

The trolley has been designed to be quickly and easily assembled on site without the need for tools. Packing down into two high visibility padded carry bags ensures the trolley is well protected during transit and packs small enough to be transported in cars as well as vans.

### Physical Specification

Weight	-	25kg	Temperature	-	-10°C to +50°C
Dimensions	-	Bag A: 850mm x 450mm x 250mm	Battery Life	-	Trolley : 6hrs per battery
		Bag B: 850mm x 345mm x 250mm			Tablet : 11hrs Approx.

### Measurement Specification

Distance	-	Range: 0-200km	SE	-	Range: ± 250mm
		Accuracy: ±1%			Accuracy: ± 0.5mm
		Resolution: 10mm			Resolution: 0.1mm
Gauge	-	Range: -25mm to +50mm	Twist	-	Cord Length: User Selectable
		Accuracy: ± 0.5mm			Accuracy: ± 0.5mm
		Resolution: 0.1mm			Resolution: 0.1mm
GPS	-	Expected Accuracy: 4m			



Track Geometry



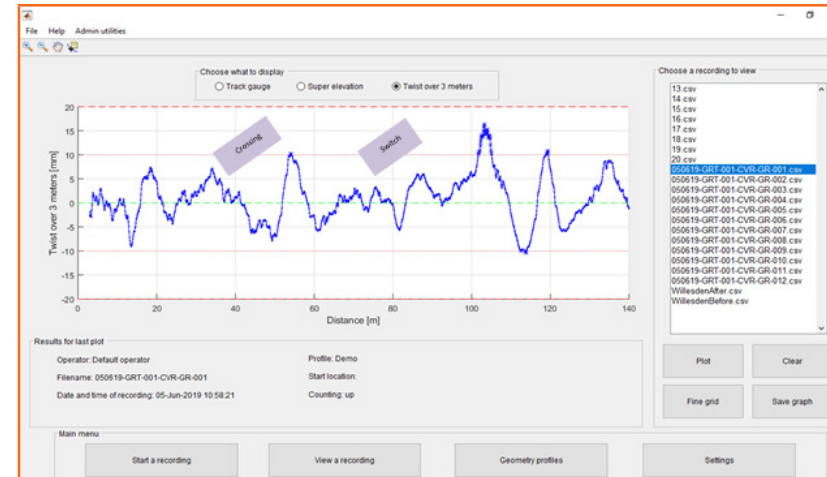
## Track Geometry Trolley

The Abtus ABT7100 is a manually propelled track geometry trolley capable of accurately measuring Gauge, Cant, Distance, Twist without track possession (where local standards allow).

