

A clearer view of underground utilities

Leica DSX



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Leica DSX utility detection solution

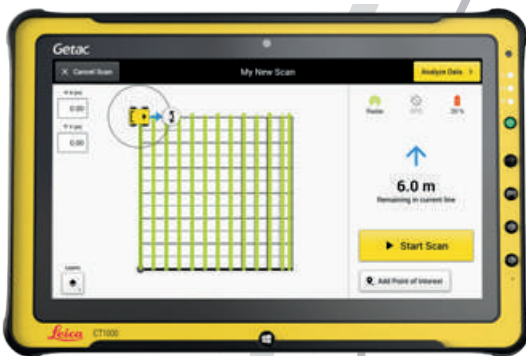
For utility repair and maintenance, civil engineering and surveying companies, the Leica DSX utility detection solution, consisting of a portable hardware with intuitive software allows to easily locate, visualise and map utilities. Unlike any other ground penetrating radar (GPR) system, the Leica DSX maximises productivity with cutting-edge software that automates data analysis and creates a 3D utility map on the field.

Reliable Detection Result

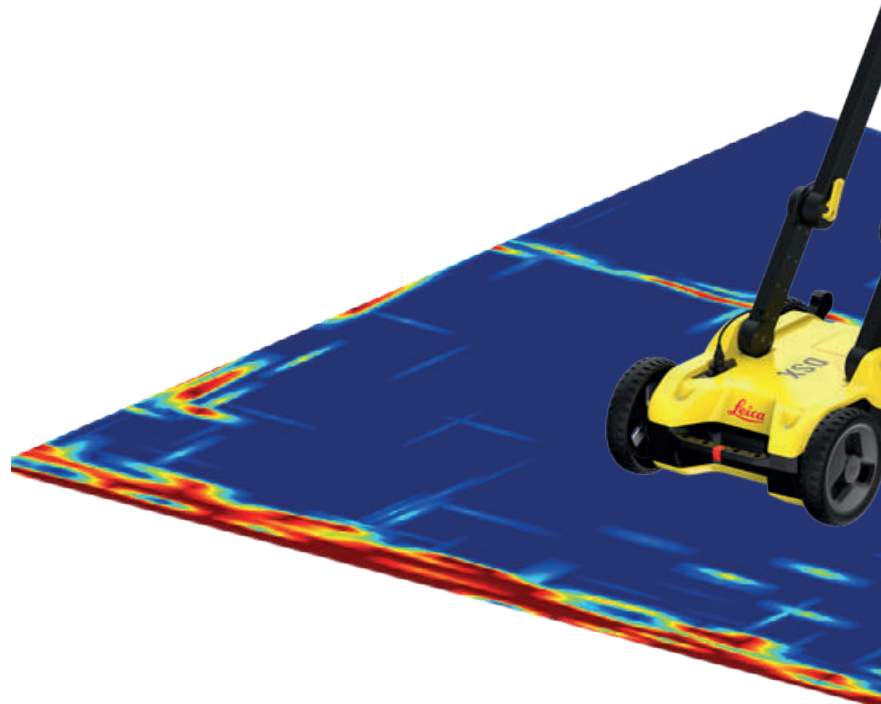


- Detect all types of underground utilities in high resolution to assure reliable avoidance zones
- Verify detected utilities with support of smart algorithm
- Import of POI's and utility records to help you make better decisions

Ease of Use



- Ensure smooth and accurate underground utility detection without expert knowledge
- Complete utility detection and mapping in just a few steps through intuitive user interface
- Scan anywhere and at any time, even in narrow areas and under severe conditions



Uncovering utilities clearly and effortlessly

Instant 2D/3D Utility Map



- Save your time on site by mapping underground utilities in just minutes
- Export utilities in CAD or BIM-ready formats for further usage
- Create professional reports, customized to your and your customers' needs

Integrated Solution



- Offer a complete workflow from acquire to excavate
- Locate underground utilities with survey-grade accuracy
- Generate utility maps, compatible with all coordinate reference systems

Leica Geosystems – when it has to be right

Revolutionising the world of measurement and survey for nearly 200 years, Leica Geosystems is the industry leader in measurement and information technologies. We create complete solutions for professionals across the planet. Known for innovative product and solution development, professionals in a diverse mix of industries, such as surveying and engineering, building and heavy construction, safety and security, and power and plant trust Leica Geosystems for all their geospatial needs. With precise and accurate instruments, sophisticated software, and trusted services, Leica Geosystems delivers value every day to those shaping the future of our world.

Leica Geosystems is part of Hexagon (Nasdaq Stockholm: HEXA B; hexagon.com), a leading global provider of information technology solutions that drive productivity and quality across geospatial and industrial landscapes.



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Leica DSX



Uncovering utilities clearly and effortlessly

Quickly and easily locate and map underground utilities with the new Leica DSX non-destructive detection solution. DXplore software delivers instant, clear and accurate visualisation of utilities in the field. Integrating best practice, simple and most reliable workflow for utility detection and mapping. Plug'n'play solution with positioning sensors and easy export to machine control, delivering instant 3D utility map and assuring most productivity.

