



The Abtus ABT7100 Track Geometry Trolley is a measuring device which records track geometry while being pushed by an operator at walking speed.

Track geometry data is collected at normal walking speed and is displayed numerically/graphically, in real-time, on a Panasonic ToughPad Tablet. Recorded Distance, Super Elevation, Gauge and Twist data can be transferred easily to a PC via USB key in the widely used .CSV file format. The Abtus software allows the user to set a wide range of measurement parameters and tolerance profiles, helping to quickly and accurately flag 'out of specification' recordings.

The equipment requires only a single operator and can be used without track possession (where local standards allow). The trolley can be assembled/disassembled in 5 seconds for convenient carrying to and from site and is supplied with two padded carry bags for ease of transportation in small vehicles.

### System Capabilities

- Track Geometry Recording - Gauge, SE, Distance and Twist Measurement
- Track Geometry Reporting - Live Data Viewing/Analysis + Exportable Data
- Data is displayed numerically and graphically in real time
- User defined measurement parameters

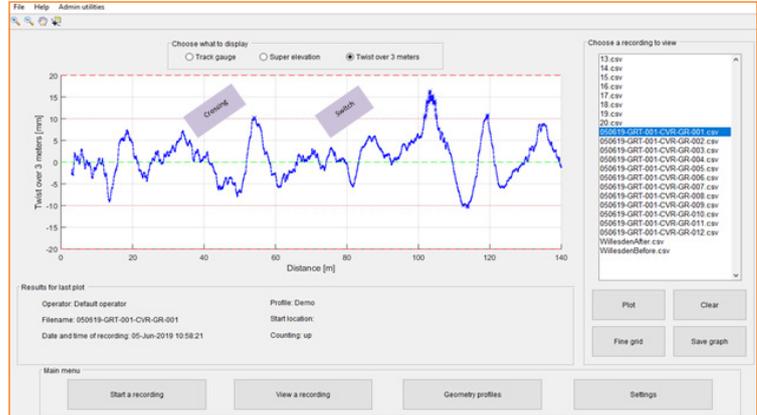


All measurements can be viewed in real time numerically and the user can switch between the graphical measurements by tapping the graph section of the screen. Predetermined events can be added by quickly tapping the appropriate event button or the operator can type a custom event in by using the "Type in an event" button provided.





The recordings can be viewed graphically or numerically on a spread sheet. The software allows the user to plot multiple Track gauge, Super elevation or Twist over 3 metres readings from previously recorded runs. This will also show the events that were added during the recording.



### Physical Specification

Weight	-	25kg	Tablet	-	Panasonic ToughPad FZ G1
Dimensions	-	1700mm x 1000mm x 720mm	Display	-	10.1" Daylight Readable
Battery Life	-	12 hrs approx.	Operating System	-	Windows 10
Battery Type	-	Li-ion Rechargeable	Battery Life	-	Typically 6 hrs
File Types	-	PDF & CSV	Rugged Features	-	IP65, 6 ft Drop Resistant
GPS	-	Expected Accuracy: $\pm 4m$	Temperature	-	- 10° C to 50° C
Communication	-	Wireless	Data	-	USB or Wireless Transfer

### Measurement Specification

Distance	-	Range: 0 – 200km Accuracy: $\pm 1\%$ Resolution: 10mm	Twist	-	Cord Length: User Selectable Accuracy: $\pm 1mm$ Resolution: 0.1mm
Gauge	-	Range: - 25mm to +50mm Accuracy: $\pm 1mm$ Resolution: 0.1mm	SE	-	Range: $\pm 250mm$ Accuracy: $\pm 1mm$ Resolution: 0.1mm