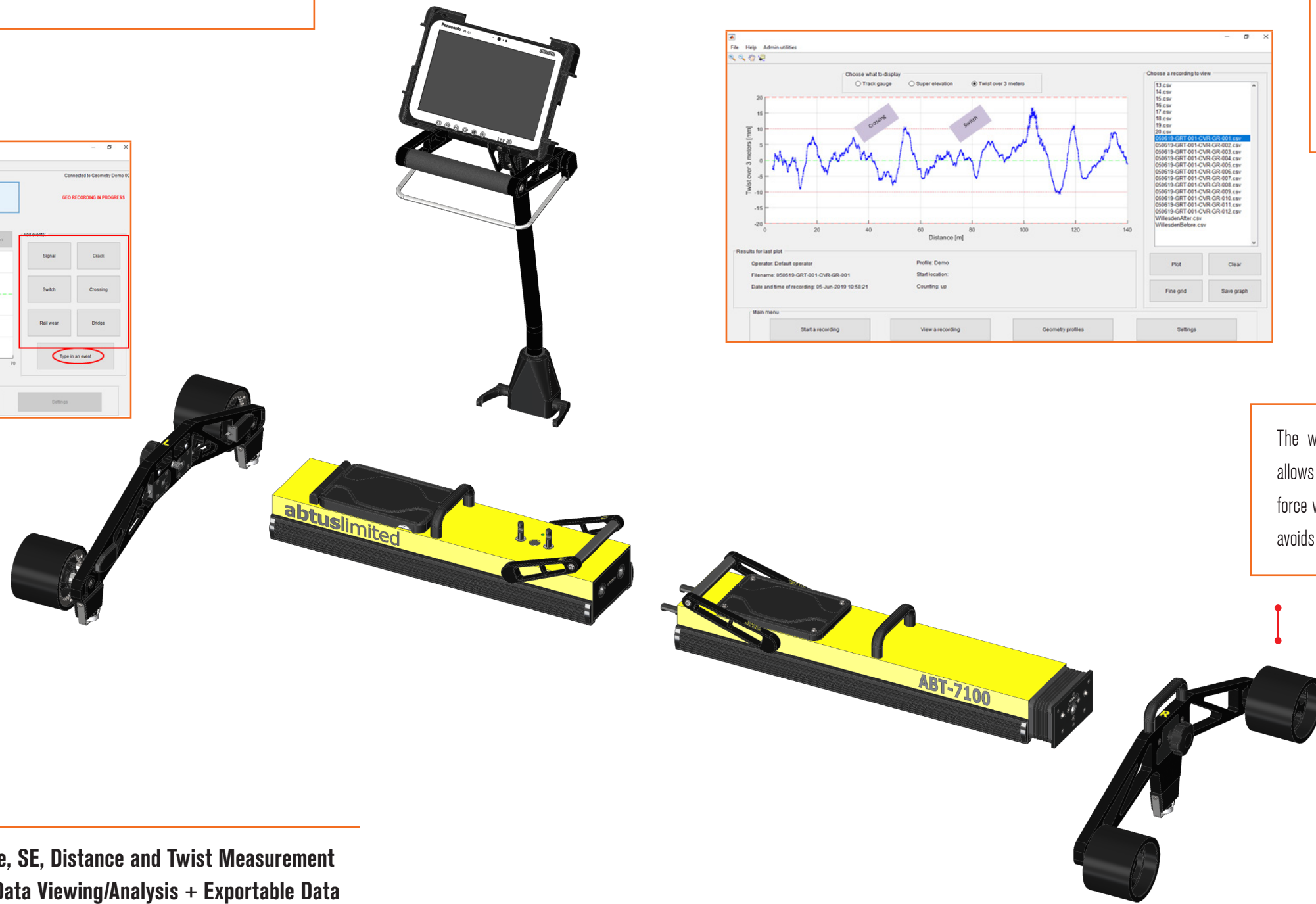
The graphical user interface has two user-switchable modes enabling easy track recordings as well as track recording analysis. By viewing previous recordings the user can quickly compare multiple track recordings from different dates to see both track degradation as well as improvement.



The user interface allows all measurements to be viewed in real time numerically (simply tap the graph) and the user can add predetermined events by quickly tapping the appropriate event buttons on the screen.



The wheel arm retraction mechanism allows the user to decrease the spring force whilst walking through S&C which avoids unnecessary trolley derailments.



## System Capabilities

- Track Geometry Recording - Gauge, SE, Distance and Twist Measurement
- Track Geometry Reporting - Live Data Viewing/Analysis + Exportable Data
- GPS tagging of track recordings enables future recordings in the same location
- Data is displayed numerically and graphically in real time
- User defined measurement parameters
- User swappable batteries
- Supplied as standard with rugged Panasonic FZ-G1 Windows 10 tablet
- Available for track gauges of 1067mm, 1435mm and 1600mm and also for embedded rails

Exportable reports can be found in the 'Recordings' folder providing the user with results for review either on the tablet PC or in the office.

ABT7100 geometry measurement file						
version: 2						
3	Operator: Default operator					
4	Filename: 181005-CTT3-10KGS-001					
5	Profile: Marston test track					
6	Gauge low limit: 1420					
7	Gauge high limit: 1460					
8	Twist 3m warning limit: 12					
9	Twist 3m fault limit: 15					
10	Start location:					
11	Counting: up					
12	Date and time of recording: 05-Nov-2018 11:15:10					
13	GPS of start position:					
14	Length of measured track [m]: 140					
15	End of header					
Distance [m]	Gauge [mm]	SE [mm]	Twist 3m [mm]	Gauge fault [mm]	Twist 3m warning [mm]	Twist 3m fault [mm]
1000	1003.1	1432.9	34	14.5		2.5
1001	1003.2	1433.3	35.3	15		3
1002	1003.3	1433.5	36.5	15.5		3.5
1003	1003.4	1433.8	36.8	15.3		3.3
1004	1003.5	1433.8	36.8	15.1		3.1
1005	1003.6	1433.7	36.9	14.9		2.9
1006	1003.7	1434	36.9	14.3		2.3
1007	1003.8	1434	37.7	14.4		2.4
1008	1003.9	1434.2	38.4	14.3		2.3
1009	104	1434.6	38.8	13.5		1.5
1010	104.1	1434.9	38.8	12.7		1.2
1011	104.2	1435.1	38.7	12	3.5527e-15	0.7
1012	104.3	1435.2	38.8	11.8		