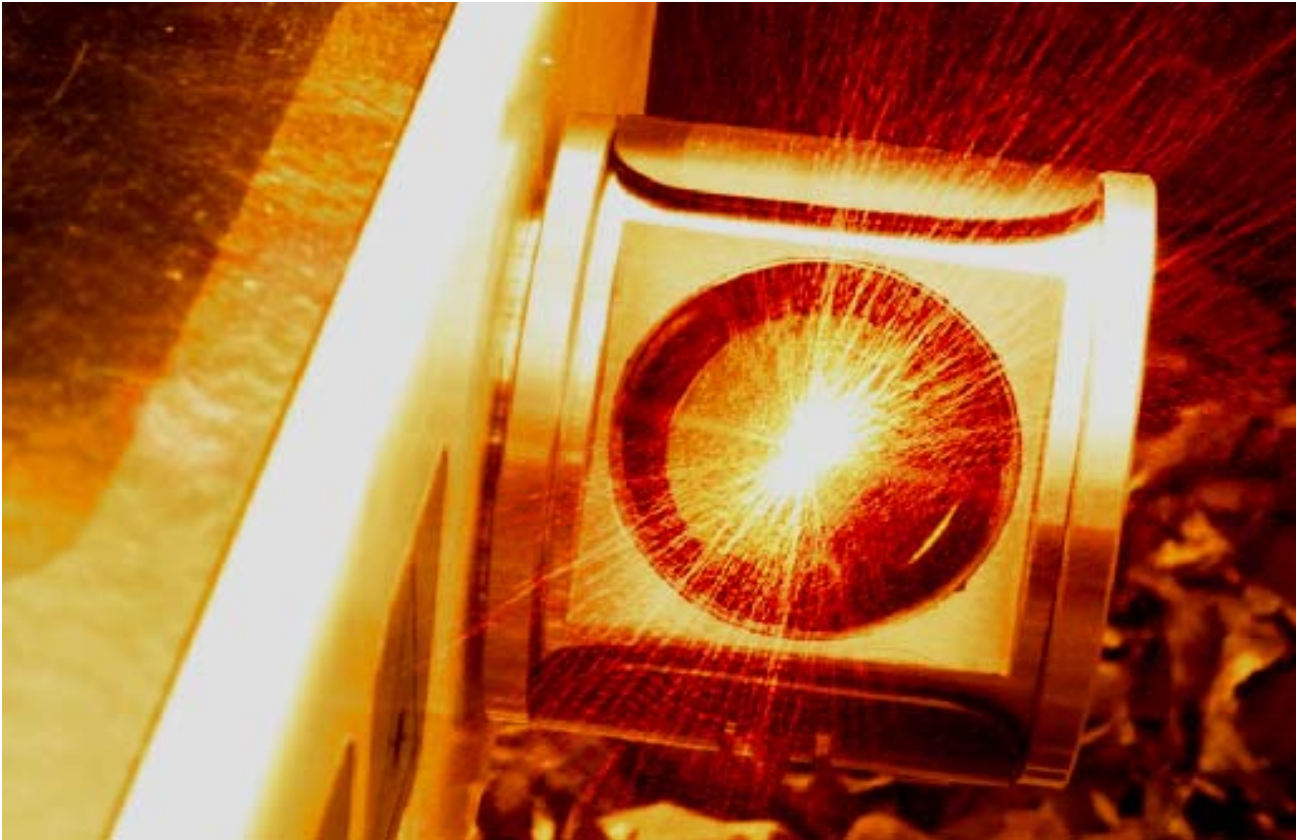


# ABT4650 RouteScan



**abtus**limited

Established in 1908 - Excellence in rail and marine engineering



## STRUCTURE GAUGING

### ABT4650 RouteScan

PADS No: 057/075504



Product Name	-	<b>RouteScan</b>
Part Number	-	ABT4650
PADS Number	-	057/075504

RouteScan has been developed to provide quick, accurate gauging clearance measurements relative to the permanent way. The gauge self-locates on the track and can be operated from a position of safety via a wireless Bluetooth™ connection from a handheld PDA. X/Y coordinate points are measured using a laser which rotates through 360°. RouteScan is also able to measure Track Gauge and Super-Elevation. Data recorded by RouteScan is compatible with MS Excel™ and ClearRoute™ and is easily transferred to a PC via USB.