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PART OF
HEXAGON

DSX and DXplore Technical Specifications

HARDWARE SYSTEM

DSX Utility Detection System		CT1000 Tablet	
Central Frequency	600 MHz	Display	11.6"
Detection Depth	Up to 2m / 6.56ft	Processor	Intel® Core™ i3-7100U
Acquisition Speed	Up to 7km/h or 4.3mph	Memory	RAM 4GB, 128GB SSD
Scan Interval	0.50m / 18in	Operating System	Windows 10 Professional
Positioning	2 encoders on wheels; GNSS antenna integration (Surveyor kit only)	Positioning	GPS (GlobalSat)
Environmental	IP65	Environmental	Sunlight readable display (LCD + Touchscreen + Hard Tip stylus) IP65 / MIL-STD-810G
Weight	23kg (without battery and tablet)	Weight	1.39Kg
Battery	Li-ion 14.8V / 5800mAh up to 8 hours operating time	Battery	Li-Ion 11.4V / 2160mAh
Operating Temperature	-10°C to +40°C / 14°F to 104°F	Communications	WiFi, Bluetooth v4.2, 4G LTE (Model 880920) RJ45 - connection to DSX
Warranty	2 years (extension CCPs available)	Warranty	2 years Global Warranty (battery - 1 yr)

SOFTWARE

DXplore		Starter	Surveyor
Setup	Animation tutorials	✓	✓
	Status check (connection, battery level, etc.)	✓	✓
	Project and draft management	✓	✓
	GNSS antenna configuration wizard		✓
Acquisition	Grid Scan mode	✓	✓
	Radar sensor control (scan and pause, etc.)	✓	✓
	Positioning status and accuracy check		✓
Positioning	Real-time position display from wheel encoders	✓	✓
	Google Maps and current location support	✓	✓
	Reference point manual entry		✓
	Local coordinate system support		✓
	GNSS antenna support (Leica GS16, GS18 T, GG04 plus and iCON GPS 70 T)		✓
Real-time position display from GNSS antenna		✓	
Process & Analysis	On-site radar tomography generation	✓	✓
	POI support	✓	✓
	Utility marking	✓	✓
	Automatic utility verification	✓	✓
	Georeferencing with positioning data		✓
View	Animation on tomography slices	✓	✓
	2D view	✓	✓
	3D view		✓
Import	Utility records in DXF format		✓
	Multiple layer support		✓
Export	Report in PDF format	✓	✓
	Detected utilities in DXF and DWG formats	✓	✓
	Tomography in png, jpg, tiff, bmp, and gif format	✓	✓
	Output in selected local coordinate systems		✓

Leica Detection Solutions

The best way to detect underground utilities



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Leica Detection Solutions

Surveyors, utility companies and contractors, now more than ever, need accurate, highly reliable, and up-to-date information – available for immediate use. Using the latest technology, detecting underground features becomes a simple and efficient task, increasing your safety and the protection of buried utilities. Our detection solutions provide a truly streamlined process from the field to the office, and back again, able to cover the entire utility detection, avoidance and mapping workflow with integrated solutions.

Cable Avoidance

Undertaking any excavation will inevitably bring site workers into close proximity to underground utilities. Consideration should always be given to knowing the exact location of all buried utilities before and during the excavation process.

The SMART utility locator solution, including the DD230/220 cable locator series, DX Shield software and signal transmitters, is the only complete portfolio of detection solutions which allows users to detect buried utilities, transfer and access data remotely to a hosted service for multiple users, across multiple sites to manage site activities.



Utility Tracking

Utility surveying means exact detection and mapping of the utility. Asset owners precisely want to know where their infrastructure is. For future planning and utility maintenance, they need to have their utilities mapped digitally.

Save time and increase confidence in your results with the Leica ULTRA, our most advanced precision utility tracing instrument.





Detection & Mapping

A utility map shows the positioning and identification of buried pipes and cables beneath the ground. Combine mapping process with a topographical survey and the results will provide you with a comprehensive detailed map of utilities.

The Leica DS2000 utility detection radar finds all potential threats, including non-conductive pipes and fibre optics. The perfect system for users with previous experience using ground penetrating radar (GPR).

For utility repair and maintenance, civil engineering and surveying companies, the Leica DSX utility detection solution allows to easily locate, visualize and map utilities. Unlike any other ground penetrating radar (GPR) system, the Leica DSX maximises productivity with cutting-edge software that automates data analysis and creates a 3D utility map on the field.



Training: Leica Detection Campus

- Understand your detection and surveying environment
- Be able to conduct a full utility survey and provide detailed results
- Know how to find work and gain knowledge of all technologies and digital efficiencies for your business

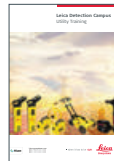
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**Leica
Detection
Campus**



**Leica DD
SMART utility
locator
solution**



Leica DSX

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