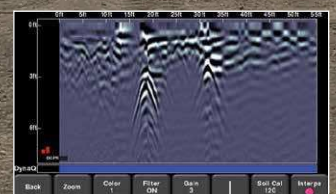
Small

Medium

Large

All