



SUB SURFACE DETECTION AND MAPPING

Aavrtti is a technology-driven company developing advanced radars, robots, and autonomous inspection solutions for industrial, infrastructure, and defense applications.

RUDI

(Radar for Utility Detection and Inspection)

RUDI is an SFCW-based Ground Penetrating Radar (GPR) mounted on a semi-autonomous robotic platform for detection, localization, and mapping of subsurface objects. Integrated GPS, LiDAR, and magnetometer system enable comprehensive subsurface mapping and digital twin generation.

VV-400 and BT-200 are beta variants of RUDI designed for different operational requirements. 'RUDIVision' is the dedicated software suite for data acquisition, visualization, and analysis.



VV-400



BT-200



RUDIVision

Applications:

- Underground Utility Detection
- Geological Investigation
- Permafrost/Buried Ice
- Buried Tunnels/Cavities
- Road Inspection

Specifications

	VV-400	BT-200
Depth Range (in ideal conditions)	0.15-1.5 m	0.1-2 m
Exported raw data format	CSV	
Wireless data transfer	Yes	
# of antennas	2	
Robot run time	2 hrs	
Imaging capabilities	A-Scan, B-Scan and C-scan	
Weight	20 kg	25 kg
Antenna setup dimensions	60 x 40 x 20 cm	100 x 20 x 40 cm
Robot dimensions	50 x 42 x 31 cm	
Robot wireless range	600 m (LoS)	
Scanning rate	5km/h	
Depth measurement accuracy (for metallic targets)	upto 85%	

OTHER PRODUCTS

RFSIG MI-X

Multi-channel signal generator for beam steering



CDPA-500W

500 W power amplifier for anti-drone applications



MT-100

Metal and Cable locator



SCALER

Vertical climbing robot



SUPPORT PARTNERS



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