IDS GeoRadar

Stream X

The GPR array solution for underground archaeological and environmental surveys



Stream X: the dedicated solution designed to survey large areas

PART OF HEXAGON

IDS GeoRadar: The Leader in Multi-frequency and Multi-channel Ground Penetrating Radar

www.idsgeoradar.com

Stream X

Stream X is a vehicle towed ground penetrating radar solution for extensive 3D mapping of buried structures and geological features. With its 2 m wide swath, high speed and unsurpassed resolution, Stream X is the ideal solution for mapping large archaeological sites, detecting underground structures, pipes and tanks, identifying and mapping cavities or even locating unexploded ordnance.

STREAM X BENEFITS

- **Cost savings** in underground investigation procedures while also providing more information on what is buried underground.
- **Increased performance:** Able to detect the presence and shape of anomalies present in the soil.
- **Fast and accurate** survey even in rough terrain.
- **High productivity:** up to 1 hectare/hour and a dedicated post processing platform.

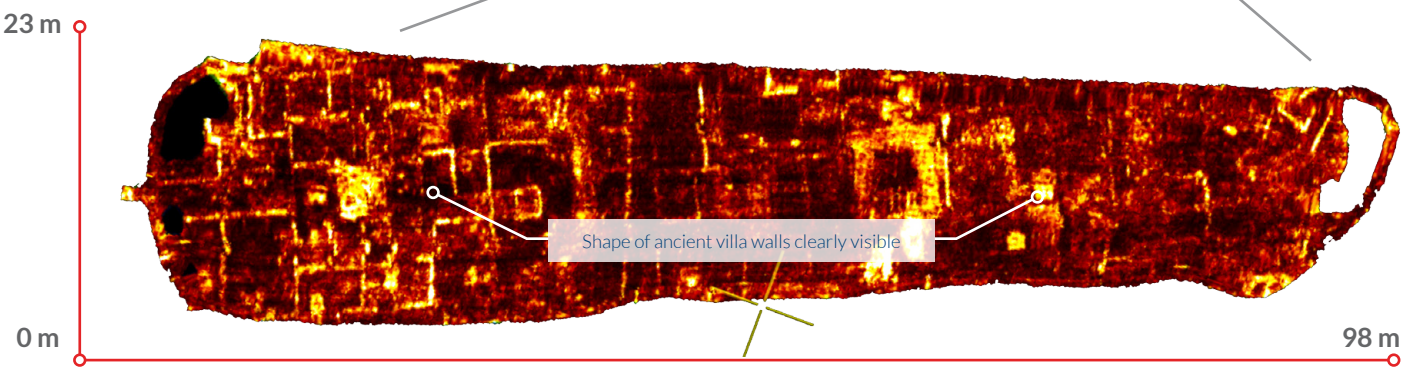


Stream X survey

STREAM X FEATURES

- **Massive array of antennas:** Stream X can be equipped with three different array configurations from 16 to 48 antennas. Antenna spacing can be as low as 4 cm; three times better than other competitors.
- **Different frequencies (200 MHz or 600 MHz):** Stream X can be equipped with a 16 antenna 200 MHz array in order to achieve the best penetration or with a 48 antenna 600 MHz array to maximize resolution.
- **Mechanical frame:** A solid mechanical frame which has been tested in several rough terrain conditions and harsh environments.
- **3D tomography:** The most defined underground 3D model currently available.
- **Advanced acquisition and navigation software** with real-time tomography and survey control with parameter editing.





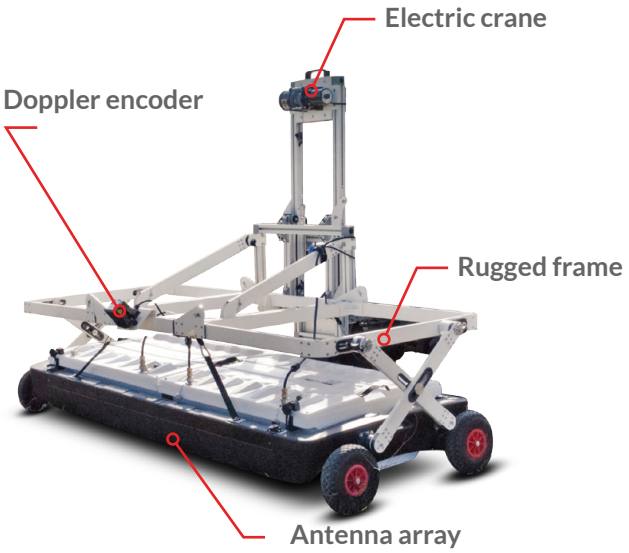
Top view time slice at a depth of 60 cm of a Roman archaeological site

