



**CODEVINTEC**

Tecnologie per le Scienze della Terra e del Mare

## New UtilityScan® The Future of Utility Locating



**UtilityScan® provides a rich feature set that redefines the level of performance available in a low cost utility locating system**

### **Features**

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- > Excellent near-surface resolution and increased depth penetration in all soil types
- > A new wireless antenna eliminates the need for cabling: a system that can withstand challenging field conditions
- > Easy to use and quick to deploy
- > The new LineTrac™ power detection module (optional) identifies and traces the precise location of underground electric and RF induced utilities
- > Enhanced software features for gain control, target detection and horizontal banding reduction



## New UtilityScan. The future of Utility Locating



### Enhanced User Experience

UtilityScan features an innovative touchscreen user interface. The app-based user interface provides two modes of operation: ScanEZ and ScanMax.

The ScanEZ mode greatly simplifies operation for new users; ScanMax mode incorporates advanced features including GPS and LineTrac functionality.

### Positioning included

An integrated GPS is included with UtilityScan. For users requiring a higher resolution positioning system, a built-in pole mount is available for mounting GPS systems on survey poles. A Bluetooth interface is provided to facilitate communication with user-provided GPS systems.

### Compact and Portable

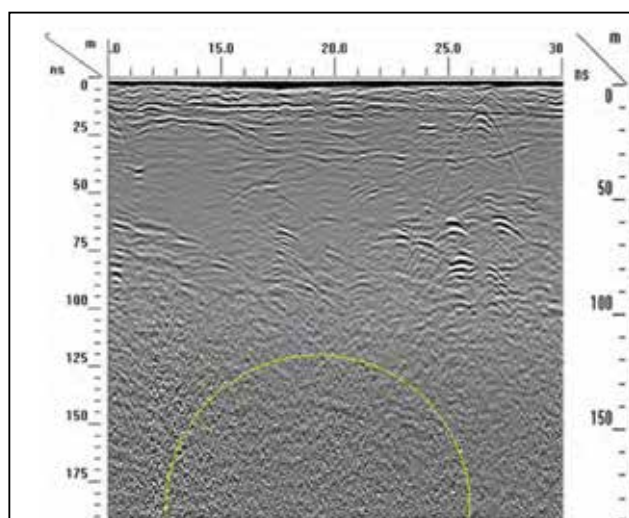
The UtilityScan system is incredibly compact. Weighing in at only 15 kg. UtilityScan can collapse to fit in the back of a small vehicle or even in an air-line overhead compartment. For survey conditions in rough terrain, the user can remove the handle and wheels and place the capsule into the (optional) rugged cart.



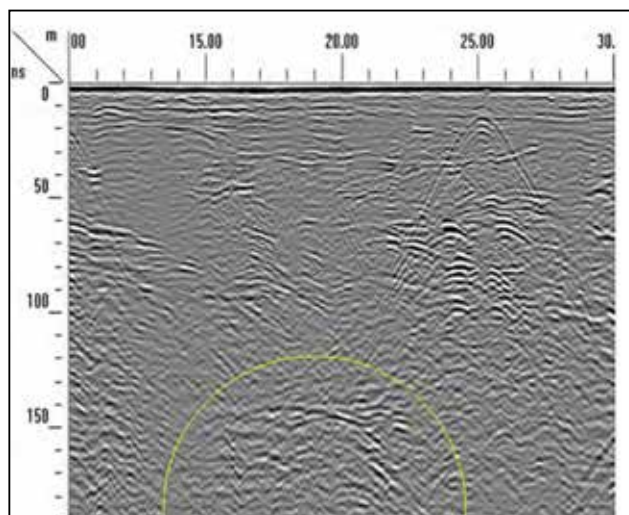


## HyperStacking™

HyperStacking provides superior near surface resolution, deeper depth penetration and vastly improved RF noise immunity when compared to traditional GPR antennas. HyperStacking (HS) is a patented real-time sampling technique that improves performance while maintaining measurement speed and minimizing radiated emissions. This technique uses multiple stacking (averaging) during data acquisition in order to reduce random noise and improve data quality.



Data Collected with Standard GPR Technology

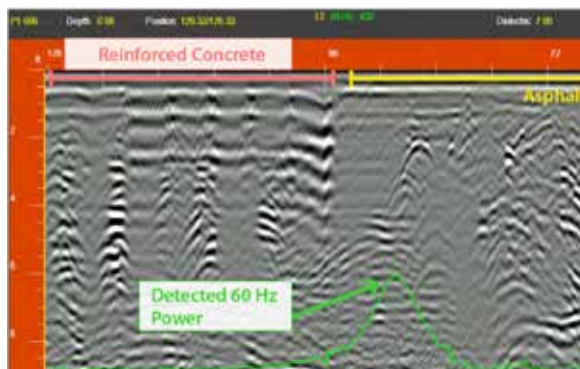


UtilityScan Data using HyperStacking Technology

Data illustrates several utilities and geological features at various depths. UtilityScan data (on right) locates deeper targets not visible with standard GPR technology. GPR data has been post-processed in RADAN® 7 software.

