A clearer view of underground utilities 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.













DSX and DXplore Technical Specifications

HARDWARE SYSTEM

DSX Utility Detection Syst	em	CT1000 Tablet	
Central Frequency	600 MHz	Display	11.6"
Detection Depth	Up to 2.40m / 7.87ft	Processor	Intel® Core™ i3-7100U
Acquisition Speed	Up to 7km/h or 4.3mph	Memory	RAM 4GB, 128GB SSD
Scan Interval (Grid Scan)	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 + Touch- screen + 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		Build	Survey
Setup	Animation tutorials Status check (connection, battery level, etc.) Project and draft management GNSS and TPS connection wizard GNSS/TPS aided project and grid definition workflow Project management	∀ ∀ ∀	\frac{\frac}}}}}}}}{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}
Acquisition	Grid Scan mode DSX cart precise alignment mode Quick Scan mode Radar sensor control (scan and pause, etc.) DSX cart position and scan trajectory displayed in 3D Real-time scan trajectory from GNSS/TPS	* * *	\ \(\lambda \) \(\lambda \) \(\lambda \)
Positioning	Location from wheel encoders Google Maps and current location support Local coordinate system support GNSS antenna and TPS support Accuracy check in all screens Geoid corrections	*	\frac{\frac}}}}}}}}{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac{\frac}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}
Process & Analysis	On-site radar tomography generation B-scan review and marking 3D tomography POI support Utility marking Semi-automatic utility verification Measure distance (Point to Point) Utility depth calibration with user input Georeferencing with positioning data	<td>\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \</td>	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
View	Animation on tomography slices Configure depth slices 2/3D view Horizontal/Vertical scans Contrast Slider Back to utility Lead to utility viewer	* * * * * * * * *	
Import	Utility records in DXF, DWG and ESRI shape file Multiple layer support		√ ✓
Export	Report in PDF format PDF report configuration Detected utilities in DXF format Tomography in png, jpg, tiff, bmp, and gif format B-scan 3D DXF/DWG Output in selected local coordinate systems MC1 (.lok supported) WGS84 ellipsoid, reference ellipsoid, orthometric height	* * * * * * * * *	\ \ \ \ \ \ \ \

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