

# RouteScan (P5650)

## Track Measurement and Analysis



The RouteScan (P5650) gauge uses 2D laser scanning technology to take quick, accurate structure clearance measurements in relation to the permanent way. It can be used to take measurements of tunnels, bridges, platforms, datum plates, signals, rail positions, and overhead line catenary wire position.

The lightweight unit is easy to use and can be operated with minimal training. The RouteScan is positioned on the track and the user controls the measurement laser from a safe position using supplied hardware and software. Data is displayed on a colour screen and then transferred to a PC via Bluetooth or USB, where files can be opened and viewed in MS Excel.

## → TECHNICAL FEATURES

### Measurement laser

The RouteScan (P5650) uses 2D laser scanning technology to take measurements. A visible (635nm wavelength) beam is directed from the laser housing.

### Measurement capability

The RouteScan can be used to measure tunnels, bridges, platforms, datum plates, signals, six-foot and ten-foot rail positions, and overhead line catenary wire position. X/Y co-ordinates are measured as single points or full profile scans referenced to the running edge of the datum rail. Accurate track gauge and SE readings can also be provided.

### Hardware and software

RouteScan comes with a Windows 10 tablet and software that allows single point and profile scanning. Bespoke clearance software can also be supplied, allowing users to review interference between the scanned structure and a train profile, taking into consideration cant and track radius.

### Non-conductivity

The unit is electrically non-conductive.

### Lightweight and portable

The unit weighs less than 14kg, making it very portable. The two legs detach easily from the body, allowing the whole kit to be stowed in a single small bag.

### Rechargeable battery

The RouteScan is equipped with a rechargeable battery. A battery indicator button alerts the user to the remaining charge and the battery can be removed and swapped by accessing the front panel via thumb screws. The control unit is also supplied with a rechargeable battery.

→ ADVANTAGES

- The RouteScan's portability and ease of use make it ideal for highly time pressurised environments in which measurements need to be taken quickly and accurately.
- The unit's sprung gauging foot ensures repeatability of positioning and measurement, increasing accuracy.
- Unlike more traditional gauging methods, Bluetooth communication allows the device to be operated from a position of safety.
- The RouteScan is easy to use and operators need less training than for traditional gauging methods.
- The rechargeable, replaceable battery allows for prolonged use of the RouteScan during long shifts.
- The RouteScan is electrically non-conductive and is approved for use in areas of 3rd rail.



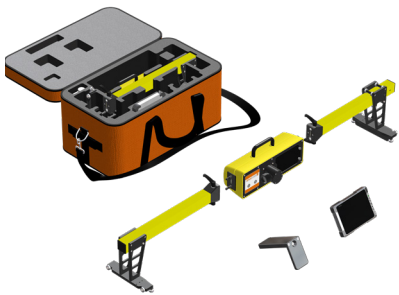
**Structure gauging**

Gauge interface software allows single point and profile scanning. Following extensive development with existing RouteScan customers, bespoke clearance software can be provided that allows the user to review interference between the scanned structure and a train profile while taking into consideration cant and track radius.

→ SPECIFICATIONS

Physical specification	
Weight	13.6kg
Size (in use)	1655mm x 315mm x 265mm
File types	CSV, SCO, SCN
Operating temperature	-10°C to +50°C
Battery life	Up to 8 hours
PC connectivity	USB, Bluetooth or wireless LAN

Measurement specification	
Angular	Range: 0 to 360°
Gauge	Range: -25mm to +50mm from nominal (1435mm) Accuracy: +/- 1mm Resolution: 1mm
Cant	Range: +/- 200mm Accuracy: +/- 1mm Resolution: 0.1mm
Laser	Range: 0,2 to 15 m Accuracy: +/- 1mm per metre Resolution: 1mm



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