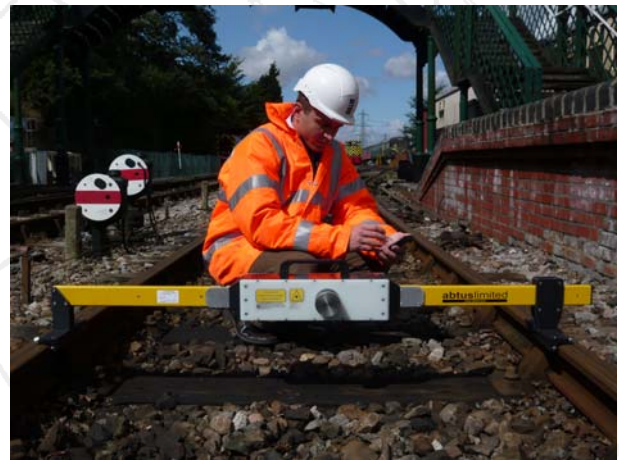
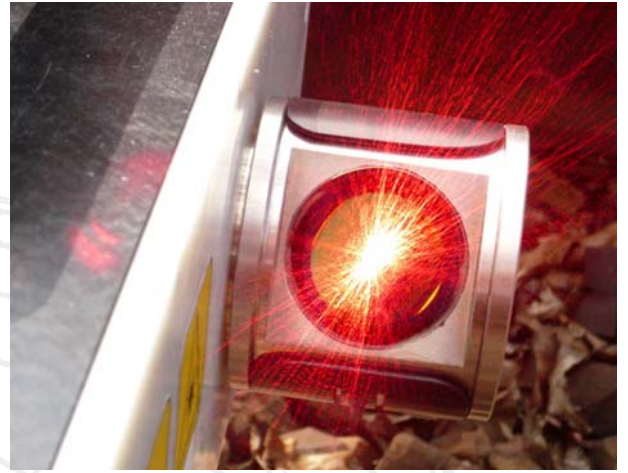
### Technical Data

Dimensions (mm)	-	1600 x 260 x 240	-	(RouteScan only)
	-	1750 x 400 x 380	-	(RouteScan in Storage box)
Weight	-	9.5kg	-	(RouteScan only)
	-	25kg	-	(RouteScan in Storage box)
Operating time	-	6 Hours	-	Based on typical rate of work
Profile	-	Range	-	0.2-30m
	-	Accuracy	-	±3mm @ 4.0m
	-	Resolution	-	±6mm @ 8.0m 1mm
Super-Elevation	-	Range	-	±200mm
	-	Accuracy	-	±1.2mm
	-	Resolution	-	0.1mm
Gauge	-	Range	-	-15/+25mm (on nominal)
	-	Accuracy	-	±0.5mm
	-	Resolution	-	0.1mm



## Product Functions

- Upper Sector Gauging; including:
  - Over Bridges
  - Tunnels
  - Platform Awnings
  - Signals
- Lower Sector Gauging; including:
  - Under Bridges with or without centre girders.
  - Platforms including Cope Overhang and Platform wall.
  - Datum Plates
- Six-foot rail and Ten-foot rail positions
- Overhead line electrification position
- Super-elevation and running gauge



## Product Functions

RouteScan is exceptionally light; weighing only 9.5kg; this makes it suitable for use in areas of live traffic. It is fully non-conductive preventing track circuit problems and also makes it suitable for use in areas with live conductor rails or OHL.

Measurement locations are referenced to the head and running edge of the datum (cess) rail. As well as being able to record a series of single point locations; RouteScan also offers an automated feature whereby a gauging profile scan of a structure can be taken. The operator is able to set the required recording interval together with a start and end angle.

RouteScan utilises high quality optics which ensure that it is able to measure on the various structure surfaces found in the railway environment. Typically a 180 point measurement profile will take approximately 45 seconds to complete when scanning a brick arch tunnel.

Measurements can be taken Relative to the plane of the rails or as absolute positions (true vertical & horizontal) meaning that the output data is suitable for maintenance, renewals or design purposes.

RouteScan stores files in both .CSV and .SC0 format for download and review in a variety of applications such as MS Excel™ and ClearRoute™.

4204030



## RouteScan Accessories

### ABT4659 Target Pole

PADS No: 057/075505

#### Description

The Target pole can be utilised in areas where it is not possible for RouteScan to 'see' the desired measurement position due to obstructions such as ballast shoulders or conductor rails.



### ABT4195/SA Lower Sector Target Plate.

#### Description

The Lower Sector Target Plate can be used to measure the lateral/vertical contact position on the platforms coping edge. It can also be used on centre girders.

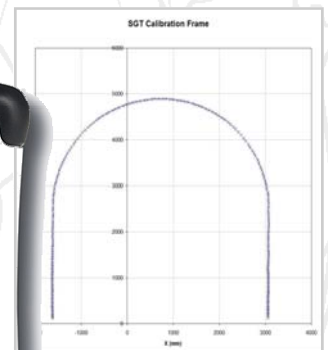


### 150/983 Rugged PDA

#### Description

Available as an alternative to the standard issue PDA, the Rugged PDA offers:

- IP67 protection against water & dust.
- Operating temperature range  $-30^{\circ}\text{C}$   $+60^{\circ}\text{C}$
- Shock Resistant; 1m drop onto plywood over concrete
- Long Battery life, up to 15 hours operation under typical conditions.



## RouteScan Training Courses

*Gauging Clearance Introduction and RouteScan* is the supplementary training course offered by Abtus. The course duration is half a day and includes an overview of Gauging Clearance principles together with instruction on the operation of RouteScan and advice on how best to utilise the equipment for your specific application. 6-10 delegates can be catered for per session which takes place at our facility in Haverhill, Suffolk or at the premises of the client.