



PTST-C Portable Track Survey Trolley

The PTST-C provides a convenient method of measuring track parameters including versines and topography. The push trolley gives a continuous record when in measuring mode directly to the integrated PC. All data can be stored, viewed and manipulated using the supplied software or exported for use in other packages.

The unit is lightweight and can be folded up and packed into a small van or estate car for easy transportation.



Parameters Measured

- Gauge (1435mm standard)
- Cross Level
- Twist (calculated)
- Switch Clearance Left
- Switch Clearance Right
- Vertical 3m Versine (Left)
- Horizontal 3m Versine (Left)
- Horizontal 3m Versine (Right)
- Topography
- Distance

For more information, please contact the Railway Sales Department at Donfabs & Consillia

Email: sales@consillia.com

Measurement

The PTST-C employs a combined mechanical and electronic sensor system to provide the most accurate readings

Battery Powered

The supplied battery pack clips neatly onto the frame to provide up to 5 hours continuous recording. Auxiliary battery packs can be added if required

Operation

The PTST-C is very easy to use and setup. Recordings can be made within minutes of arriving at site and data is available for replay immediately after completion of the test. All setups are logical with multi choice options

Software

The computer system is supplied preloaded with all necessary software including setup, viewing and reviewing options

Braking

The PTST-C has fail safe interlocked brakes fitted. The brakes are only released when the push handle is in the raised position and ready for use

Lighting

Optional lighting brackets can be fitted on request to house stabling lights

Recording System

The recording system is based upon an integrated ruggedised PC with folding lid which is removable for transportation or storage. Data is stored directly to the hard disc of the PC and to the memory card. The memory card is transferable to other computer systems

Options

The PTST-C can be fitted with options to measure platform, conductor rails and other structures, full details are available upon request

Technical Specification

Construction

Aluminium box section with flexible hinge arrangement to provide transportation folded mode

Measurement Technology

Mechanical paddle arrangement combined with electronic sensor technology for cross level and topography.
Laser technology for versine measurement

Measured Parameters

Parameter	Range	Accuracy	Resolution
Gauge	1435mm (+30mm, -10mm)	+/- 0.5mm	0.1mm
Cross Level	+/- 160mm	+/- 1mm	0.25mm
Twist	+/- 50mm	+/- 1mm	0.25mm
Twist Base	1 to 20m	+/- 0.1%	100mm
Left Switch Blade Clearance	25 - 140mm	+/- 1mm	0.1mm
Right Switch Blade Clearance	25 - 140mm	+/- 1mm	0.1mm
Left 3m Vertical Versine	+/- 50mm	+/- 1mm	0.25mm
Left 3m Horizontal Versine	+/- 50mm	+/- 1mm	0.25mm
Right 3m Horizontal Versine	+/- 50mm	0.1%	1mm
Topography	0 to 1000m	0.1%	1mm
Distance	Every 50mm over 10k	0.1%	50mm

Braking System

Castellated wheel with mechanical interlock from push handle. Fail safe when in the rest position. Brakes released when in the operating position

Recording System

Removable integrated ruggedised PC with folding lid.
Data is stored directly to hard disc of PC and to memory card.
PC is powered from the trolley battery supply

Events

Event is triggered from a push button mounted on the trolley handle. In addition there are 40 "Keyboard" events. Predetermined annotation messages can be input onto the trace and recording

Options

Platform Height and Lateral Position System
Conductor Rail Measurement
Sleeper Height Measurement
Extended Versine Calculation Software
Gauge Options - other gauges available on request

Accessories

Carrying Bag

Environmental

Measurement Mode		Transportation Mode	
Length:	2000mm	Length:	1150mm
Width:	1650mm	Width:	1650mm
Height:	900mm	Height:	455mm
Weight:	47kg (including computer and battery pack)		
Temperature:	-15°C to +45°C RH, non condensing		