

# Specification

<b>Frequency Range</b>	2.5MHz and 5.0MHz
<b>System Linearity</b>	Vertical = 1% Full Screen Height (FSH) with amplifier accuracy $\pm 0.1$ dB. Horizontal $\pm 0.4\%$ Full Screen Width (FSW).
<b>Gate Monitor</b>	3 fully independent gates for echo monitoring and thickness measurement. Gates are adjustable over the full range (amplitudes from 0%-100% FSH).
<b>Memory</b>	All A-Scans and Panels are automatically deleted after 24 hours of creation. (Applies to Network Rail approved software version.)
<b>Rail-Thickness Log</b>	Encoder triggered rail thickness log stored in a CVS file. Data accessible by a computer using the USB cable provided.
<b>Power</b>	Lithium-Ion battery pack 14.4V / 5.0 ampere-hours. (up to 16 hours duration from a fully charged pack, recharge time 3-4 hrs.)
<b>Standard Kit Includes</b>	1 Railscan 125+ Flaw Detector. 1 Li-ion Battery & 1 Battery Charger. 1 Fabric Carry Bag and 1 USB Cable. 1 Calibration Certificate (EN12668) and 1 Instruction Manual.



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## Railscan 125+ - Inspect with Confidence



Inspect with  
Confidence

Simplicity | Capability | Reliability

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## Railscan 125+

### Setting standards of performance and reliability

For more than 30 years the Railscan name has meant exceptional performance with class-leading design within the rail infrastructure market. The new Sonatest **RailScan 125+** flaw detector delivers a higher level of near-surface resolution and penetrating power into a portable and rugged enclosure. It also offers more measuring capabilities than its predecessors for rail applications such as:

- rail walking stick inspection solutions
- rail manual defect sizing
- rail bottom depth measurements

### Sonatest Ultrasonic Assurance of Quality

Based on 60 years of experience, the **Railscan 125+** is powered by high-end software and electronic technologies:

- Narrow Band amplifiers 2 MHz & 5 MHz
- Up to 3 gates for complete inspection solutions
- Encoder driven for Rail-Thickness auto-logging
- Best signal-to-noise ratio on the market (SNR)

### The Reference for Railway Companies

Approved by Network Rail, the owner and infrastructure manager of most of the rail network in England, Scotland and Wales, the **Railscan 125+** takes part in the quality control procedures to ensure integrity assessment of the UK railway network.



The **Railscan series** instruments are used by different private and public railway companies all around the world. Designed in cooperation with railway specialists for railway applications, including:

- Walking Stick Compatible (Sperry Rail, NRS and any other bi-directional walking sticks)
- Rail-Thickness auto-logging function saved directly to a spreadsheet format
- Single-shot PRF for high-speed multiplexing
- USB outputs to support custom software systems (e.g. Sperry palmtop with GPS)
- Long Battery Life (up to 16 hours, quick re-charge time)

## Robust & Reliable

Sonatest's reputation for robust design and proven reliability is an important aspect of our flaw detector ownership. Downtime is expensive and should be minimised to ensure maximum productivity. The **Railscan 125+** is constructed to high standards using a high-density enclosure that is sealed to IP67, giving an excellent water resistance so it can withstand the railways' harsh environments in which operators work. The **Railscan 125+** comes with a 2 year warranty, extendable to 5 years with Sonacover, and a worldwide service network.

## High Visibility Display

For any flaw detector, the display is a crucial element. The **Railscan 125+** has a colour transfective VGA display and maximum readability is achieved, even in direct sunlight conditions, through adjustable brightness and the choice of 9 colour palettes, including a black-on-white LCD emulation mode. The Full-Screen mode maximises the A-scan area to improve readability further whilst testing and its fast response and peak capture functionality ensure any indications clearly displayed, even if it only appears for one cycle of the 1 KHz PRF.



## High Performance with Total Control

The acknowledged ease of use of the previous Railscan generation has been enhanced with the menu navigation key, providing easy access to functions. The menu structure has been designed to guide the user through their task with operation quickly becoming second nature.

## UT-Lity Data Management Software

UT-Lity software provides everything you need to manage your inspection data, configuration files and software updates.

- Load, store, manage files both on the PC and on a connected flaw detector.
- Save, analyse, colour code and export thickness logging data to spreadsheets/asset management software.
- Update the Flaw Detector Firmware as and when updates become available on Sonatest website.