## Dynamic Gain Control

The Dynamic Gain Control function recognizes a difference in subsurface conditions and automatically modifies the display gain. This eliminates the need for users to continually adjust the gain during surveys and provides a clearer, consistent data image.

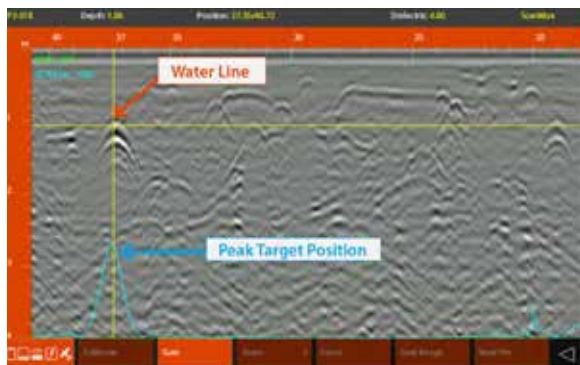


Data shows varying subsurface conditions and multiple unknown targets. Green LineTrac peak indicates presence of live power and aids the user in confirming a valid target identification.

## LineTrac™

LineTrac is the first use of a power detection capability in a utility locating radar system. The most important requirements for utility locators are ease-of-use, accuracy and reliability. The key benefit is that detected power or induced frequencies can be overlaid on the radar data, providing reliable positioning and target information to the user.

LineTrac with 350 HS antenna



Data illustrates several metallic and non-metallic targets at various depths. Yellow cross hairs identify a water line at 3 feet (1 meter) in depth, blue LineTrac peak indicates the detection of an induced 33 KHz active frequency.

**Technical specifications**

<b>Controller</b>	<b>Zebra XSLATE L10A</b>	<b>Lenovo Tablet</b>
Data Storage Internal Memory	32 GB + 32 GB micro SDHC	64 GB
Display	10.1 - inch View Anywhere	8", 1920 x 1200 LCD
Processor	Qualcomm SnapdragonTM 660 octa-core 2.2 GHz	Qualcomm Snap Dragon 265
Ports	USB 3.1 Type, USB 3.0, HDMI	Micro USB
Battery / Operation Time	8 hours, External long-life Battery	19.75 Watt hour / 3 hours
Environmental	IP-65	Consumer Grade
Durability	MIL-STD-810G	Consumer Grade
Operating temperature	-28°C to 60°C (-18.4°F to 140°F)	Consumer Grade

**System**

Frequency	350 MHz
Sampling Rate	up ai 500.000.000 samples/sec
Scan Speed	250 scans/sec
RF Noise Reduction Method	Patented trasmit signal dithering
Maximum Range	35 pt / 10 m (media dependent)
Communication Interface	WiFi or Ethernet
Antenna Orientation	Perpendicular Dipole
PRF	200 kHz
LineTrac AC Current Detection Option	AC (50/60 Hz) Current Detection, Arbitrary Frequency (10 Hz to 50 Hz) Locator Detection
GPS	Internal (Tablet) and External (Bluetooth)
Connectors	Rugged Ethernet, Survey Wheel
Georadar - Battery/Battery Life	Li-ion 94 Watt hour / 7 hours
Power Consumption	13,8 Watt
Operating Temperature	-20°C to 40°C (-4°F to 104°F)
Storage Temperature	-40°C to 60°C (-40°F to 140°F)
Weight With Tablet	34 lbs (15 kg)
Dimensioni (piegato)	22 x 19.25 x 12.5 in (56 x 49 x 32 cm)
Environmental	IP-65
Durability	3 Axis 30G shock tested, Vibration tested (20-2.000 Hz)

**Software**

Data Collection Modes	ScanEZ and ScanMax
Display Modes	LineScan and O-Scope con Focus, Focus-Plus and Zoom option
Data format	RADAN (.dzt)
Scan Density	<b>Low:</b> 12 scans/ft (40 scans/m); <b>Medium:</b> 18 scans/ft (60 scans/m) <b>High:</b> 24 scans/ft (100 scans/m)
Data Resolution	32 bit
Depth Ranges	3, 6, 9, 12, 15, 25, 35 ft (1, 2, 3, 4, 5, 8, 10 m)
Gain	Dynamic Gain Control (Variable Display Gain)
Real-time Filters	Band Filter
Display Modes	<b>Linescan Mode:</b> Data displayed with option to show LineTrac overlay <b>Focus Mode:</b> Data displayed in split screen view
Depth Scale Calibration	Hyperbola Matching or Manual
Diagnostic	<b>Status Indicators For:</b> GPS quality, system battery, hard disk capacity, WiFi, LineTrac