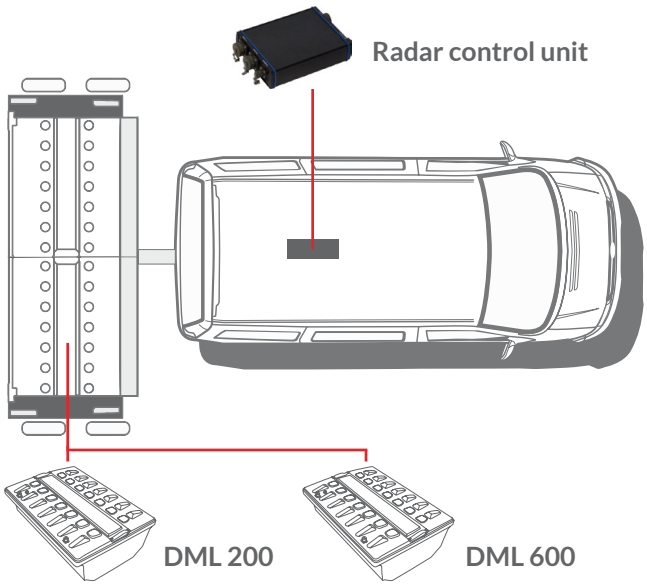
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STREAM X CONFIGURATION

Stream X is available with a 200 MHz antenna array for deep investigation or a dual 600 MHz array for high resolution shallow investigations. These are controlled by 1 to 4 multi-channel DAD FastWave radar control units and positioned using a survey wheel, total station or GPS. Stream X's provided software is able to acquire and display in real-time data from up to 48 antennas. It includes 2D and 3D tomography for an immediate visualization and detection of anomalies and the ability to automatically transfer target data to CAD or GIS maps.





SYSTEM SPECIFICATIONS	
RECOMMENDED LAPTOP	Panasonic CF-19 or CF-31 Tough-Book
MAX. ACQUISTION SPEED (@ STD. SCAN INTERVAL)	36 kph (22 mph)
POWER CONSUMPTION	28 W - 200 MHz version
POSITIONING	Doppler radar and/or GPS or total station
NUMBER OF CONTROL UNIT	1 DAD MCH @ 200 MHz 4 DAD MCH @ 600 MHz
SCAN RATE PER CHANNEL: (@512 SAMPLES/SCAN)	87 scans/sec
SCAN INTERVAL	8 scans/m
POWER SUPPLY	SLA Battery 12 VDC 12 Ah + electric crane battery

ANTENNA SPECIFICATIONS	
IP GRADE	IP65
SCAN WIDTH	1.80 m
NUMBER OF CHANNELS	15 / 44
ANTENNA CENTER FREQUENCIES	200 MHz or 600 MHz
POLARIZATION	VV
ANTENNA SPACING	12 cm / 4 cm
CERTIFICATION	EC, FCC, IC

SOFTWARE SPECIFICATIONS	
OneVision Acquisition Software	• Real time tomography • Integrated navigator • Extensive survey management • System and survey set up • GPS management
GRED HD 3D CAD Post Processing Software	• Tomographic map view (C-Scan) including radar scan fusion • 3D data visualization • Advanced targeting using radarscan and tomographic view • CAD, GIS exportation of GPR data and target • Synthetic map (only for the Stream family of products) • Radarscan viewer, filter and advanced filtering macros, multiple radar scan viewer • Layer picking for automatic analysis of sub-layers • GPS and map track viewer including X, Y and Z axis and digital map importation • Video handling (option)

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