

Detector Duo

The dual antenna radar for detecting metallic and non-metallic pipes



A DUAL ANTENNA RADAR WHICH COMBINES SUPERIOR SCAN RESOLUTION
WITH EXTRA SOIL PENETRATION DEPTH

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Detector Duo

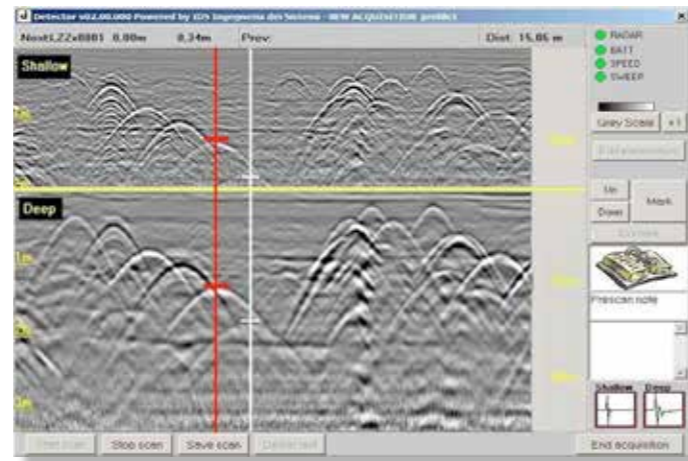
Detector Duo is a portable radar solution for locating buried utilities and other underground features. To accomplish this task it uses a dual frequency antenna which provides an increased resolution at the same time as a better penetration depth, allowing a more accurate interpretation of the data. The compact, easy to transport and deploy radar and its high performance acquisition software allows contractors, local authorities and utility service providers to locate the exact position of pipes, cables and bedrock and helps prevent damage during trenching and drilling operations

Detector Duo Benefits

- **Easy to interpret** real-time results make locating the exact position of pipes and cables simple.
- Two antennas combine **superior resolution** with **extra soil penetration depth**.
- **GPS support** to help keep track of the survey path, buried objects and utilities.

Detector Duo Features

- **Deep and shallow antennas:** Two antennas (250 MHz – 700MHz) in the same box help the operator to locate pipes and cables giving him the proper frequency for the specific locating need. Real time display of deep and shallow antennas on the same screen is also available.
- **More than 8 hours of autonomous use:** The Detector Duo is equipped with a low power consuming control unit.
- **Easy to use:** Plug and play, few buttons, easy software interface. Automatic calibration for quick start up; automatic recovery of soil type parameters; no need to insert propagation speed or soil dielectric constants.
- **GPS:** With GPS the operator can see the path covered during the survey and can add geo-located marks within the software to indicate pipes and targets.



Real-time software showing shallow and deep antenna



Detector Duo at work in rough terrain



Utility detection survey

Detector Duo Configuration

Detector Duo is composed of a dual frequency antenna unit contained in a replaceable protective skid and mounted on a rugged trolley for easy use and maneuverability. The trolley is lightweight and collapsible for easy portability. Included in the trolley unit is a DAD FastWave radar control unit and a data logger PC with a sunlight readable monitor for easy use outdoors.



SYSTEM SPECIFICATIONS	
OVERALL WEIGHT (PC NOT INCLUDED)	20.5kg (46lbs)
RECOMMENDED LAPTOP	Panasonic CF-19 Tough-Book
MAX. ACQUISITION SPEED (@ STD. SCAN INTERVAL)	11 kph (6.8 mph)
POWER CONSUMPTION	13.3 W
POSITIONING	Metric wheel and optional GPS or Total station
SCAN RATE PER CHANNEL (@512 SAMPLES/SCAN)	127 scans/sec
SCAN INTERVAL	42 scans/m
POWER SUPPLY	SLA Battery 12VDC 12 AH
ANTENNA SPECIFICATIONS	
ENVIRONMENTAL	IP65
ANTENNA FOOTPRINT	60 x 39 cm
NUMBER OF HARDWARE CHANNELS	2
ANTENNA CENTER FREQUENCIES	250MHz and 700 MHz
ANTENNA POLARIZATION	HH Polarization
CERTIFICATION	EC, FCC, IC

SOFTWARE SPECIFICATIONS	
K2 ACQUISITION SOFTWARE	• Automatic calibration for an easy and quick start-up- Metric and Imperial units
	• Several filter option and filters macros
	• Automatic calibration for an easy and quick start-up
	• Visualization and storage of two antennas data
	• Mark of targets and pipes through software
	• Available in more than 20 languages
	• Easy connection with GPS or total station with direct exportation of path and targets