



**CODEVINTEC**

Tecnologie per le Scienze della Terra

45° 27' 39.384" N  
9° 07' 30.145" E

## UtilityScan Locate and Map Underground Utilities with GPR



Photo: Le Matériel de Sondage

**UtilityScan® is the industry standard ground penetrating radar solution for the designation of subsurface utilities.**

With UtilityScan, users can quickly identify and mark the location and depth of service utilities – gas, communications, sewer lines – and other metallic and non-metallic targets including underground storage tanks and PVC pipes.

### Typical Uses

- > Utility detection – metallic and non-metallic
- > Environmental remediation
- > Damage prevention
- > Road inspection
- > Geological investigation
- > Archaeology and forensics



The UtilityScan family is configurable and provides the flexibility to address a wide range of utility applications. The selection of the appropriate antenna and cart tailor UtilityScan beyond utility operation to address NDT and environmental applications, including bridge deck assessment and concrete scanning. Regardless of the configuration, UtilityScan delivers exceptional data quality while being rugged enough to stand up to years of field use.

## UtilityScan Solutions

Utility locators, construction professionals, environmental firms and land surveyors need a reliable, non-destructive method to locate subsurface targets prior to digging, trenching, conducting site assessments and mapping.

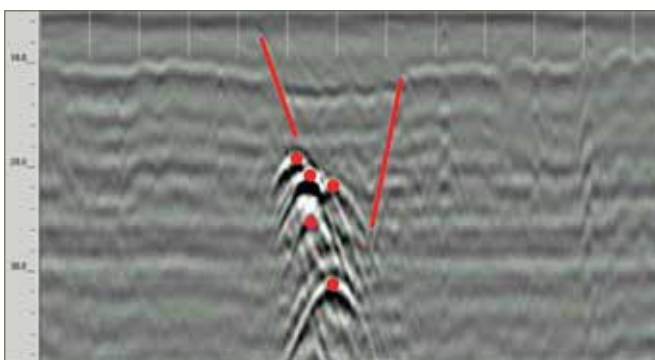
### Locate Underground Storage Tanks

Use UtilityScan to accurately pinpoint underground storage tanks and associated piping.

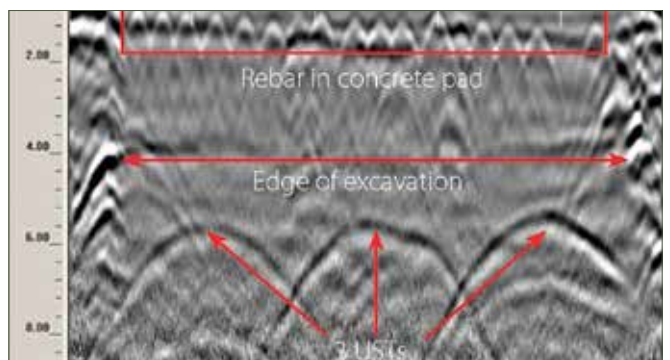


### Locate and Map Underground Utilities

Designate the location and position of metallic and non-metallic pipes in real time using the GSSI UtilityScan. GPR can enhance one's overall understanding of subsurface targets and obstructions.



UtilityScan data showing a duct bank with five utilities. Also shown is a well-defined excavation trench.



UtilityScan data depicting storage tanks under concrete pad



## Survey Solutions Survey Cart Options



### Rugged Cart

- > Weather resistant design
- > Multiple antenna options (2600 MHz to 270 MHz)
- > Internal integrated survey wheel encoder
- > Removable, 16-inch wheels (41 cm)
- > Marking paint can holders
- > Compatible with SIR 4000 and SIR 3000 control unit
- > Dimensions: 30.1x47.9x41.8 in (76.4x121.6x106.1 cm)
- > Antenna centerline to front of cart: 19 in (48.3 cm)
- > Model 643



### Compact Cart

- > Compact, weather resistant design
- > Multiple antenna options (2600 MHz to 400 MHz)
- > Internal integrated survey wheel encoder
- > Removable, 12-inch wheels (30 cm)
- > Compatible with SIR 4000 and SIR 3000 control unit
- > Dimensions: 24.3x39.4x40.3 in (61.7x100x102.4 cm)
- > Antenna centerline to front of cart: 15 in (38.2 cm)
- > Model 653



### Standard Cart

- > Lightweight and foldable design
- > Multiple antenna options (2600 MHz to 400 MHz)
- > Integrated survey wheel encoder
- > 20-inch front and 24-inch back wheels (51 cm, 61 cm)
- > Compatible with SIR 4000, SIR 3000, SIR 20, SIR 2000 control units
- > Dimensions: 24.9x53.3x45.8 in (63.2x135.2x116.3 cm)
- > Antenna centerline to front of cart: 31.6 in (80.2 cm)
- > Model 623

## Antenna Options



0 - 12 feet\*  
(0 - 4 m)  
400 MHz Antenna



0 - 18 feet\*  
(0 - 6 m)  
270 MHz Antenna

\*under ideal soil conditions

## Control Unit Options



SIR 4000



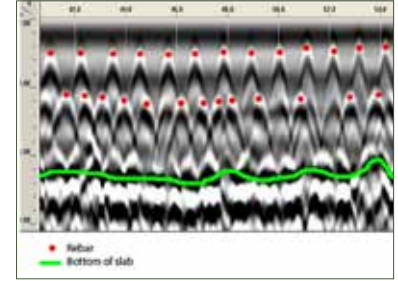
SIR 3000



## UtilityScan Flexibility

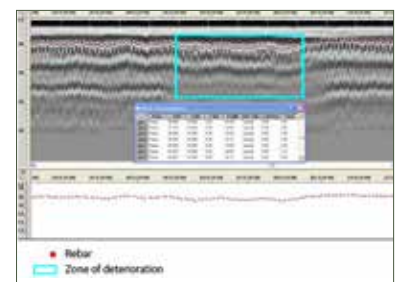
### Concrete Scanning and Inspection

Use ground penetrating radar to locate embedment within concrete structures prior to cutting or coring. Collect quantifiable data on rebar location and areas of delamination.



### Bridge Deck Inspection

By substituting the standard utility antennas with a high frequency antenna, users can determine the condition of aging bridge decks, parking structures and obtain accurate concrete cover depth on new structures.



\*Annotations are simulated interpretations of data.

### System Includes

SIR® 4000 and SIR® 3000 control unit
400 MHz or 270 MHz antenna
Choice of cart option
2 m control cable
2 batteries
Battery charger
Custom transit case for control unit
AC adapter
User manual
Sunshade

### Designate Targets

- > Real-time data collection
- > Back-up cursor and cross-hair cursor allow the user to accurately locate targets
- > Multiple techniques to calculate depth of targets

### Premium Mobility

- > Easy to transport
- > Durable components tested to withstand the toughest conditions

### Integrated System

- > Windows® operating system
- > Ability to store and replay data
- > GPS integration

### Value

- > Multiple antenna and control unit options
- > Flexible system for concrete and bridge inspection applications
- > Two-year warranty