

TRHF - REBAR CONCRETE SCANNING GPR

TRHF is an economy GPR based concrete scanning system for Non Destructive Structural analysis



TRHF is a highly portable GPR instrument utilized based on straight line scanning for examining the internal structure and features, both near the surface and at depth in concrete and masonry.

It can provide 2D and 3D images of objects in concrete such as shallow and deep rebars, voids, pipes and cables. It can also enable the inspection of concrete for thickness and integrity as well as provide 2D and 3D location of rebars and cables.

TRHF's advanced processing software allows direct onsite processing of data based on a range of filtering, processing, visualization and interpretation tools and provides standard printing and image export functions.

Applications :

- 2D & 3D imaging of shallow and deep rebars in concrete.
- Inspection of concrete for location of voids.
- Inspection of concrete thickness, integrity.
- 2D & 3D imaging of pre-tension and post-tension cables.
- Inspection and analysis of old structures and monuments.
- Inspection of walls and floors for the location of pipes, objects, caches, etc.

Features :

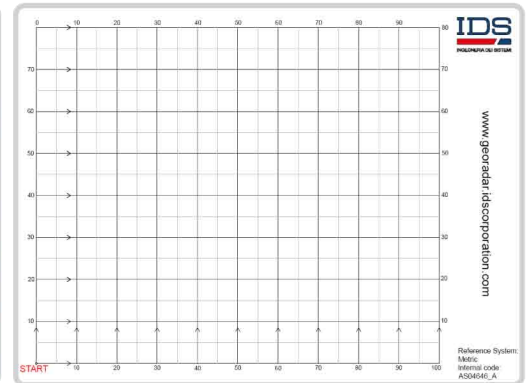
- **Immediate 2D & 3D imaging in the field:** By just pressing a button the 2D & 3D tomography of the surveyed area is available in the field in real-time.
- **Pad survey guide:** Patented survey kit that aids the acquisition of accurate scans which allows the creation of 2D & 3D images of the highest resolution. Alternatively a paper or plastic survey grid can be used.
- **Handle with remote control:** Provides the operator the flexibility to use the antenna or vertical structures which would be otherwise difficult to access and perform with fast survey of horizontal structures. The handle contains a remote control in the form of a button which can allow the operator to start/stop acquisition.



4 Wheels Cart



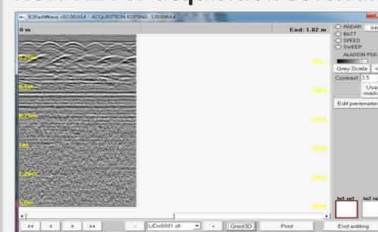
Handle with start and stop button



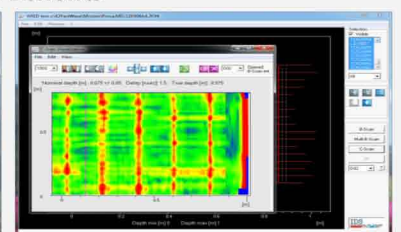
Paper Pad



New K2 FW acquisition software Benefits



GRED 2D & 3D Aladdin processing software with new maps automatically generated



K2 FW acquisition software with GRED 3D link

Standard system includes following operationally beneficial components:

- 4 wheel cart.
- Handle with remote control.
- A patented pad survey kit.



Specification :

Recommended laptop	Panasonic Tough-Book
Max. Acquisition Speed (@ STD. scan interval)	4.5 kph (2.8 mph)
Power consumption	3.3 W
Positioning	Survey wheel
Number of control unit	1 DAD 1CH FW
Power Supply	SLA Battery 12VDC 12 AH, Battery charger provided
Link from antenna to controller	Ethernet cable or Wi Fi
Pad survey kit	Paper and/or plastic
Antenna Specifications	
Environmental	IP65
Antenna footprint (cms)	12.4 X 12.4
Number of channels	2
Antenna center frequency	2 GHz
Antenna polarization	Unipolar
Certification	EC, FCC, IC.0
Survey methods (basic kit)	Pad Survey Guide (PSG)
Remote Control	Handle with remote operation buttons
DAD - PRF (Pulse Repetition Frequency)	Up to 400 KHz
DAD - Max. scan rate	4768 scan/sec (@128 samples)
DAD - Bit per sample	16 bit (Optionally 32 Bit)
DAD - Connection to Data Logger	Ethernet LAN Wireless (WiFi IEEE 802.11b)
Antenna Size (cm)	12.4x12.4x18.5
Antenna Weight (Kg)	2.0
Battery operating time	8.0 hours
Elaboration Software	GRED 3D