

R-scan Lite

A manual B-scan imaging system for plate and pipework from 50mm diameter to flat

R-scan Lite is a portable, battery operated PC based digital ultrasonic B-scan imaging system designed for ease of operation within the Petro-Chemical environment.

Key Features

- Battery Operated
- Lightweight and Portable
- Dry Coupled Dual 5 MHz Wheel Probe
- Scan Pipe Diameters from 50mm to Flat

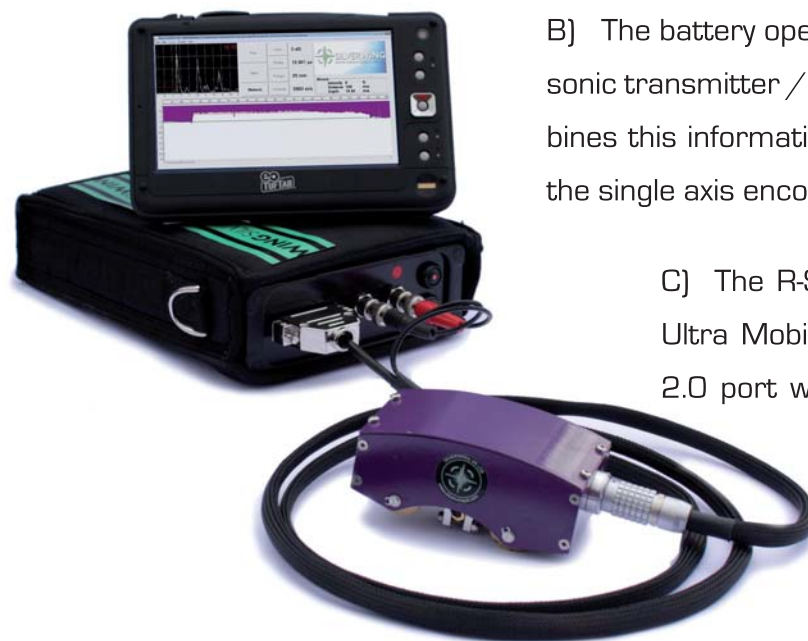


The R-scan Lite comprises three sections:

A) The manual, single axis encoded, scanner utilises a 5 MHz dual dry coupled wheel probe allowing B-scan ultrasonic imaging to be carried out without the need for traditional ultrasonic couplant. The scanner is suitable for both plate and pipe from 50mm diameter to flat.

B) The battery operated [7 hours on a full charge] digital ultrasonic transmitter / receiver processes the UT signals and combines this information with detailed positional information from the single axis encoder.

C) The R-Scan is connected to the latest generation Ultra Mobile Portable Computer (UMPC) via the USB 2.0 port which can handle scanning speeds of up to 200mm/sec. The software has standard flaw detector controls for the A-scan set-up, simplifying training and operation requirements.



All controls such as gain, time base range, filtering and gate adjustments are on the same screen as the active A-scan display and the B-scan image. The easy to use defect sizing tools combined with cut and paste functions allow the export of defect images directly into other Windows software packages such as Word or Excel.

UT Module - Specification

- Pulse Voltage: -400V
- Pulse Shape: Spike
- Receiver Gain: 0 – 80dB in 1dB steps
- Filters: Wideband [0.5 – 18MHz]
 - 0.5 – 4.0 MHz
 - 2.0 – 8.0 MHz
 - 4.0 – 16.0 MHz
 - 6.0 – 24.0 MHz



- Sample rate: 50MHz
- Waveform Length: 32768 samples (excl Delay)
- Transducer Range: 1.0MHz – 15MHz
- Transducer Mode: Single or dual via external switch
- Computer Interface: USB 2.0
- Connectors: Encoder – 25 way D type socket
 - UT – 2x BNC (Tx & Rx)
 - Data – IP68 USB 'B'
 - Charger – 3 way Amphenol Din type
- Power Supply – Internal 14.4v battery pack (up to 7 hours run time)

These features turn the R-Scan from a simple corrosion detection device into one of the most cost effective, comprehensive Ultrasonic B-scan Imaging Systems on the market today.

Technical Specification

Scanner		UT Module	
Dimensions	Length 122 mm Width 65 mm Height 54 mm Weight 550 g	Dimensions	260 mm 160 mm 60 mm 1.8 kg
Wheel Probe	TWP25 5MHz Dry Coupled wheel probe	Battery	7 hours operation from fully charged
Umbilical Cable	2 metre	Charger	1.5 hours fast charge from flat